Appendix 7-1 Glenamuck District Roads Scheme-Modelling Report

Project

Glenamuck District Roads Scheme

Report Title

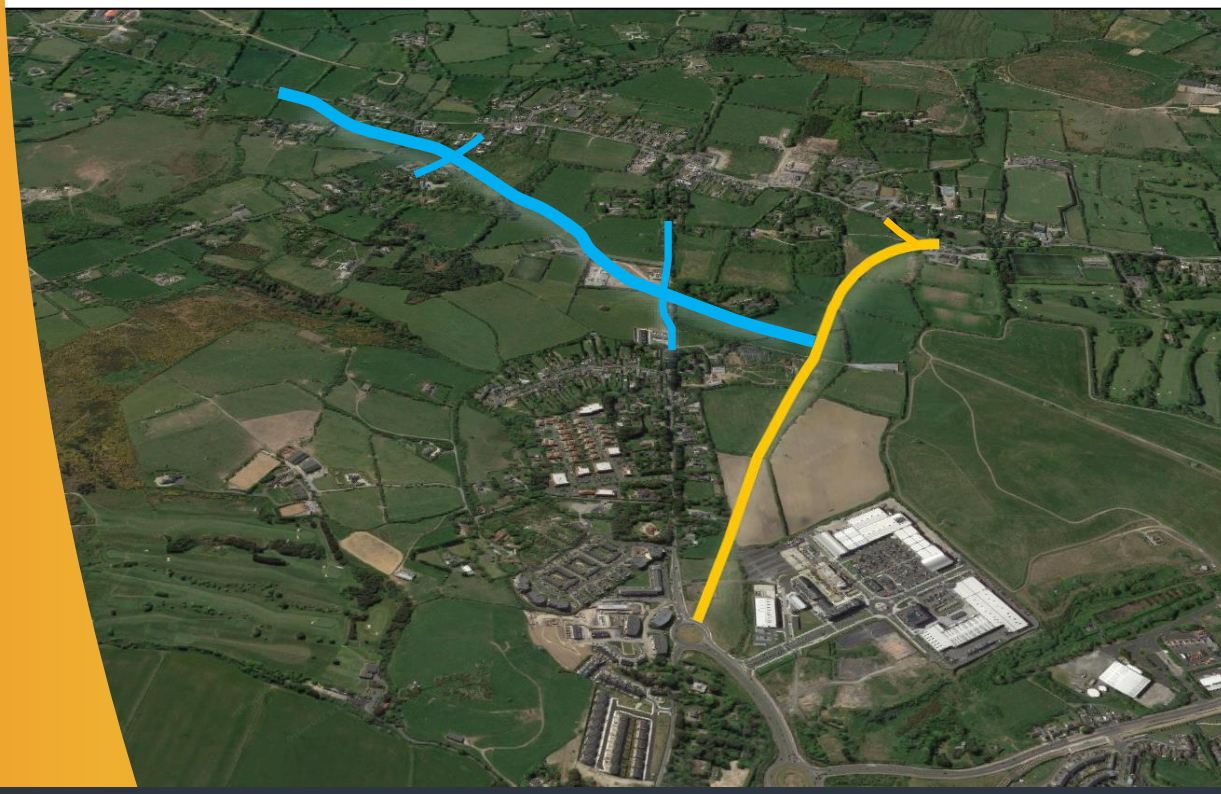
MODELLING REPORT

Date

December 2018

Client

Dún Laoghaire-Rathdown County Council



DBFL Consulting Engineers and Transportation Planners

Document Control

Job Title: Glenamuck District Roads Scheme

Job Number: p170172

Report Ref: 170172-DBFL-REP-D-004

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Reviewed by: Robert Kelly

Date: December 2018

Distribution: Client
DBFL Consulting Engineers (Dublin)

Revision	Issue Date	Description	Prepared	Reviewed	Approved
Draft_01	29/03/2018	Client Review	DPM	RJK	TJ
Final	05/12/2018	Final	DPM	RJK	TJ

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EXECUTIVE SUMMARY

OVERVIEW

This Traffic Modelling Report (TMR) is based on a three-stage (macrosimulation, microsimulation and junction modelling) transport modelling approach and methodology undertaken by DBFL Consulting Engineers on behalf of Dun Laoghaire-Rathdown County Council (DLRCC) as part of the Glenamuck District Roads Scheme (GDRS). Further, the development process, results and analysis are summarised within this report.

The modelling approach also includes the refinement, calibration/validation and an improved traffic forecasting process for an existing strategic local area traffic model of Glenamuck Local Area Plan from 2013. This local area traffic model assisted in the microsimulation stage of the transport modelling approach.

This transport modelling approach was used to test the impacts of the proposed GDRS scheme, future traffic management proposals, highway network interventions and forecast traffic demand flows through proposed junctions to inform designs for the preliminary design stage of the project. The traffic model study area for the proposed scheme is illustrated in **Figures 1** and **2** below.

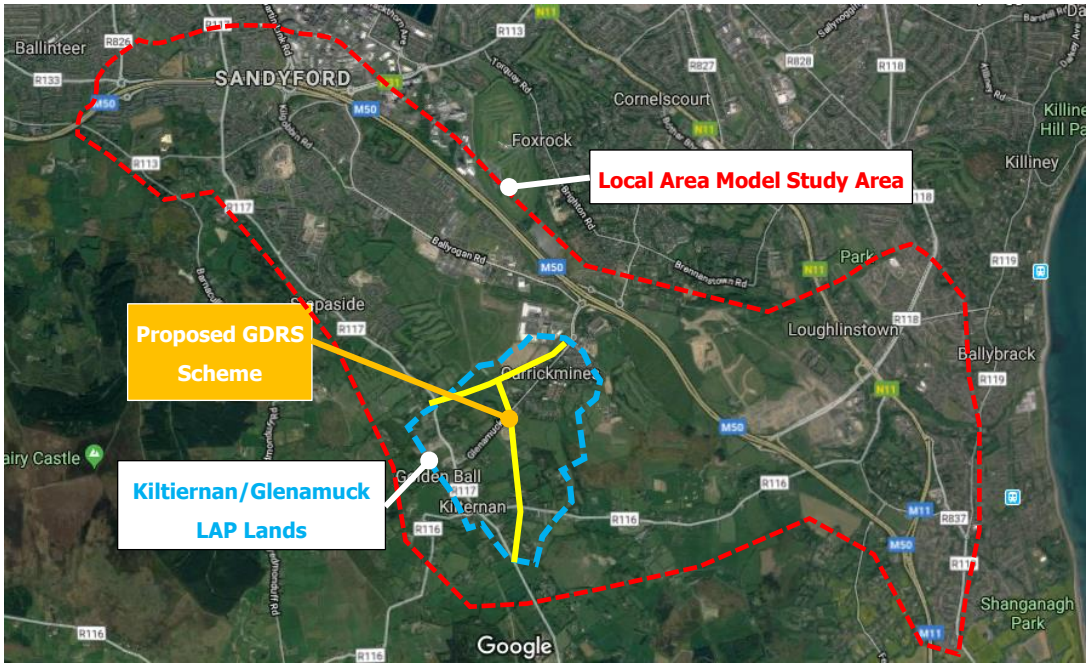


Figure 1: Proposed Glenamuck District Roads Scheme and Key Study Boundaries

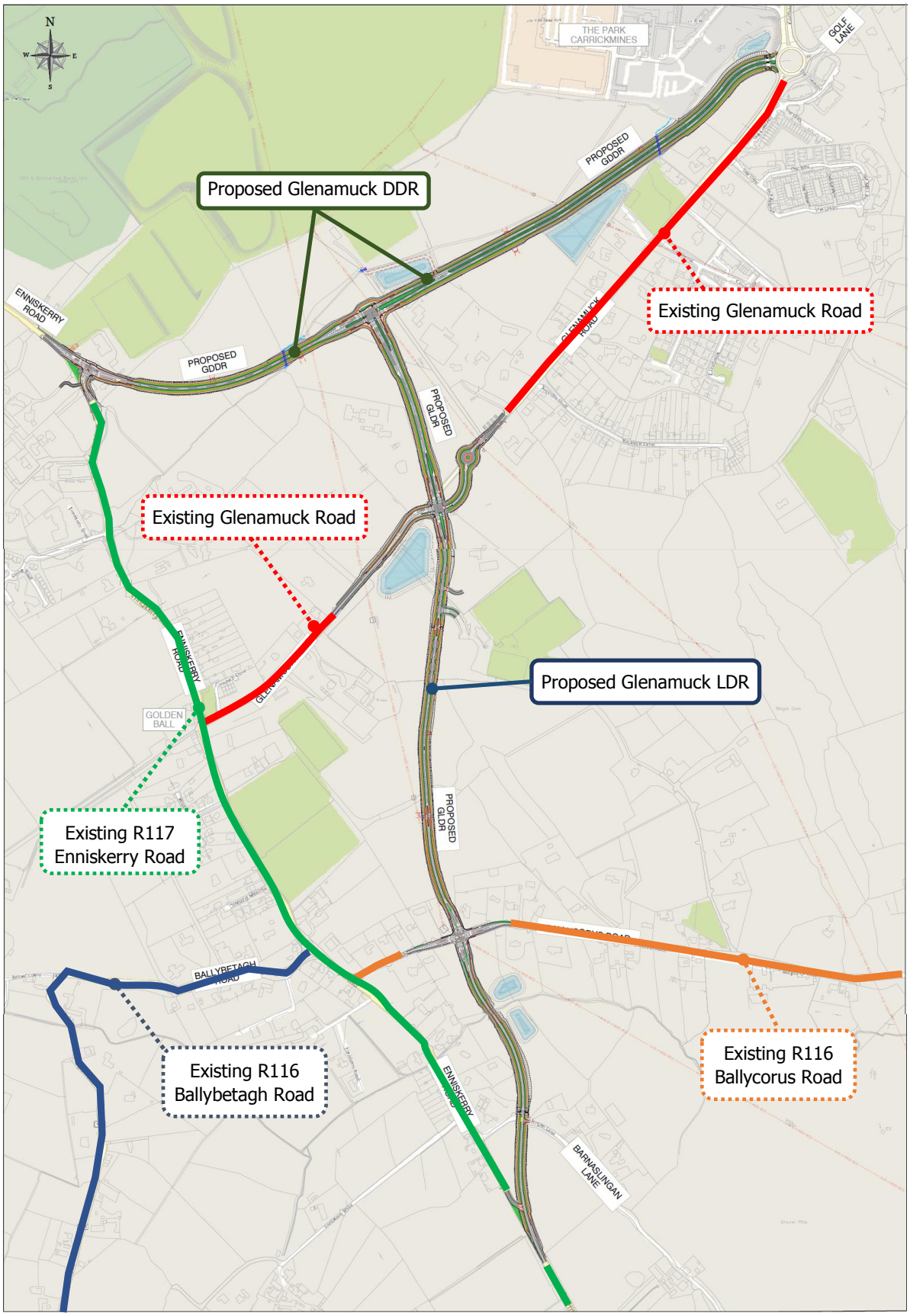


Figure 2: Proposed Glenamuck District Roads Scheme and Surrounding Existing Road Network

This traffic assessment for the GDRS scheme required transport modelling and analysis to be undertaken at three levels of modelling, from strategic macro-modelling, local area micro-simulations and to local junction models (Illustrated in **Figure 3**).

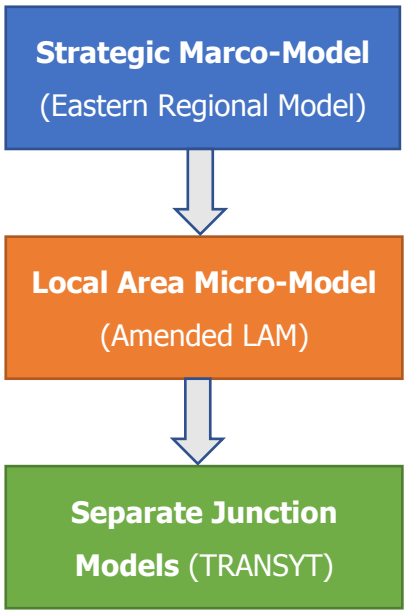


Figure 3: Outline of Approach Undertaken

For the strategic macro-modelling component of the assessment, the NTA's East Regional Model (ERM) was used to develop a comprehensive understanding of Glenamuck / Kiltiernan local area encompassing mode share and trip origin / destination analyses and the impact on strategic road and public transport infrastructure. The ERM which is part of the NTA's Regional Modelling System provides a multi-modal forecasting capability that is particularly well suited for the assessment of large-scale developments such as proposed the GDRS.

However, for a more detailed assessment within the area, a Local Area Model (LAM) was developed to build on the zonal detail provided by the ERM inside the Glenamuck local area (which is too coarse for detailed assessment) and to provide the required means of testing a high number of scenarios (since the ERM run times are impractical when testing many options and scenarios as is required for Glenamuck at a local level).

RPS Group undertook a review of the Glenamuck Local Area Plan in 2013 as a cost-effective method of updating the previous modelling work from 2006, to assess the Glenamuck / Kiltiernan LAP transportation infrastructure designs and proposals. The previous RPS model included two user classes 'HCVs and light vehicles' and covers the AM peak period 08:00 – 09:00 only. The transport model's network included the LAP area, the various M50/M11 junctions, the routes between the LAP area and these junctions and routes to and from the M11 via the Loughlinstown roundabout.

The base year model was calibrated to 2012 conditions. The transport model's zoning system within the LAP area was revised in order to tie in more closely with the system of land parcels and land uses proposed within the LAP, the proposed system of access roads by which new lands use would connect to the road network. The forecast year for the RPS review was 2022

and the future year model network also contained additional zones to allow for developments at the Park, Carrickmines and Cherrywood. These existing RPS files were used the proposed amended LAM for this assessment of GDRS with some elements of refinement and new demand matrices being applied.

This LAM acted as an Assignment Demand Model, which replicated demand responses where they might be expected as a result of a scheme. The demand responses considered here comprise changes in trip rates, choice of destination and travel mode.

The final part of this transport modelling approach was to derive the traffic flows from the amended LAM and apply them to TRANSYT junction models to optimise junctions designs and geometry, refinement and junction operation. Results and junction design based on the TRANSYT analyses with be provided in a separate report to the Traffic Modelling Report.

SCENARIOS TESTED

Figure 4 summarises the overview of scenarios tested which were undertaken for the Glenamuck District Roads Scheme.

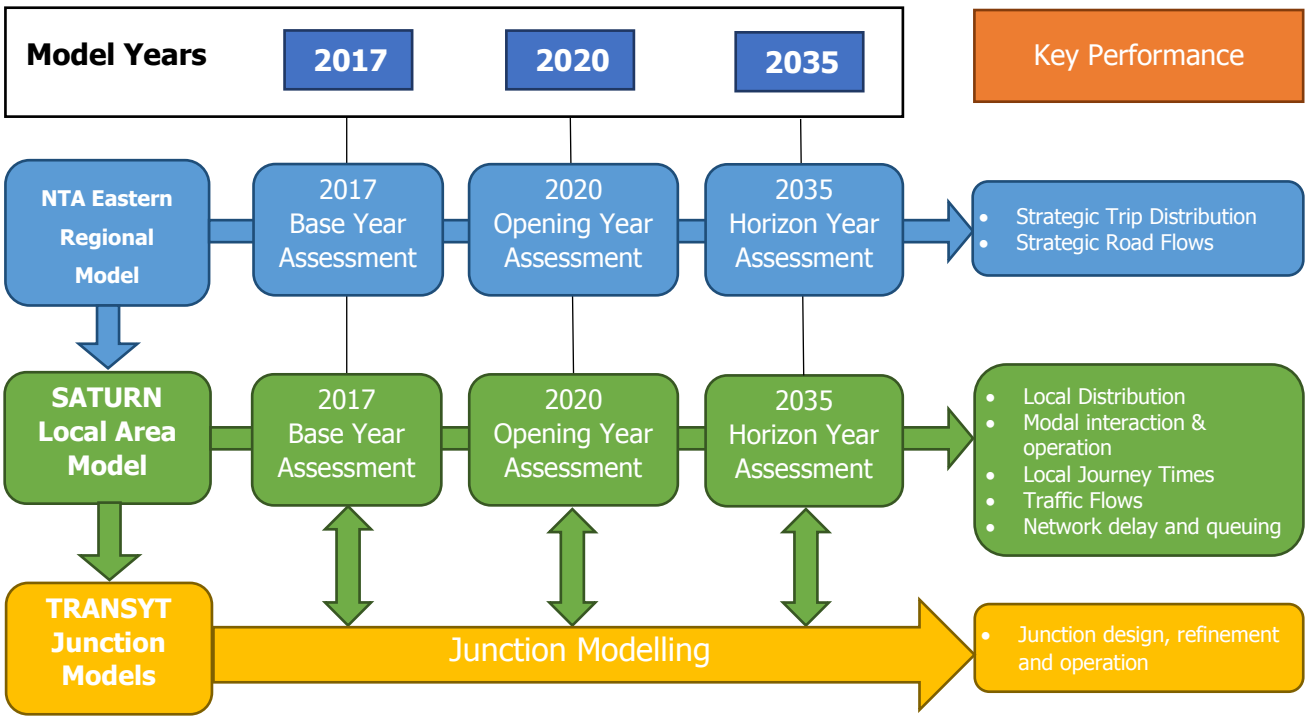


Figure 4: Proposed Glenamuck District Roads Scheme Transport Modelling Approach

Both ERM and LAM models were used to provide Key Performance Indicators (KPIs) to inform on the performance of the transport network for all modes at a strategic and local level. **Table 1** summarises the various KPIs and how they were utilised in the transport modelling assessment for the proposed GDR scheme.

Modelling Stage:	Key Performance Indicator	Purpose in Assessment
ERM	Strategic Trip Distribution	- LAM Calibration
	Strategic Road Flows	- LAM Calibration - Wider Area Effects
LAM	Local Distribution	- Trip Distribution - Turning Proportions
	Modal Interaction	- Scheme's effects Bus Routes
	Local Journey Times	- LAM Validation - Scheme Appraisal
	Traffic Flows	- Demand Flows for TRANSYT
	Network Delays and Queuing	- Scheme Appraisal - Problem Junction Identification for TRANSYT
TRANSYT	Degree of Saturation	- Junction Design - Junction Operation
	Total Junction Delay	- Junction Design - Junction Operation
	Max. Mean Q. Lengths	- Junction Design - Junction Operation
	Signal Timing	- Junction Design - Junction Operation

Table 1: Summary of Key Performance Indicators in Assessment

The assessment years that were tested as part of this modelling assessment as per TII guidelines were:

- Base Year – 2017;
- Opening Year – 2020; and
- Future Horizon Year (15+ years) – 2035

The following is a list of scenarios that were undertaken as part of the Regional Model and Local Area Model assessments: -

Base

- **A1** – 2017 Base Traffic Flows (Existing Network)

Do Nothing

- **B1** – 2020 Base Traffic Flows (No Glenamuck District Roads Scheme)
- **B2** – 2035 Base Traffic Flows & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (No Glenamuck District Roads Scheme)

Do Something

- **C1** – 2020 Base Traffic Flows (With Glenamuck District Roads Scheme + Bus Gates)
- **C2** – 2035 Base & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (With Glenamuck District Roads Scheme+ Bus Gates)
- **C3** – 2035 Base & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (With Glenamuck District Roads Scheme + Bus Gates) + Proposed Complementary Road Infrastructure (**See Figure 5**)

An additional scenario was assessed solely in the assessment for a sensitivity test to investigate the impact of the Bus Gates. Then the bus gates were removed and compared to modelling results with the Bus Gates still in place. For clarity, each of the 'Do Something' scenarios above (C1 – C3) include for the provision of 24/7 bus gates at the locations illustrated in **Figure 5** below.

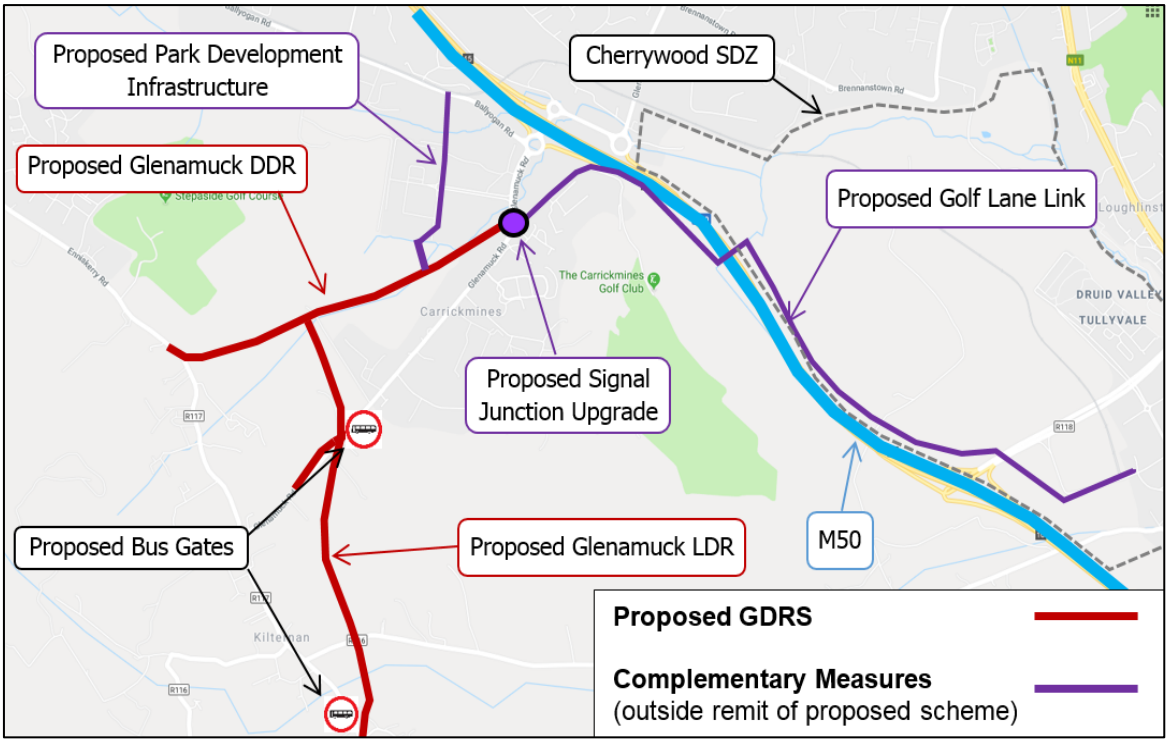


Figure 5: Proposed Bus Gates & Complementary Road Infrastructure

As part of the assessment additional complementary road infrastructure (**Figure 5**) was included into a separate 2035 Do Something scenario in both the Regional Model and LAM. These additional complementary measures included were:

- The Park Development infrastructure to connect the GDR scheme with the Ballyogan Road;
- The Golf Lane Link to connect Cherrywood over the M50 to the GDRS; and
- The roundabout junction at the Glenamuck Road / Golf Lane intersection was updated to a signalised junction.

For all 'Do Something' scenarios in this assessment a new bus gate will be provided on the existing Enniskerry Road where it joins with the extended GLDR. This will only allow public transport vehicles, cyclists and pedestrians access to and from Kiltiernan Village from the Enniskerry Road at the bus gate. All other vehicles will not be allowed to make this movement. A four-armed junction between the existing Glenamuck Road and the GLDR will facilitate the movement of public transport from Glenamuck Road (West) and the GLDR to Glenamuck Road (East), via another bus gate. Public transport vehicles, cyclists and pedestrians will be able to access and egress from Glenamuck Road (East) onto the GLDR. All other vehicles will not be allowed to access or egress from Glenamuck Road (East) onto the GLDR.

LAM CALIBRATION & VALIDATION

The calibration and validation of the LAM base model followed guidance set out by the 'Project Appraisal Guidelines for National Roads Unit 5.1 – The Construction of Transport Models'. The calibration process was carried out on both the network and the base matrix. The following calibration checks were undertaken on the LAM base model:

- Turning proportions at junctions; and
- Flows on individual links.

The following validation checks were undertaken on the LAM base model:

- Journey times along critical routes.

A total of 50 links flows were used in the calibration process. A comparison of modelled and observed flows demonstrated that the AM and PM Peak period models match the flow criteria. The results therefore confirm that the models have been calibrated to a standard compliant with the PAG criteria in all-time periods. Similarly, the both R-square analyses shows that R2 is close to 1 which corresponds to only minor differences between the modelled and observed flows used for the calibration of the base AM and PM models.

As part of the validation process, the modelled journey times were compared against the 20 surveyed journey times to ensure the model gave a reasonable representation of existing conditions. All models satisfy the PAG requirement that 85% of all modelled journey times are within 15% of observed data or within 1 minute if higher than 15%. As such, the base year models were considered validated to the requirements of PAG Unit 5.2: Construction of Transport Models in terms of journey times.

In terms of Model convergence, the AM Peak and PM Peak models reached a satisfactory level of convergence as set out by PAG guidance.

RESULTS & FLOW EXTRACTION

Flow Extraction

As part of the regional model cordon process, the resulting cordon flows at 20 locations (each representing a geographical locations or road along the boundary extent) along the boundary extents established appropriate extracted Base Year flows and future year growths for external zones for the Local Area Model (LAM). This report summarises flow extraction from the regional model at each of the cordon location to supply the external zones in the LAM.

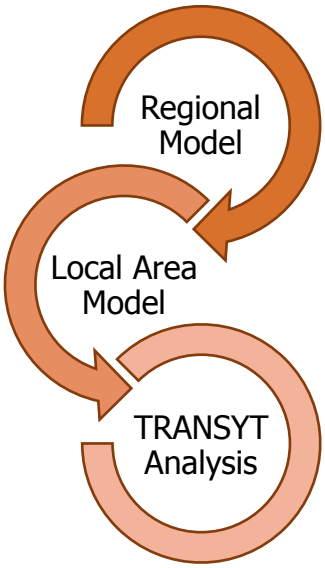


Figure 6.2: Outline of Approach Undertaken

The similar approach of traffic flow extraction was undertaken for carrying out TRANSYT analyses is to extract forecasted traffic flows along the GDRS from the Local Area Model to assist in the design, refinement and future operational performance of key junctions on the GDRS. Results and junction design based on the TRANSYT analyses with be provided in a separate report to the Traffic Modelling Report.

Local Area Model Results

A range of scenario tests were performed using the LAM to look at network performance of the GDRS. Network results for each of the scenarios tested in the LAM were compared. This LAM analysis was developed based on the impacts on the network performance parameters:

- Total Network Travel Time (hrs) for all vehicles;
- Total Network Vehicle Kilometres (hrs) for all vehicles; and
- Total Delays (hrs).

Comparing the AM peak periods in each of the scenarios the trend generally describes that the GDRS improves traffic conditions as there is a reduction in delay in the 2020 and 2035 opening and horizon years and with the complementary measures there is further benefits with greater demand following the development of the LAP lands (with up to 3,000 residential

units) and committed developments. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035, there is a significant reduction in delay across the network, highlighting the benefits of the proposed GDRS and that the existing road network as it stands is unsustainable for catering traffic in the future horizon year of 2035.

Comparing the PM peak periods in each of the scenarios the trend generally again showed that the GDRS improves traffic conditions as there is a reduction in delay in the 2020 and 2035 opening and horizon years comparing the Do-Nothing and Do-Something scenarios. The complementary measures show further improvements with greater demand following the development of the LAP lands (with up to 3,000 residential units) and committed developments compared to the Do-Something scenarios. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035, there is a significant reduction in delay across the network, highlighting the benefits of the proposed GDRS and that the existing road network as it stands is unsustainable for catering traffic in the future horizon year of 2035.

Comparing the average speeds for general traffic, the overall trend is that average speed increases in the AM peak period in the Do-Something scenarios as opposed to a downward trend in the Do-Nothing scenarios. There is a slight decrease between the 2017 base and 2020 Do Nothing, this is correlating to a slight increase in background traffic. Comparing the 2020 and 2035 Do Something there is a noticeable decrease in average speed, this is correlating to an increase in background traffic over a 15-year period, however with the introduction of the complementary measures outside the remit of the proposed GDRS, average speed is improved. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035 and the 2017 Base, there is a significant reduction in average speed across the network, however with the introduction of the proposed GDRS average speed improves. This shows that the existing network as it stands is not efficiently catering traffic in the future horizon year of 2035. The PM peak period reflects a similar trend as in the AM peak period.

Comparing the average speeds for buses, the overall trend is that average speed increases in the AM peak period in all Do-Something scenarios as opposed to a downward trend in the Do-Nothing scenarios. There is a slight decrease between the 2017 base and 2020 Do Nothing, which correlates to a slight increase in background traffic and the delay paralleled with this increase in traffic. This continues to the 2035 Do-Nothing scenario. However, with

the introduction of the GDRS, the general trend is that average speed increases with each progressive scenario in the AM peak period. The exception being the 2035 Do Something scenario where average speeds decrease. But this changes slightly with the implementation of the complementary measures, however the introduction of the signalised junction at the Glenamuck Road / GDDR, does allocate the greatest amount of time to links with bus lanes. For the PM peak period this is a similar case as in the AM peak period.

When assessing forecasted traffic flows in the LAM for the opening year of 2020, it was found that the Glenamuck District Roads Scheme reduces the level of traffic within the Local Area Plan environ for Kilternan-Glenamuck by diverting road traffic onto the proposed scheme's network and enabling traffic to bypass less suitable and unsafe roads on the LAP environ road network. The Kiltiernan Village Centre, Glenamuck Road and the bypassed section of the R117 Enniskerry Road benefit the most from the scheme. The proposed scheme acts as collector road for the local network attracting trips from existing and committed developments. Traffic on the Ballycorus Road is expected to grow from the 2017 Base to the 2020 Do-Nothing scenarios primarily contributed by trips from large developments near the road corridor and with the introduction of GDRS a further increase in traffic is expected, by +22.2% from the 2020 Do-Nothing scenario. The scheme attracts additional traffic from further origin points due to the time-saving benefit of the scheme. The scheme has a marginal to slight impact on the M50 and the nearby Junction 15 in terms of traffic.

When assessing forecasted traffic flows in the LAM for the future horizon year of 2035, it was found that again the Glenamuck District Roads Scheme reduces the level of traffic within the Local Area Plan environ for Kilternan-Glenamuck by diverting road traffic onto the proposed scheme's network and enabling traffic to bypass less suitable and unsafe roads on the LAP environ road network. The Kiltiernan Village Centre, Glenamuck Road and the bypassed section of the R117 Enniskerry Road benefit the most from the scheme. AADT traffic figures do increase compared to the 2020 Do Something scenario due to a fully developed LAP lands being assumed. But, these AADT flows are the same or lower than the 2017 base AADT flows. The proposed scheme acts as a link street for the local network attracting trips from existing and committed developments and the fully developed LAP lands. The scheme attracts additional traffic from further origin points due to the time-saving benefit of the scheme. Traffic on the Ballycorus Road is expected to grow from the 2017 Base to the 2035 Do-Nothing scenarios primarily contributed by trips from large developments near the road corridor and with the introduction of GDRS a further increase in

traffic is expected, to an AADT of 11,600 in the 2035 Do-Something scenario and comparatively, an AADT of 11,050 in the 2035 Do-Something with Complementary Measures. However, the Ballycorus Road has been earmarked in the County Development Plan as a long-term road proposal to be improved to cater for strategic demand on this corridor after the implementation of the GDRS. In regard to traffic on the M50 there is a marginal to slight impact on the M50 and the nearby Junction 15. Comparing the two Do-Something scenarios (one being with the complementary measures that are outside the remit of the GDRS but are assumed as being implemented after the GRDS and before 2035) shows mostly slight improvements to AADT in the LAP local road network however, reductions in traffic levels occurring on the R116 Ballycorus Road and the M50.

Following the extraction of forecasted traffic flows along the GDRS from the LAM a number of key junctions on the scheme were assessed through TRANSYT to assist in the design, refinement and future operational performance of these key junctions on the GDRS. Capacity and operational analyses at each of the junctions for each scenario found that all the junctions on the GDRS would operate within capacity.

1.0 INTRODUCTION

1.1 REPORT OVERVIEW

1.1.1 This Traffic Modelling Report (TMR) outlines the three-stage (macrosimulation, microsimulation and junction modelling) transport modelling approach and methodology undertaken by DBFL Consulting Engineers on behalf of Dun Laoghaire-Rathdown County Council (DLRCC) as part of the Glenamuck District Roads Scheme (GDRS). Further, the development process, results and analysis are summarised within the report.

1.1.2 The modelling approach also included the refinement, calibration/validation and improved traffic forecasting process for an existing strategic local area traffic model of Glenamuck Local Area Plan from 2013. This local area traffic model assisted in the microsimulation stage of the transport modelling approach.

1.1.3 This transport modelling approach will be used to test the impacts of the proposed GDRS scheme, future traffic management proposals, highway network interventions and forecast traffic demand flows through proposed junctions to inform designs for the detailed design stage of the project. The traffic model study area for the proposed scheme is illustrated in **Figure 1.1** below.

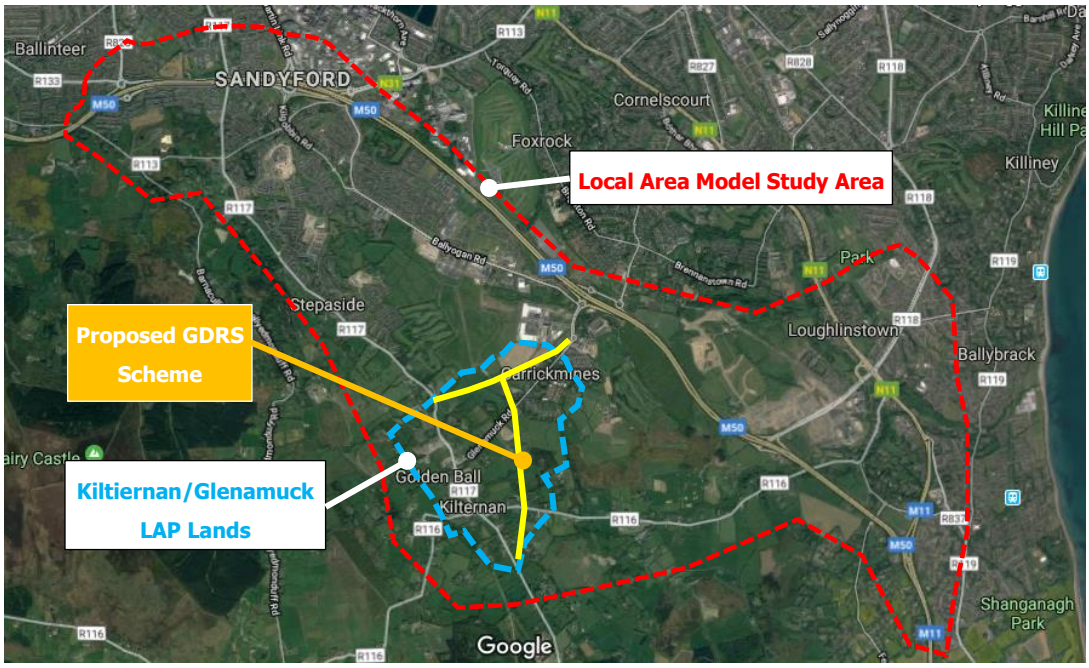


Figure 1.1: Proposed Glenamuck District Roads Scheme and Key Study Boundaries

1.1.4 This transport modelling approach has been developed in accordance with Transport Infrastructure Irelands' (TII's) Project Appraisal Guidelines (PAG) 2016 and industry best practice.

1.2 PROJECT BACKGROUND

1.2.1 The overall aim of this project is the delivery of the 1.8km Glenamuck District Distributor Road (GDDR) and the 1.6km Glenamuck Link Distributor Road (GLDR) including associated junctions between these roads and existing roads such as Enniskerry Road & Ballycorus Road (**Figure 1.3**). Total length of the combined proposed scheme is 3.4km.

1.2.2 While the road has long been an objective contained in Dún Laoghaire-Rathdown County Development Plans (As stated in *ST25* under '*Six-Year Road Objectives*' and *Specific Objective 40* in the most recent Development Plan 2016-2022) and Local Area Plans for the Glenamuck / Kiltiernan, the scheme is yet to receive planning approval.

1.2.3 The delivery of the scheme will not only serve zoned development lands but will also provide a safe road network for the existing population of the Kiltiernan area. Existing roads such as Glenamuck Road East have long been unsafe and inadequate to serve the current volumes of traffic using the route to connect to the M50 and local amenities such as the Park Development.

1.2.4 The GDRS project will entail the progression through the following stages: -

- Preliminary Design
- Detailed Design & Statutory Process with the Call Off Project
- Tender Evaluation and Award
- Construction
- Handover

1.2.5 The proposed scheme will also provide upgraded facilities for pedestrians, cyclists & public transport to replace poor or non – existent facilities on existing routes whilst also providing safe linkages to the Luas Green line on Ballyogan Road. Public Transport measures also includes bus gates to enable the provision bus priority through key junctions and links to provide higher frequency and reliability services to cater for the anticipated increase in population and development in the LAP lands.

1.2.6 The GDDR/GLDR will form a key component of the revised network of roads planned for the south-western area of Dun Laoghaire-Rathdown County and will align with

the proposals for Cherrywood SDZ (Golf Lane upgrade), the proposed construction of the Clay Farm Loop Road off Ballyogan Road and road infrastructure in the Q3 Park development in Carrickmines to support the anticipated levels of residential and commercial development in the area.

1.3 OUR APPROACH

1.3.1 This traffic assessment for the GDRS scheme required transport modelling and analysis to be undertaken at three levels of modelling, from strategic macro-modelling, local area micro-simulations and to local junction models (Illustrated in **Figure 1.2**).

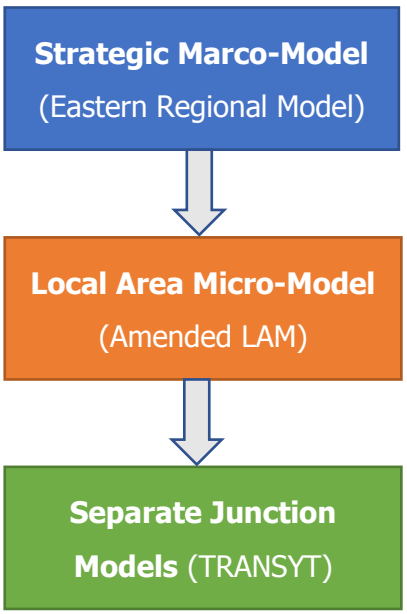


Figure 1.2: Outline of Approach Undertaken

1.3.2 For the strategic macro-modelling component of the assessment, the NTA's East Regional Model (ERM) was used to develop a comprehensive understanding of Glenamuck / Kiltiernan local area encompassing mode share and trip origin / destination analyses and the impact on strategic road and public transport infrastructure.

1.3.3 The ERM which is part of the NTA's Regional Modelling System provides a multi-modal forecasting capability that is particularly well suited for the assessment of large-scale developments such as the proposed GDRS. **Section 4** summarises the NTA's Regional Modelling System and functionalities.

1.3.4 However, for a more detailed assessment within the area, a Local Area Model (LAM) was developed to build on the zonal detail provided by the ERM inside the Glenamuck local area (which is too coarse for detailed assessment) and to provide the required means of testing a high number of scenarios (since the ERM run times are impractical when testing many options and scenarios as is required for Glenamuck at a local level).

1.3.5 RPS Group undertook a review of the Glenamuck Local Area Plan in 2013 as a cost-effective method of updating the previous modelling work from 2006, to assess the Glenamuck / Kiltiernan LAP transportation infrastructure designs and proposals.

1.3.6 The previous RPS model included two user classes 'HCVs and light vehicles' and covers the AM peak period 08:00 – 09:00 only. The transport model's network included the LAP area, the various M50/M11 junctions, the routes between the LAP area and these junctions and routes to and from the M11 via the Loughlinstown roundabout.

1.3.7 The base year model was calibrated to 2012 conditions. The transport model's zoning system within the LAP area was revised in order to tie in more closely with the system of land parcels and land uses proposed within the LAP, the proposed system of access roads by which new lands use would connect to the road network.

1.3.8 The forecast year for the RPS review was 2022 and the future year model network also contained additional zones to allow for developments at the Park, Carrickmines and Cherrywood.

1.3.9 These existing RPS files were used the proposed amended LAM for this assessment of GDRS with some elements of refinement and new demand matrices being applied.

1.3.10 This LAM acted as an *Assignment Model*, which replicated demand responses where they might be expected as a result of a scheme. The demand responses considered here comprise changes in trip rates, choice of destination and travel mode.

1.3.11 The final part of this transport modelling approach was to derive the traffic flows from the amended LAM and apply them to TRANSYT junction models to optimise junctions designs and geometry, refinement and junction operation.

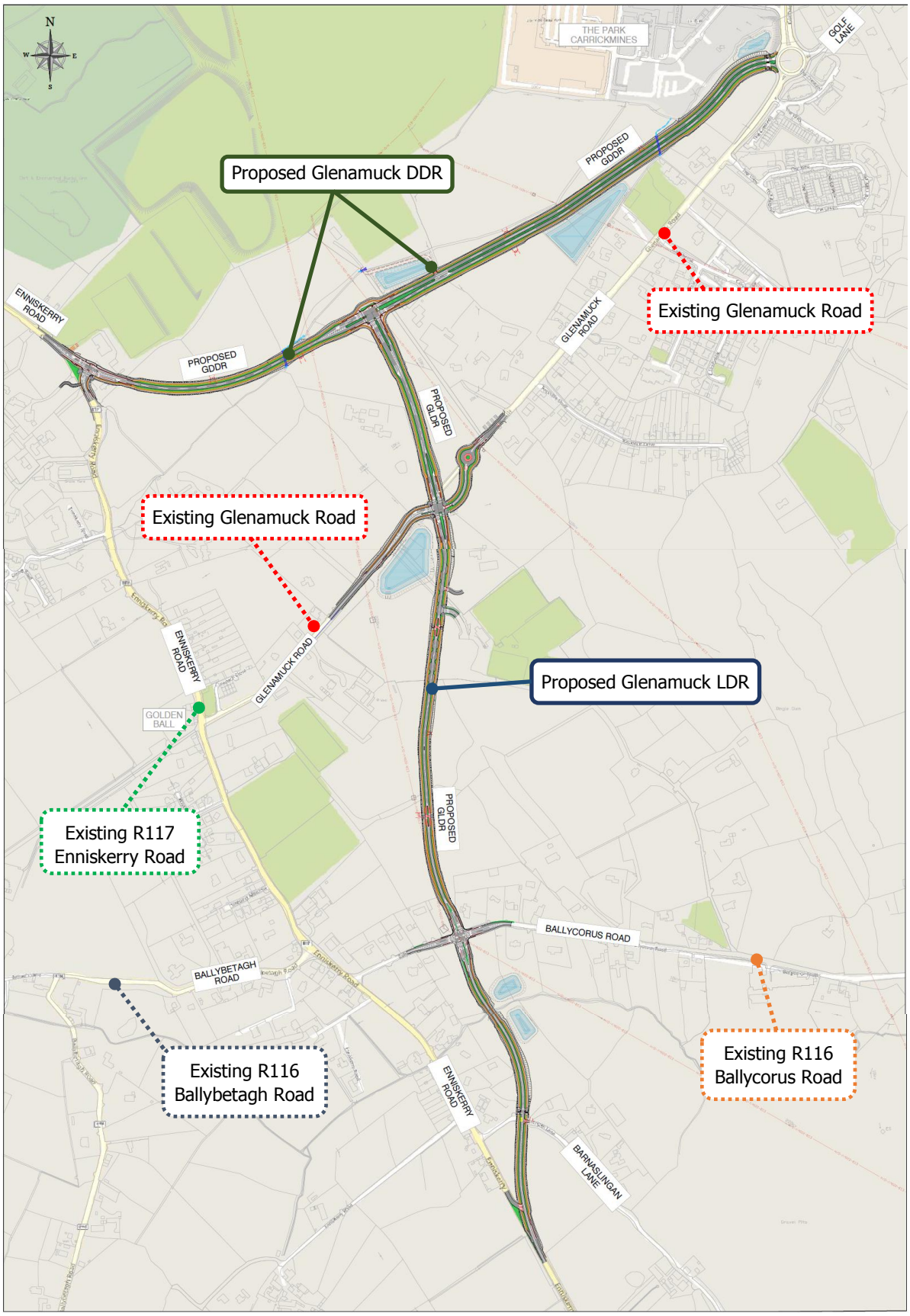


Figure 1.3: Proposed Glenamuck District Roads Scheme and Surrounding Existing Road Network

1.4 MODELLING OBJECTIVES

1.4.1 The objectives of the transport modelling are: -

- Determine demand flows on the proposed GDRS;
- Undertake junction modelling on key intersections based on forecasted traffic flows which will aid in the preliminary and detailed designs;
- Data from transport modelling exercise will assist in the project appraisal of the proposed scheme;
- Determine the likely influence the proposed scheme will have on the surrounding transport network; and
- What modes of transport are likely to be affected by the proposed GDRS.

1.5 REPORT STRUCTURE

1.5.1 The following outlines the structure of the remainder of this report:

- Section 2 – Transport Modelling Methodology
- Section 3 – Data Collection
- Section 4 – Regional Model System Methodology
- Section 5 – Local Area Model Methodology and Development
- Section 6 – TRANSYT Methodology
- Section 7 – Local Area Model Calibration & Validation
- Section 8 – Regional Model Results
- Section 9 – Local Area Model Results
- Section 10 – TRANSYT Analysis
- Section 11 – Summary & Conclusions

2.0 TRANSPORT MODELLING METHODOLOGY

2.1 ASSESSMENT FRAMEWORK

2.1.1 The GDR scheme required transport modelling and assessments to be undertaken at three levels of modelling, from strategic macro-modelling, local area micro-simulations and to local junction models.

2.1.2 The NTA's East Regional Model (ERM) which is part of the NTA's Regional Modelling System provides a multi-modal forecasting capability that is particularly well suited for the assessment of large-scale developments such as proposed the GDR scheme. **Section 4** summarises the NTA's Regional Modelling System.

2.1.3 For the strategic modelling, the ERM was used to develop a comprehensive understanding of Glenamuck / Kiltiernan local area encompassing mode share and trip origin / destination analyses and the impact on strategic road and public transport infrastructure.

2.1.4 For a more detailed assessment within the area, a Local Area Model (LAM) was developed for each assessment year to build on the zonal detail provided by the ERM inside the Glenamuck local area (which is too coarse for detailed assessment) and to provide the required means of testing a high number of scenarios (since the ERM run times are impractical when testing many options and scenarios as is required for Glenamuck at a local level).

2.1.5 The existing RPS files from the 2013 Glenamuck Transport Local Area Model were used for this the proposed LAM for the assessment of GDRS with some elements of refinement and new demand matrices being applied. This LAM will act as an *Assignment Model*, which replicates demand responses where they might be expected as a direct result of a scheme. The demand responses considered here comprise changes in trip rates, choice of destination and travel mode. **Section 5** outlines the overall Local Area Model approach and methodology further.

2.1.6 The final part of the transport modelling approach was deriving traffic flows from the LAM and applying them to TRANSYT junction models to optimise junctions designs and geometry, refinement and junction operation. **Section 6** summarises the junction modelling methodology.

2.1.7 **Figure 2.1** summarises the overall transport modelling approach to be undertaken for the Glenamuck District Roads Scheme.

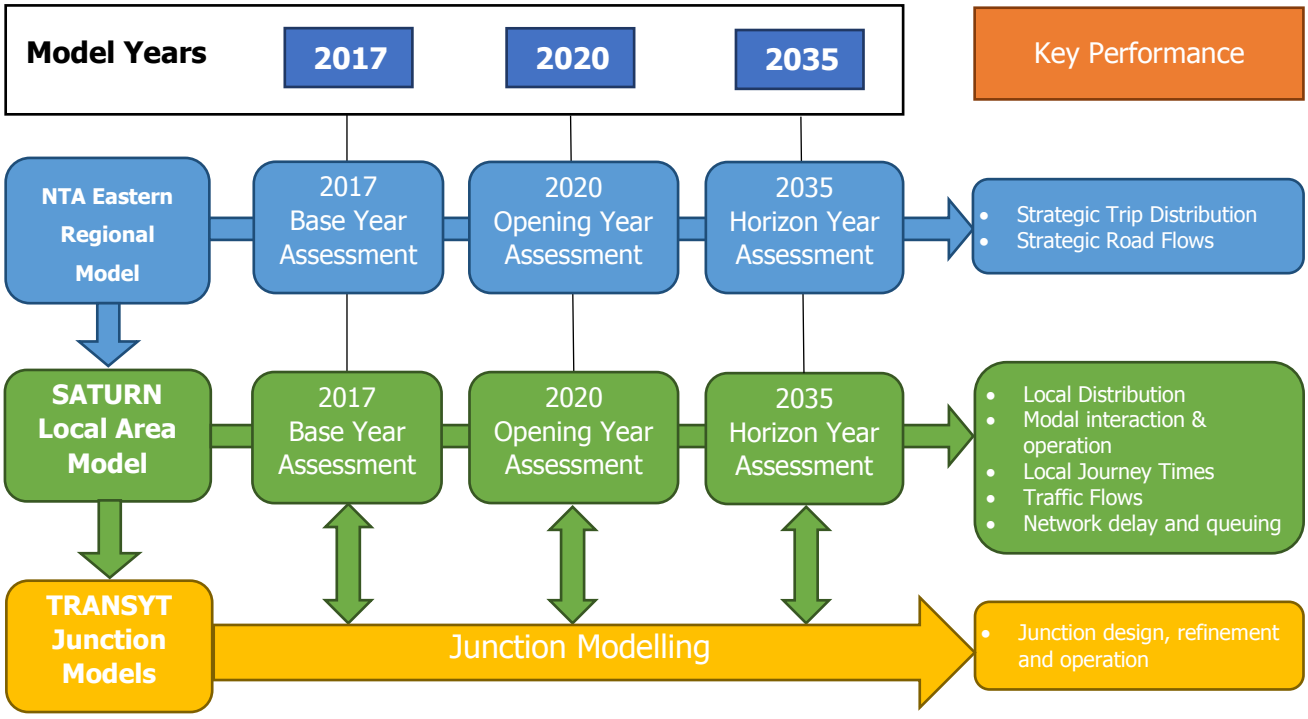


Figure 2.1: Proposed Glenamuck District Roads Scheme Transport Modelling Approach

2.2 KEY PERFORMANCE INDICATORS (KPIs)

2.2.1 Both ERM and LAM models are to be used to provide Key Performance Indicators (KPIs) to inform on the performance of the transport network for all modes at a strategic and local level.

2.2.2 The following KPIs will be assessed in the ERM:

- Strategic Trip Distribution; and
- Strategic Road Flows.

2.2.3 The following KPIs will be assessed in the LAM:

- Local Distribution;
- Modal Interaction & Operation;
- Local Journey Times;
- Traffic Flows; and
- Network Delay and Queuing.

2.2.4 The following KPIs will be assessed in the TRANSYT Models:

- Degree of Saturation (%);
- Total Junction Delay;

- Max. Mean Queue Lengths; and
- Optimised Traffic Signal Timing.

2.2.5 **Table 2.1** summarises the various KPIs and their proposed uses in the transport modelling assessment for the proposed GDR scheme.

Modelling Stage:	Key Performance Indicator	Purpose in Assessment
ERM	Strategic Trip Distribution	- LAM Calibration
	Strategic Road Flows	- LAM Calibration - Wider Area Effects
LAM	Local Distribution	- Trip Distribution - Turning Proportions
	Modal Interaction	- Scheme's effects Bus Routes
	Local Journey Times	- LAM Validation - Scheme Appraisal
	Traffic Flows	- Demand Flows for TRANSYT
	Network Delays and Queuing	- Scheme Appraisal - Problem Junction Identification for TRANSYT
TRANSYT	Degree of Saturation	- Junction Design - Junction Operation
	Total Junction Delay	- Junction Design - Junction Operation
	Max. Mean Q. Lengths	- Junction Design - Junction Operation
	Signal Timing	- Junction Design - Junction Operation

Table 2.1: Summary of Key Performance Indicators in Assessment

3.0 DATA COLLECTION

3.1 OVERVIEW

3.1.1 In order to develop a traffic model, a significant level of traffic data is required to ensure that the model can replicate existing traffic patterns and volumes. This section of the Transport Modelling Report (TMR) describes the collation of data for the construction of the Base Year (2017) Glenamuck LAM.

Traffic Surveys

3.1.2 A summary of the traffic surveys data that were collated to inform the development of the Base Year (2017) LAM are outlined in **Table 3.1** below. **Figures 3.1** to **3.4** illustrate the location of the traffic surveys. All surveys were undertaken by Innovative Data Solutions (IDASO) except for the permanent ATC on the M50.

3.1.3 A number of permanent Transport Infrastructure Ireland (TII) Traffic Monitoring Units (ATC counters) are located in the study area and data from these counters were also used as part of the development of the 2017 base year LAM. Baseline traffic survey data from the surveys are outlined within **Appendix A.**

Survey Type	Description
Traffic Counts	**Automatic Traffic Counts** (ATC) surveys were carried out at an additional 7 sites in Carrickmines / Glenamuck / Kiltiernan area 24 hours a day over a one-week period from Monday 6th to Monday 13th November 2017.
	Junction Turning Movement Count (JTC) surveys were carried out at 9 locations from 07:00 to 19:00 on Tuesday 7th, Thursday 9th and Saturday 11th November 2017.
	Junction Turn Counts – Pedestrian Counts (JTC – PED) were carried out at 9 locations from 07:00 to 19:00 on Tuesday 7th, Thursday 9th and Saturday 11th November 2017.
	Data from 4 Transport Infrastructure Ireland **Permanent ATC's** for 2017.

Survey Type	Description
Queue Length Surveys	**Queue Length** surveys were carried out at 9 JTC locations from 07:00 to 19:00 on Tuesday 7th, Thursday 9th and Saturday 11th November 2017.
Journey Time	**Journey Time** survey data was collected through the Bluetooth methodology. A minimum sample rate of 20% is required as part of these surveys.

Table 3.1: Traffic Survey Data

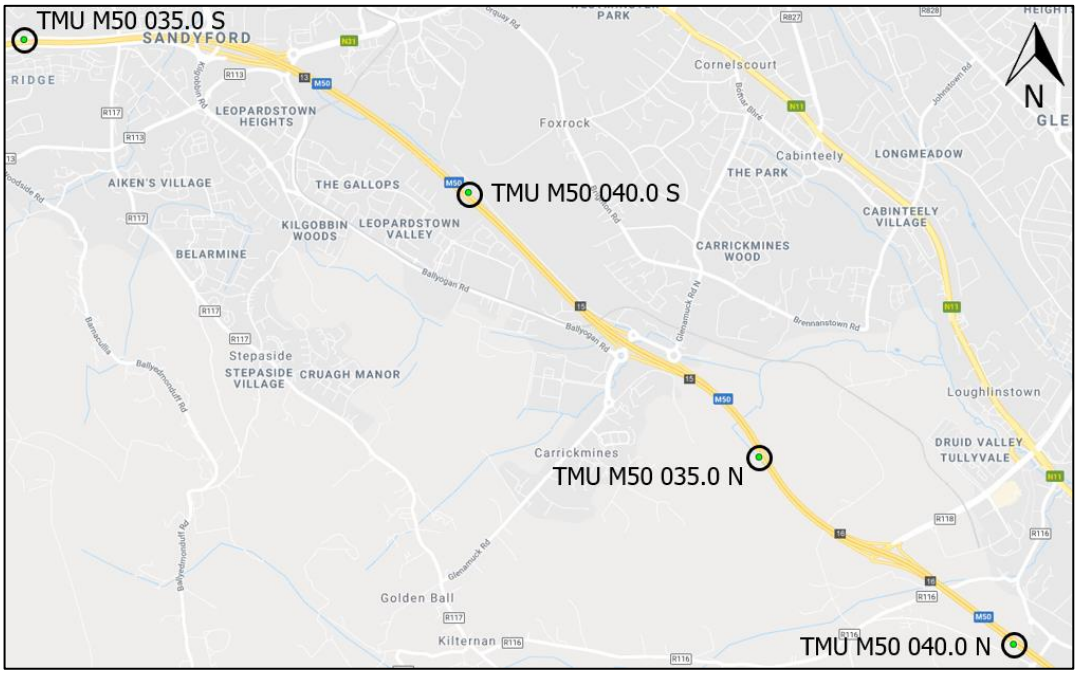


Figure 3.1: Location of TII Permanent ATC's Used in this Assessment

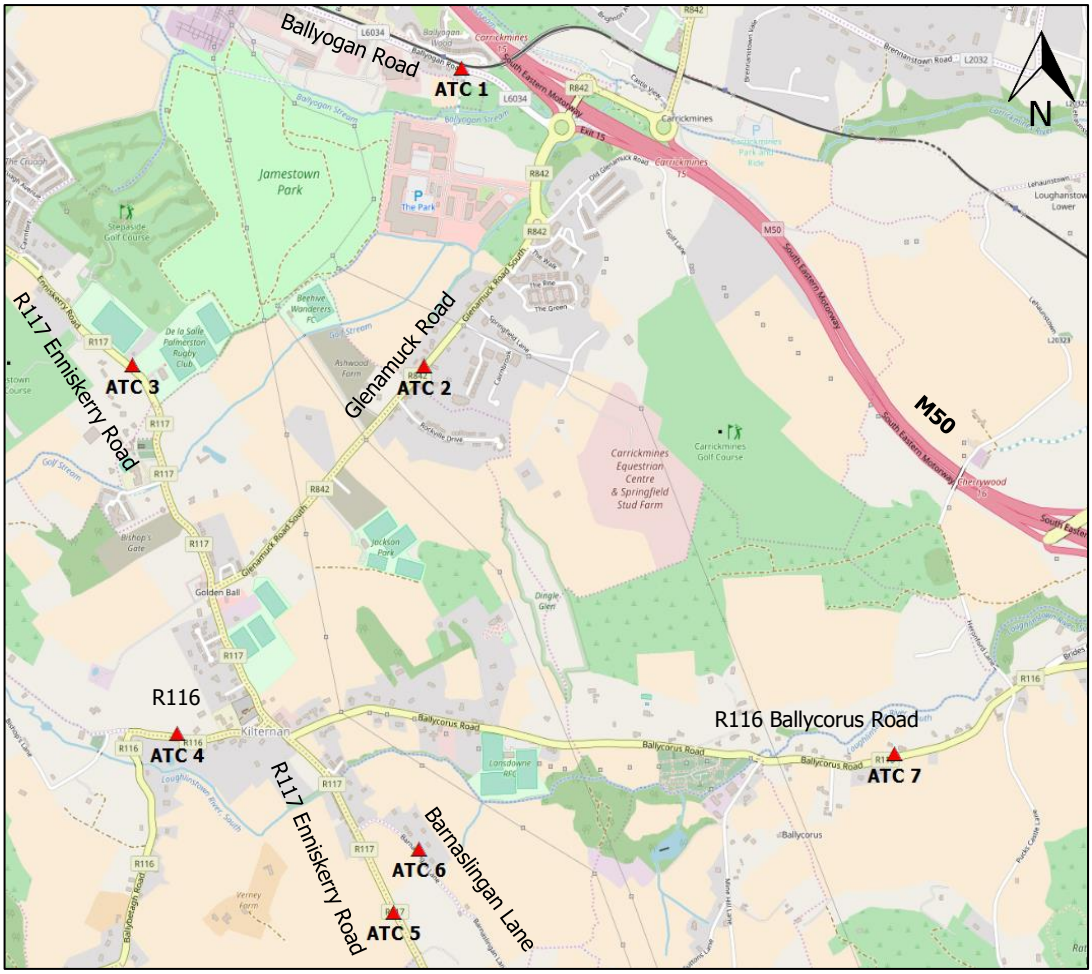


Figure 3.2: Overview of ATC Survey Locations

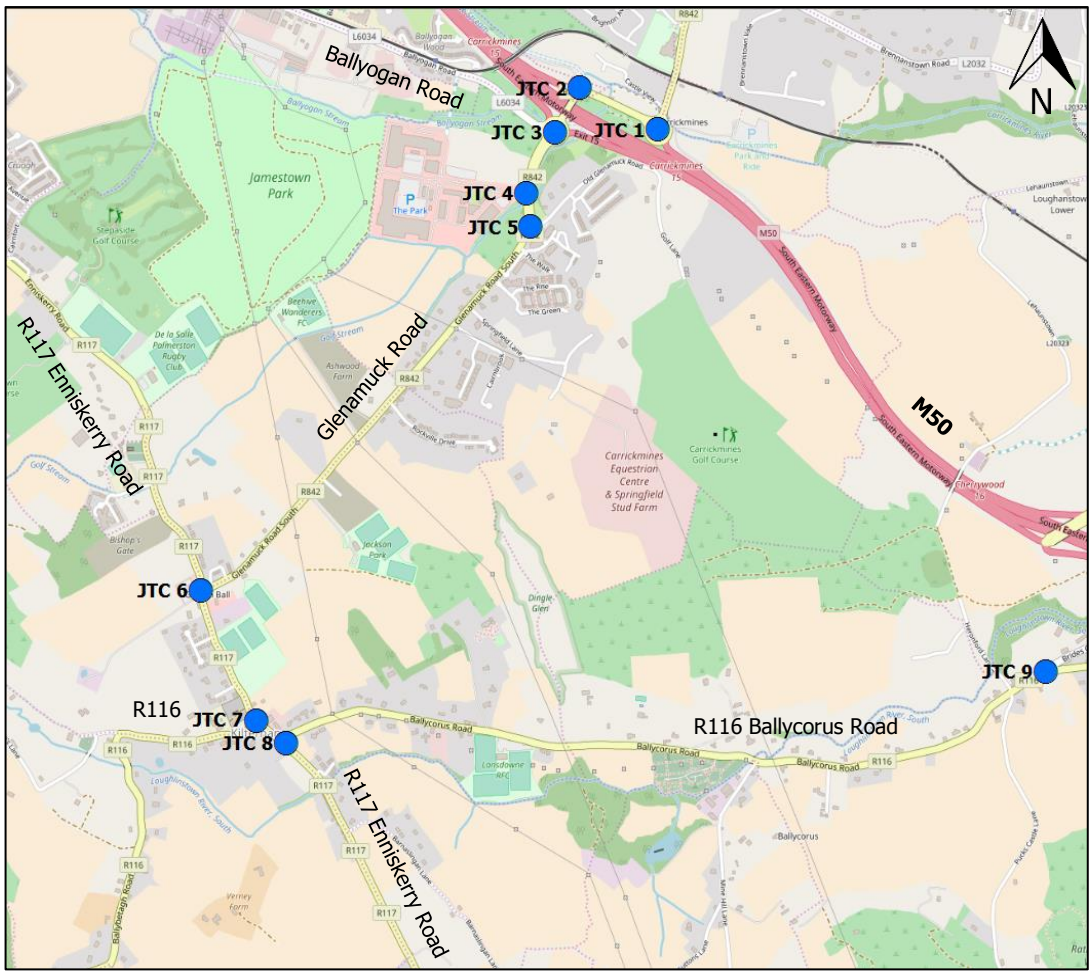


Figure 3.3: Overview of JTC/PED and Queue Length Survey Locations

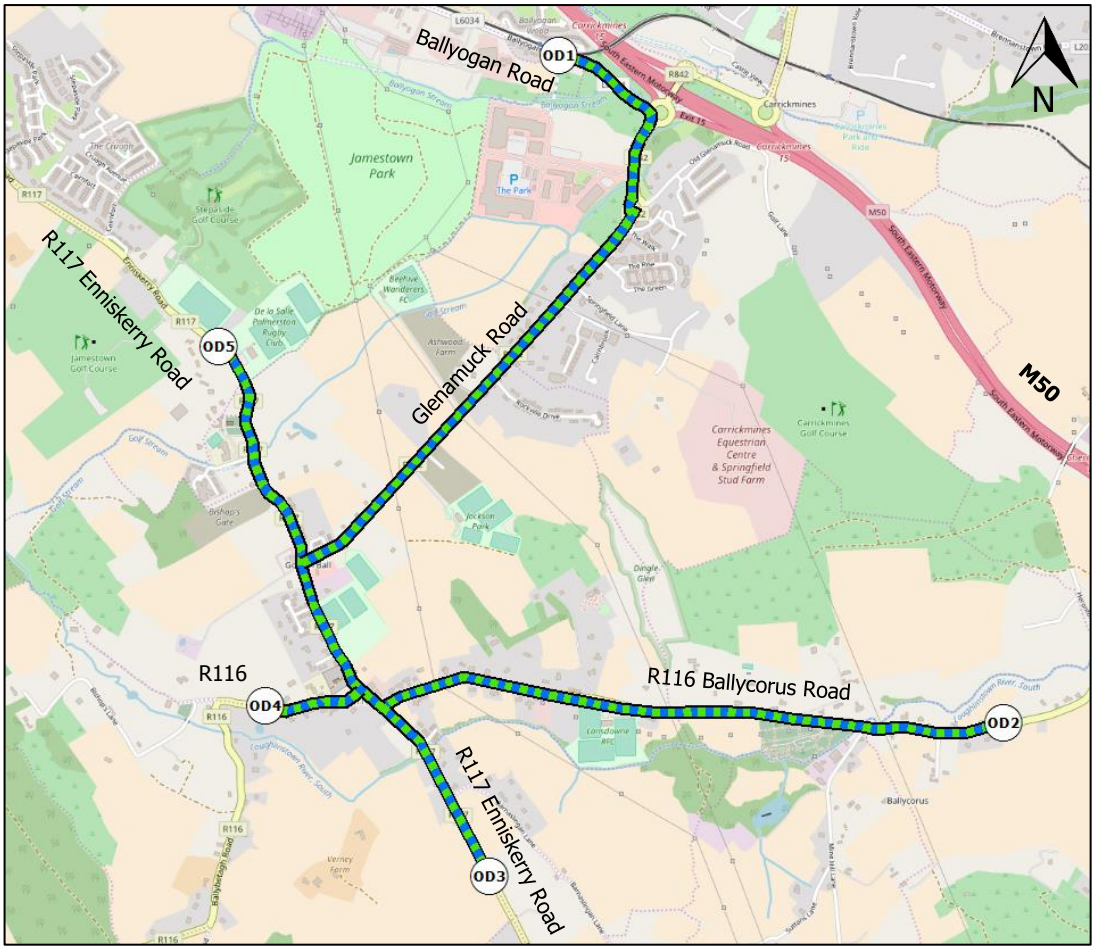


Figure 3.4: Overview of Bluetooth OD Locations & Journey Time Paths

3.2 TII TRAFFIC COUNTERS

3.2.1 TII has a large number of permanent ATC traffic counts across the national and motorway road network. These Automated Traffic Counts (ATCs) captured the traffic flows passing given points on the road network and classified the flow into different vehicle classifications, such as Cars, Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV). AADT traffic flow data, were extracted from 4 traffic count sites near the proposed scheme, as illustrated in **Figure 3.1**.

3.3 AUTOMATIC TRAFFIC COUNTS

3.3.1 An Automated Traffic Count (ATC) captures the traffic flow passing a given point on a road and classifies the flow into different vehicle classifications, such as Cars, Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV). Traffic flow data, extracted from the ATC survey sites (7 ATC survey sites indicated in **Figure 3.2**) undertaken

over the one-week period from Monday 6th to Monday 13th November 2017, is presented in **Table 3.2.** below

3.3.2 **Table 3.2** also provides annual average estimates of both weekday (Mon – Fri) and 7-day traffic flow based on the ATC Surveys. The following estimates are presented:

- 2017 Annual Average Weekday Traffic (AAWT); and
- 2017 Annual Average Daily Traffic (AADT).

3.3.3 It should be noted that a seasonality factor of 0.99 for the month of November has been applied to the collected data in line with guidance provided in TII PAG Unit 16.1: Expansion Factors for Short Period Traffic Counts. A graphical summary of the peak hour AAWT and AADT information presented in **Table 3.2** below is shown in **Figure 3.6**. Baseline ATC survey data from the surveys are summarised within **Appendix A**.

Site	Location	Vehicles per Hour (Two-way Flow)		Vehicles per Day	
		AM	PM	AAWT	AADT
ATC 1	Ballyogan Road	981	940	11,169	10,387
ATC 2	Glenamuck Road	779	734	8,373	7,908
ATC 3	Enniskerry Road	873	818	8,116	7,633
ATC 4	R116	178	139	1,898	1,865
ATC 5	Enniskerry Road (South of Barnaslingan junction)	434	886	6,967	6,504
ATC 6	Barnaslingan Lane	21	26	323	359
ATC 7	Ballycorus Road	202	280	2,374	2,209

Table 3.2: Automatic Traffic Counter Data 2 Way Flow (2017)

3.3.4 ATC survey helped in establishing the AM and PM peak hour periods as seen in **Figure 3.5**. Below the following time peak hours were found:

- AM Peak Hour (08:00 – 09:00); and
- PM Peak Hour (17:00 – 18:00).

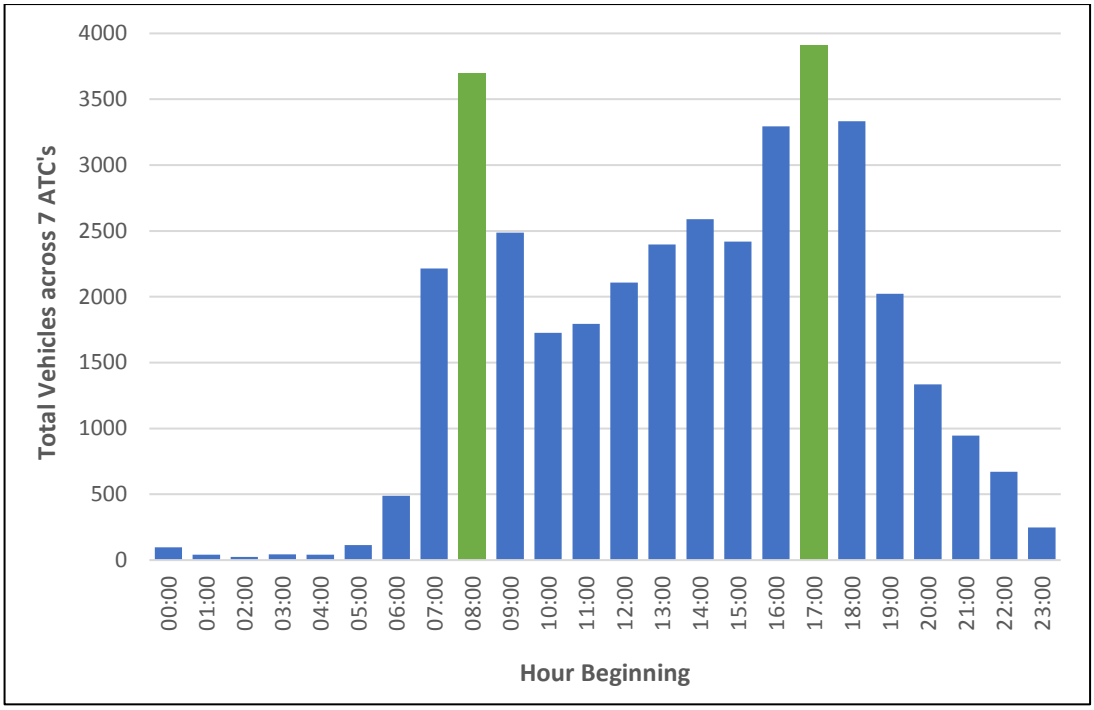


Figure 3.5: Peak Hour Selection

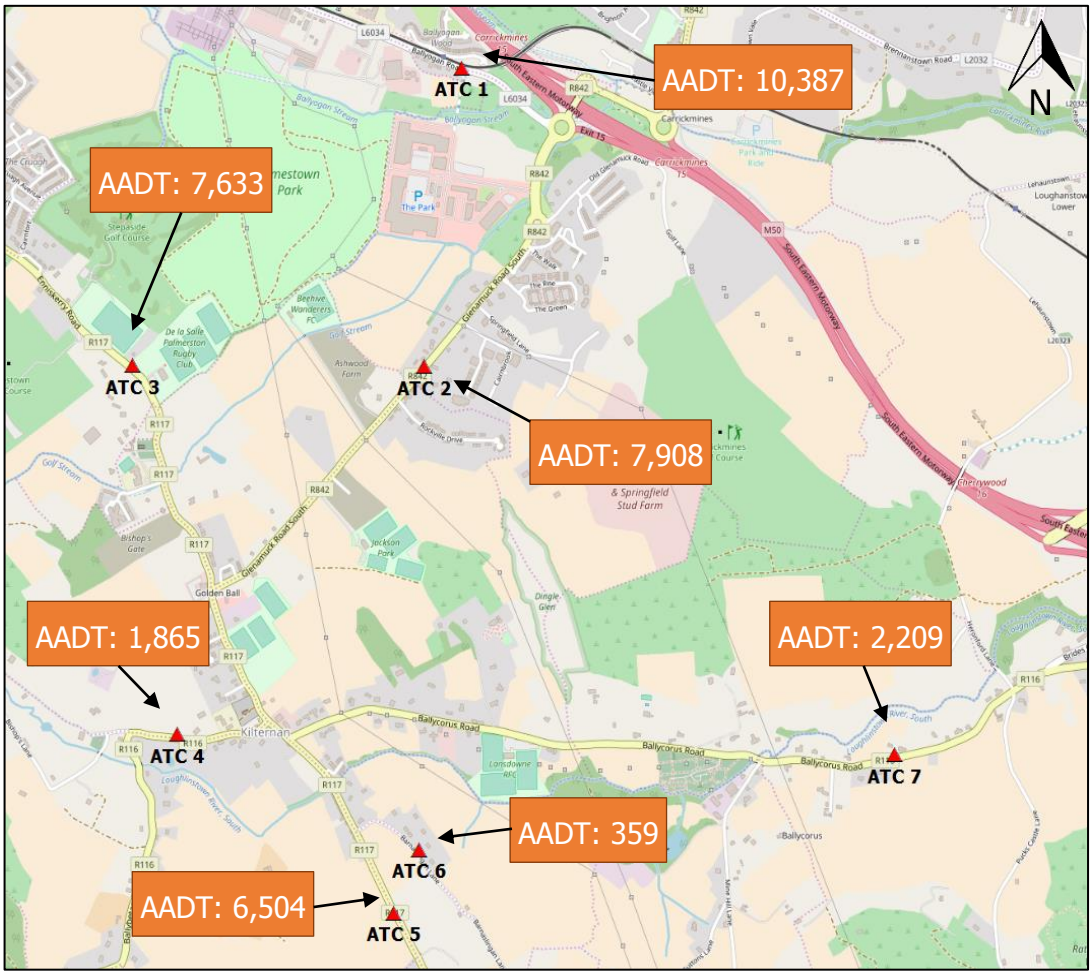


Figure 3.6: Estimated AADT's from ATC surveys within the Study Area

3.4 JUNCTION TURNING COUNTS

3.4.1 A Junction Turning Count (JTC) captures the number of vehicles turning at a junction and observes which turn they take. As with the ATCs they classify the traffic into different vehicle categories. JTC surveys were undertaken at 9 junctions from 07:00 to 19:00 on Tuesday the 7th, Thursday the 9th and Saturday the 11th November 2017. Traffic flow was classified by vehicle type and recorded in 15-minute time intervals. The junctions listed in **Table 3.3** below were surveyed (refer to **Figure 3.3**). Baseline JTC survey data from the surveys are contained within **Appendix A**.

Site	Location
JTC 1	Glenamuck Road North / M50 Roundabout (East)
JTC 2	Glenamuck Road North / M50 Roundabout (West)
JTC 3	Glenamuck Road / M50 / Ballyogan Road Roundabout
JTC 4	Glenamuck Road / The Park Carrickmines
JTC 5	Glenamuck Road / Golf Lane Roundabout
JTC 6	Glenamuck Road / Enniskerry Road
JTC 7	Enniskerry Road / R116
JTC 8	Enniskerry Road / Ballycorus Road
JTC 9	Ballycorus Road / Rathmichael Road / Brides Glen Road

Table 3.3: Junction Turning Movement Counts (2017)

3.5 BLUETOOTH SURVEYS

3.5.1 Journey time information was collated from the Bluetooth data in order to ensure that the travel time on existing roads was properly reflected within the base models, thereby ensuring that a robust assignment could be undertaken. These journey times represent an average of journey time surveys captured on Tuesday the 7th, Thursday the 9th and Saturday the 11th November 2017.

3.5.2 The journey times between 5 OD points, these key routes are shown graphically in **Figure 3.4** Details of the resultant journey times for the AM and PM periods are presented in **Tables 3.4** and **3.5**. This journey time data was used to validate the base year models.

07:00 - 10:00	OD 1	OD 2	OD 3	OD 4	OD 5
OD 1		413	337	337	281
OD 2	413		153	168	234
OD 3	291	154		74	144
OD 4	279	174	90		149
OD 5	374	266	156	188	

Table 3.4: Average Journey Time between OD locations during AM period (in secs)

16:00 - 19:00	OD 1	OD 2	OD 3	OD 4	OD 5
OD 1	-	517	479	418	507
OD 2	393	-	187	179	262
OD 3	377	173	-	79	167
OD 4	339	193	120	-	118
OD 5	374	298	223	183	-

Table 3.5: Average Journey Time between OD locations during PM period (in secs)

3.5.3 The data presented below in **Tables 3.6** and **3.7** (expressed as average percentage breakdown of origin trips) for the AM and PM periods over the three days the Bluetooth surveys were conducted. The vertical column of row represents the percentage of captured vehicles at each OD location and which other OD location the captured vehicles were destined for. Therefore, the tables outline the Origin of a vehicle (the first time a vehicle was captured within the network) and the Destination (as the last time a vehicle was captured).

07:00 - 10:00	OD 1	OD 2	OD 3	OD 4	OD 5
OD 1	-	413	337	337	281
OD 2	413	-	153	168	234
OD 3	291	154	-	74	144
OD 4	279	174	90	-	149
OD 5	374	266	156	188	-

Table 3.6: Average Origin Breakdown between OD locations during AM period

16:00 - 19:00	OD 1	OD 2	OD 3	OD 4	OD 5
OD 1	-	18.5%	59.3%	0.0%	22.2%
OD 2	0.0%	-	15.1%	19.2%	65.7%
OD 3	4.8%	13.1%	-	10.4%	71.7%
OD 4	1.9%	21.2%	30.7%	-	46.2%
OD 5	0.6%	15.0%	77.8%	6.6%	-

Table 3.7: Average Origin Breakdown between OD locations during PM period

3.5.4 **Tables 3.8** below presents the overall sample capture rate at each OD location of the percentage vehicles captured in the Bluetooth survey out of the total number of travelling through each OD locations. This capture sample is taken as an individual vehicle first seen at one OD location and last seen at another OD location. The sample rates captured as part of this data collection process ranged from 22.6% - 26% which is considered a good capture rate for a Bluetooth survey which has a normal capture rate range of 15% - 20%. Baseline Journey Time survey data from the surveys are outlined within **Appendix A**.

Capture Rate:	OD 1	OD 2	OD 3	OD 4	OD 5	All Sites
7th November	25.6%	25.0%	23.2%	24.6%	25.1%	24.7%
9th November	26.0%	24.5%	22.9%	22.6%	25.0%	24.2%
11th November	25.2%	23.3%	22.6%	25.3%	24.8%	24.2%
Average	25.6%	24.3%	22.9%	24.2%	25.0%	24.4%

Table 3.8: Average Origin Breakdown between OD locations during PM period

4.0 REGIONAL MODEL SYSTEM METHODOLOGY

4.1 SOFTWARE OVERVIEW

4.1.1 The Regional Model System (RMS) was developed by the National Transport Authority (NTA) to support its transport functions and to provide a consistent framework for transport assessment and appraisal nationally.

4.1.2 The RMS has a hierarchical structure with three main components. These are the National Demand Forecasting Model (NDFM), the five Regional Multi-modal Models and the Appraisal Modules. The National Demand Forecasting Model provides consistent demand forecasts for input into each Regional Multi-modal Model. The Regional Multi-modal Models are strategic multi-modal, network-based transport models and include all the main surface modes of travel (including travel by car, bus, rail, Luas, walking, and cycling). They are complemented by the Appraisal Modules, which provide a full suite of appraisal tools in line with national guidance.

4.1.3 The five Regional Multi-modal Models are centred on the five main cities of Dublin, Cork, Galway, Limerick and Waterford (**Figure 4.1**). Each regional model has the following key attributes: -

- 24-hour average weekday travel demand for 33 different journey purposes;
- Five primary time periods;
- A detailed representation of the road network, the public transport network & services and active modes (walking and cycling); and
- A comprehensive representation of the travel choices of residents, using from-home/to-home tours to ensure consistent modelling of changes in time of travel, mode and parking behaviour.

4.1.4 Each of the five Regional Multi-modal Models (RMM) uses the same basic structure. This ensures that there is consistency across the regions for appraisal purposes. The structure is presented in **Figures 4.2** and **4.5**.

4.1.5 **Figure 4.2** shows the primary structure of the models and their relationship with other tools. NDFM outputs travel demand to the RMM for iteration through the choice and assignment modules, as well as direct input to the assignment for external trips produced by the Regional Model System Integration Tool (RMSIT) and other special zones as ports and airports.

4.1.6 **Figure 4.5** outlines in more detail the steps involved in converting the 24-hour demand into time, mode and destination-specific matrices for assignment. In

addition to the typical trip-making behaviours of time, destination and mode choice, the model includes a detailed representation of the impact of the impact of destination parking availability and cost on these choices, as well as the impact of tours in understanding the true costs experienced in decision making.

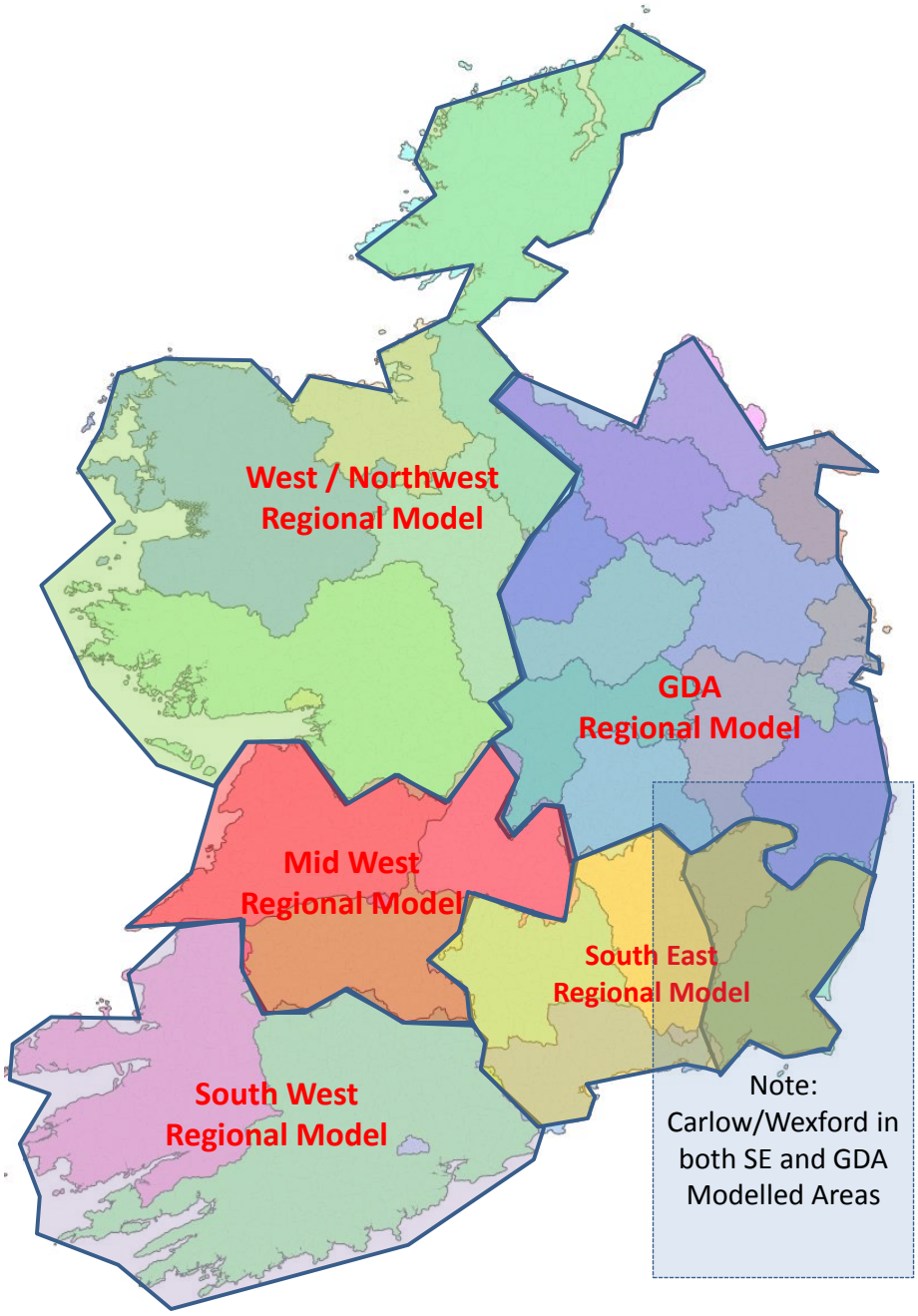


Figure 4.1: The Five Regional Multi-modal Models

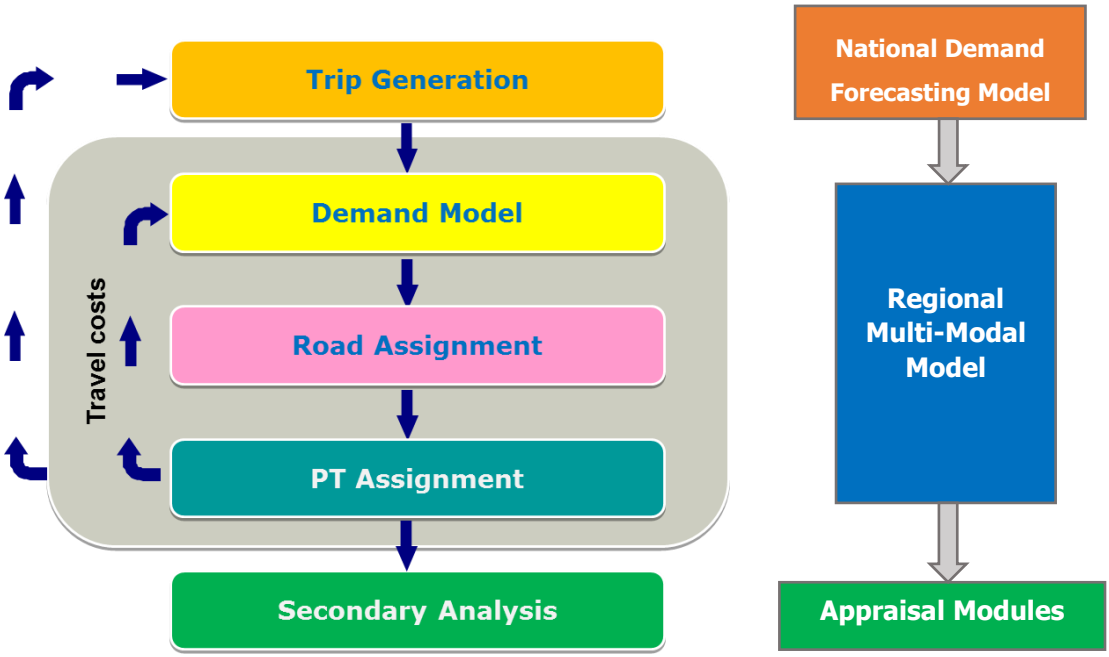


Figure 4.2: Basic Model Structure of Regional Model System

National Demand Forecasting Model

4.1.7 The National Demand Forecasting Model (NDFM) provides key sets of data inputs to each of the regional models. The NDFM includes the set of models and tools that are used to derive levels of trip making (nationally) from planning data for input to each of the regional models. The NDFM outputs levels of trip making at the smallest available spatial aggregation (Census Small Area or CSA, approx. 10,000 nationally) as a function of a set of 63 planning variables associated with population, schools, and employment locations.

4.1.8 Trip making estimates are produced for an average 24 hour weekday, so journeys (or tours) which involve leaving and returning home for some purpose (e.g. going to work) are represented as two trip legs in (usually) separate time periods.

4.1.9 The NDFM's outputs are expressed as Trip Ends which may be at the Tour level (as described above) or at the One-Way level, which would generally mean the trip starts and ends at non-home-based locations. The Trip End outputs produced by the NDFM are then used by the regional models, including the East Regional Model, to estimate what associated travel takes place on the road, public transport, and active modes networks. That then allows conditions on those transport networks to be assessed.

4.1.10 The key components of the NDFM are as follows:

- The **Planning Data Adjustment Tool** (PDAT), which controls the planning data inputs to the core NDFM system, and is used to amend planning data to represent the combination of general changes over time and the relevant land-use planning scenarios;
- The **Car Ownership/Car Competition Model**, a spreadsheet model which estimates the level of car ownership in a CSA, (sub-dividing the number of households in the CSA between 'No Car', 'Cars < Adults' and 'Cars >= Adults' households);
- The **National Trip-End Model (NTEM)**, which converts the planning data into person trips, using the calculations described in this report;
- The **Car Availability** Model, which classifies the set of individual person trips as either 'Car Available' or 'Car-not-available' using calibrated relationships between the three car competition bands and the trip purpose; and
- The **Regional Model Strategic Integration Tool (RMSIT)**, which estimates the level of trip-making by main mode (car, bus, rail and goods vehicles) between 56 of the main urban settlements (including ports and airports) in Ireland.

4.1.11 **Figure 4.3** shows the system of NDFM models and the key regional model components that the NDFM interacts with.

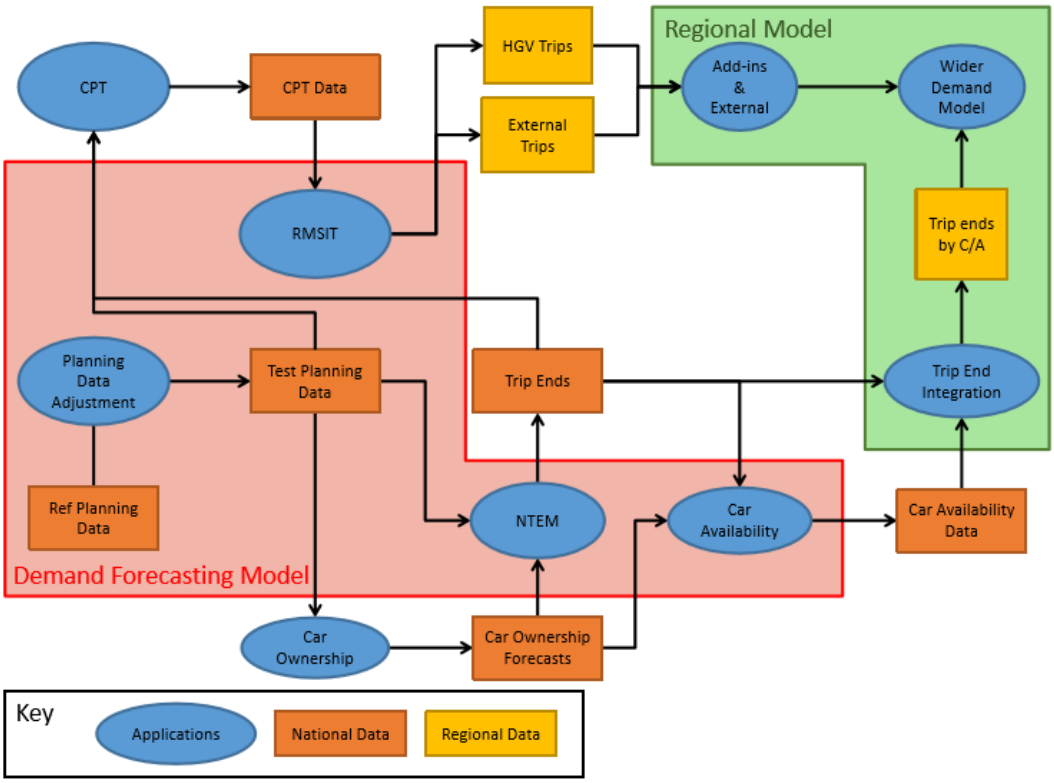


Figure 4.3: NDFM Placement within Modelling Hierarchy

4.1.12 Each regional model performs the following processing steps to utilise the NDFM output:

- Amalgamation of the CSA-based trip-ends to the relevant model zoning system;
- Amalgamation and/or splitting of the zone purposes to match the relevant demand model demand segments (e.g. splitting commuting trips between 'blue collar' and 'white collar' demand segments); and
- Incorporation of the relevant information from the RMSIT (i.e. trips to/from external zones and goods vehicle growth etc.).

4.1.13 An expanded diagram is shown (**Figure 4.4**) below which covers the interactions between the various modelling systems in more detail.

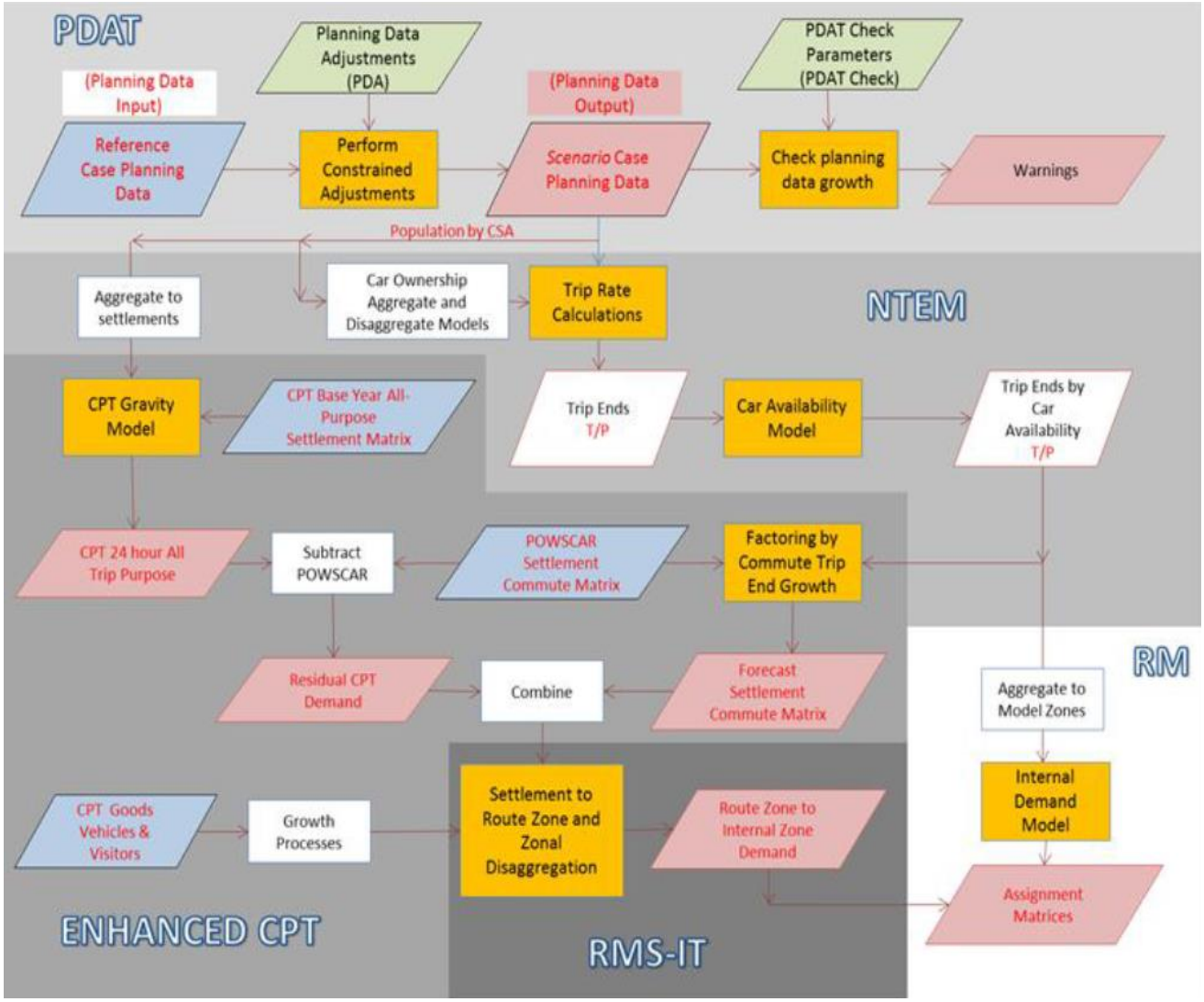


Figure 4.4: Expanded National Modelling System

Regional Multi-modal Models

4.1.14 The components for each of Regional Multi-modal models can be identified by five modelling stages as seen in **Figure 4.2**:

- The first is the ***Trip Generation*** stage is where estimates of the total quantity of travel demand generated by, and attracted to, each model zone on a daily basis (known as trip-ends) are calculated. The level of demand from, and to, each zone is related to attributes such as population, number of employees and land-use data. The trip end model is calibrated to these attributes, which then generates trip rates that are used to estimate the number of productions and attractions when forecasting to a future year. Trip ends feed into the demand model. This

functionality is provided by the National Demand Forecasting Model (NDFM) as described in the previous section;

- The ***Demand Model*** is integral to the Regional Multi-modal models and represents travel behaviour and choices such as when, where, and how to travel. It represents all day travel demand, including linked from home / to home trip pairs, which enables more accurate modelling of mode choice behaviour. The demand model processes all-day travel demand from the NDFM through several choice models to represent combined mode, time of day, destination and parking decision making. The outputs are origin-destination travel matrices by mode and time period that represent total travel in a period of time for all pairs of zones in the modelled area. The Road and Public Transport models then assign these to determine the route-choice of trips in their respective transport networks;
- The ***Road Assignment Model*** includes capacity restraint whereby travel times are recalculated in response to changes in assigned flows;
- The ***PT Assignment Model*** includes a similar process to represent the discomfort of travelling on crowded services. The assignment and demand models should be operated iteratively, as illustrated in **Figure 4.2**, until the demand for travel and costs are in balance, or converged; and
- Model outputs will be used in analysis of the impacts of transport and transport related interventions. ***Secondary Analysis*** utilities efficiently and consistently calculate indicators of such issues. The following impacts can be informed by model outputs (travel costs, demands and flows):
    - social, economic and financial appraisal;
    - road safety and accidents;
    - environmental impacts: noise, local air quality and carbon emissions;
    - fitness benefits of more use of active travel modes; and
    - change in fare revenue for PSO services and tax revenue from fuel oil.

The Demand Model

4.1.15 The purpose of the Demand Model (FDM) is to convert trip ends into matrices that can be assigned by the road, PT and active modes assignment models. The model is sufficiently detailed to incorporate different responses by journey purpose, demographic characteristics and car availability.

4.1.16 Outputs of the FDM include:

- One-hour peak road matrices for assignment for each assigned time period;
- One-hour peak PT matrices for assignment for each assigned time period; and
- One-hour peak active modes matrices for assignment for each assigned time period.

FDM Structure

4.1.17 The purpose of the FDM is to take input trip ends (at the 24-hour level) and costs (from the road, PT and active modes assignment models) and to allocate these trips to different time periods, modes and destinations so that they can be assigned using the peak-hour road, PT and active modes assignment models. A simple representation of the model structure is shown below in **Figure 4.5**.

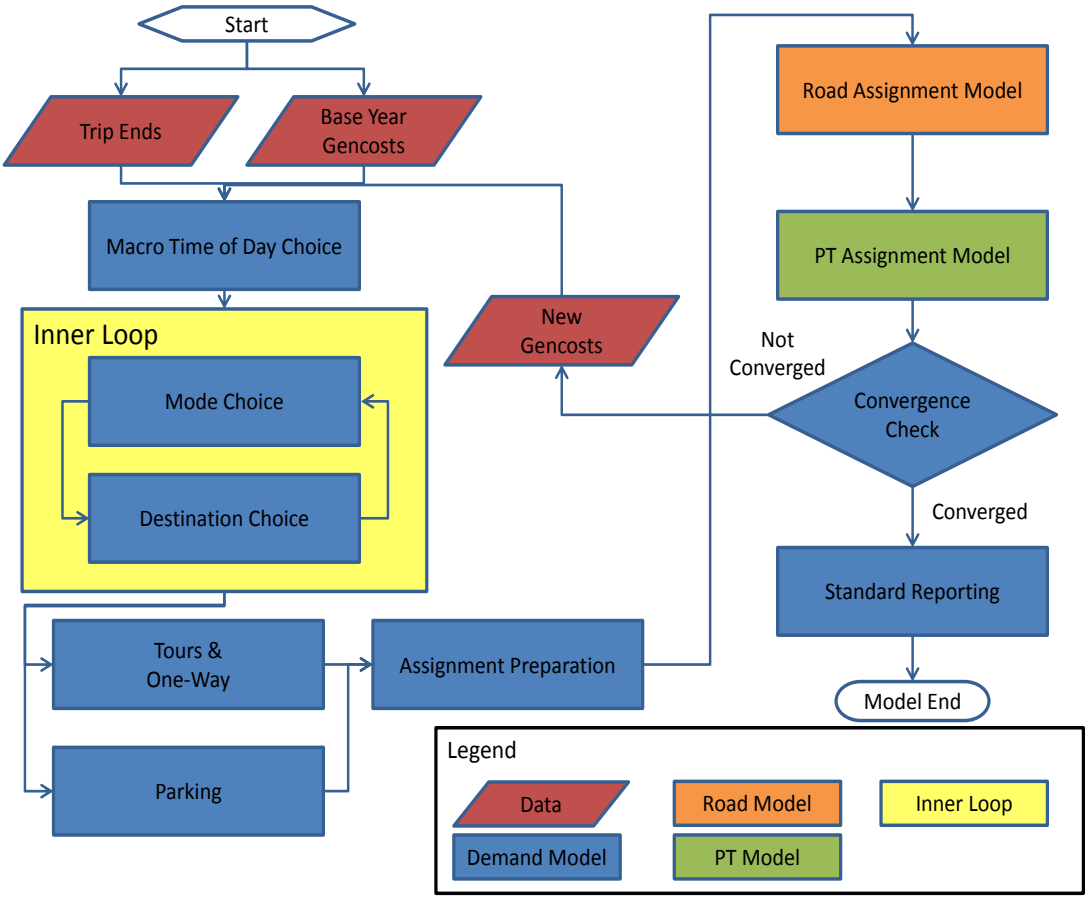


Figure 4.5: Structure of Regional Multi-Modal Model

Base Model Calibration and Validation

4.1.18 The calibration and validation process used by the RMS utilises comparisons between model outputs with the following observed data: -

- POWSCAR Census Data
- The NTA National Household Travel Survey
- The Geodirectory
- The Valuations Office Parking data
- CSO HGV data
- NTA Ticketing data
- NTA Airport Surveys
- Port Passenger data
- Over 6,000 Traffic counts nationwide
- Journey Time data
- Public Transport Surveys

- GTFS Public Transport
- NAPTAN Bus Stop database
- HERE Road Network data
- Traffic Signal data from a range of Urban Traffic Control Systems.

4.2 SCENARIOS TESTED

4.2.1 This section lists the different categories of scenarios tested with the Eastern Regional Model as part of this macro-modelling assessment for the GDR scheme.

Base Scenario

4.2.2 There is to be one base scenario to be tested as part of this project. This consists of using the existing ERM Base Model and growthing the demand from the 2012 base demand to 2017 forecast demand.

Modelled / Forecast Years

4.2.3 The following forecast years were tested as part of this assessment as per TII guidelines:

- 2017;
- 2020; and
- 2035

Do Nothing Scenario

4.2.4 There was one Do Nothing scenario tested as part of this assessment. This consisted of using the existing ERM Base Model and growthing the demand from the 2012 base demand to 2020 and 2035 forecast demands. Further, the scenario assumed that the GDR scheme was not included.

Do Something Scenarios

4.2.5 There were three Do Something scenarios tested as part of this assessment. The first consisted of using the existing ERM Base Model with the GDR scheme included

and growthing the demand from the 2012 base demand to 2020 and 2035 forecast demands.

4.2.6 The second Do Something scenario used the 'reference' 2035 model of the 'Greater Dublin Area (GDA) Transport Strategy 2016-2035' where the GDR scheme was included.

4.2.7 The third Do Something scenario used the 'reference' 2035 model of the 'GDA Transport Strategy 2016-2035' where the GDDR scheme was included with additional proposed infrastructure in the wider network such as the Golf Lane Link Road, Access routes for the Park Development between the scheme and Ballyogan Road and an upgrade to the Glenamuck west roundabout to a signalised junction.

4.3 NETWORK ASSUMPTIONS & REFINEMENT

4.3.1 This section outlines the different network assumptions included in each of the scenarios tested within the Eastern Regional Model.

2017 Base (ERM Scenario ID: AAB)

4.3.2 This scenario investigated the base year 2017 in the Eastern Regional Model. No network changes were carried out in the base model. New demand to reflect travel demand for 2017 was applied to this scenario.

2020 Do Nothing (ERM Scenario ID: AAA)

4.3.3 This scenario investigated the future year 2020 where the GDRS is not implemented. No network changes were carried out in the base model. New demand to reflect travel demand for 2020 was applied to this scenario.

2035 Do Nothing (ERM Scenario ID: AAJ)

4.3.4 This scenario investigated the future year 2035 where the GDRS is not implemented. No network changes were carried out in the base model. New demand to reflect travel demand for 2035 was applied to this scenario. It is assumed that the Glenamuck-Kiltiernan LAP lands are fully developed in this scenario.

2020 Do Something (ERM Scenario ID: AAF)

4.3.5 This scenario investigated the GDRS in the future year of 2020. Modifications were made to the input road files only. Two bus gates were coded into the AM and PM networks (**Figure 4.6**). A free flow vehicle speed of 50 kph was applied to the GDR scheme and a free flow vehicle speed of 40 kph in rest of the Kiltiernan-Glenamuck LAP Lands. Previously coded capacity indices were removed. These network changes and assumption were performed in all five ERM time periods.

2035 Do Something (ERM Scenario ID: AAG)

4.3.6 This scenario investigated the GDRS in the future design year of 2035. Modifications were made to the input road files only. A new node (90003) was included as to extend the GLDR to the Enniskerry Road. The 'reference' model had the scheme terminated at the Ballycorus Road. Two bus gates were coded into the AM and PM (**Figure 4.6**). A free flow vehicle speed of 50 kph was applied to the GDDR and a free flow vehicle speed of 40 kph in rest of the Kiltiernan-Glenamuck LAP Lands. Previously coded capacity indices on the GDDR were removed.

4.3.7 This was performed in all five model time periods. The full suite of proposals under the 'GDA Transport Strategy 2016-2035' are included within this scenario.

2035 Do Something & Complimentary Measures (ERM Scenario ID: AAI)

4.3.8 This scenario investigated the GDRS in the future design year of 2035. Modifications were made to the input road files only. A new node was included to extend the GLDR to the Enniskerry Road. The 'reference' model had the scheme terminated at the Ballycorus Road. Two bus gates were coded into the AM and PM networks (**Figure 4.6**). A free flow vehicle speed of 50 kph was applied to the GDDR and a free flow vehicle speed of 40 kph in rest of the Kiltiernan-Glenamuck LAP Lands. Previously coded capacity indices on the GDDR were removed.

4.3.9 Additional infrastructure (**Figure 4.6**) which are not part of the proposed scheme but planned infrastructure outside the immediate remit of the proposed GDRS were coded into the scenario which were:

- The Park Development infrastructure to connect the GDDR scheme with the Ballyogan Road;
- The Golf Lane Link to connect Cherrywood over the M50 to the GDDR; and

- The roundabout junction at the Glenamuck Road / Golf Lane intersection was updated to a signalised junction.

4.3.10 This was performed in all five model time periods. The full suite of proposals under the 'GDA Transport Strategy 2016-2035' were included within this scenario.

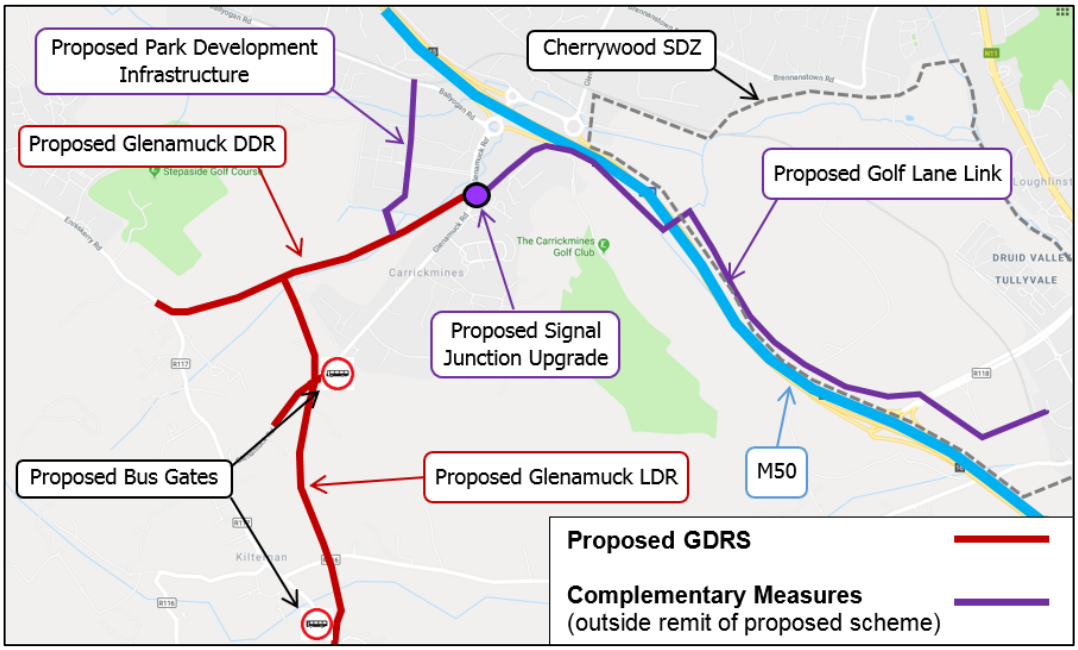


Figure 4.6: Proposed Bus Gates & Complementary Road Infrastructure

4.3.11 As mentioned as part of this assessment additional complementary road infrastructure (**Figure 4.6**) was included into a separate 2035 Do Something scenario in both the Regional Model and LAM. These additional complementary measures which are not part of the proposed scheme but planned infrastructure outside the immediate remit of the proposed GDRS were:

- The Park Development infrastructure to connect the GDR scheme with the Ballyogan Road;
- The Golf Lane Link to connect Cherrywood over the M50 to the GDRS; and
- The roundabout junction at the Glenamuck Road / Golf Lane intersection was updated to a signalised junction.

4.3.12 For all 'Do Something' scenarios in this assessment a new bus gate will be provided on the existing Enniskerry Road where it joins with the extended GLDR. This will only allow public transport vehicles, cyclists and pedestrians access to and from Kiltiernan Village from the Enniskerry Road at the bus gate. All other vehicles will not be allowed to make this movement. A four-armed junction between the existing

Glenamuck Road and the GLDR will facilitate the movement of public transport from Glenamuck Road (West) and the GLDR to Glenamuck Road (East), via another bus gate. Public transport vehicles, cyclists and pedestrians will be able to access and egress from Glenamuck Road (East) onto the GLDR. All other vehicles will not be allowed to access or egress from Glenamuck Road (East) onto the GLDR.

Transport Network Measures

4.3.13 This assessment was tested for the years 2017, 2020 and 2035 as per TII guidelines by inputting the relevant planning data for each plot into the NTA National Demand Forecasting Model. Within each forecast year, the appropriate transport network were also input to the model based on the NTA Greater Dublin Area Strategy for 2035.

4.3.14 **Table 4.2** below shows the main infrastructural items (which would have a potentially significant impact within the Glenamuck-Kiltiernan LAP lands) developed through consultation with the NTA based on the GDA Strategy 2035. Although the table only shows the main measures, it should be noted that all others scheme such as road and bus services changes are included by 2035.

4.3.15 In 2020, committed infrastructure such as Luas Cross City and Phoenix Park Tunnel are in place. In 2035 the complete suite of GDA Strategy measures and infrastructure are in place.

Transport Measures by Year	2020	2035
Luas Cross City	✓	✓
Phoenix Park Tunnel Link	✓	✓
Luas Green Line Enhancement		✓
Bus Connects: Core Radial Bus Network		✓
Bus Connects: Core Orbital Bus Network		✓
Bus Connects: Core Regional Bus Network		✓
N11 Widening		✓
New MetroLink (Metro North & South)		✓
DART Expansion Programme		✓
DART Frequency of 5 Minutes		✓
M50 Widening		✓

Table 4.2: Transport Network Measures Assumptions by Year

4.4 CORDONING PROCESS

4.4.1 To define growth for external zones in the LAM, a cordoning process was necessary within the modelling approach of this assessment. Creating a cordon model from a strategic donor model is often the starting point in developing a local area assignment model. Cordon models are generally created from a larger strategic model e.g. the ERM (Strategic, low detail) in this case.

4.4.2 Prior to creating a ERM model, the extents of the study area for the local assignment model (LAM) was established. This study area was based on the previous study area boundary as the RPS 2013 Glenamuck / Kiltiernan LAP transport model. The extents of the cordon model were defined by changes in link flows. Care was given to ensure the extents of the cordon model was not too tightly drawn and the resultant model was sufficiently large to assess all potential Do Something variants.

4.4.3 The resulting cordon flows at the boundary extents established appropriate extracted Base Year flows and future year growths for external zones for the LAM (in both future years of 2020 and 2035). **Figure 4.7** illustrates the cordon established and the 20 locations along the boundary extent where flows were recorded for the LAM base external zone flows and future growth rates.

4.4.4 The SATURN cordoning process included inter-zonal trips in the final cordoned matrix. These where then disaggregated using the same process as non inter-zonal trips and hence appear as zone to zone trips on the network.

Figure 4.7: Cordon Boundary and Link Extent Extraction Locations

5.0 LOCAL AREA MODEL METHODOLOGY & DEVELOPMENT

5.1 OVERVIEW

5.1.1 This section of the report describes the methodology and development of the 2017 Base Year Local Area Model (LAM) and forecasting for horizon design years.

5.1.2 As a starting point for the LAM, the SATURN modelling of the local area highway model used in the RPS 2013 Glenamuck transport modelling work. The RPS Base, option 4 (network with GDRS) models and demand were used as the basis for the new models. The original matrices included two user classes – heavy vehicles and light vehicles – and only covers the AM peak period 08:00-09:00.

5.1.3 The same network cordon as the 2013 model was used as shown in **Figure 5.1**, so as to include the LAP area, the various M50/M11 junctions that traffic may use to access the LAP area, and the routes between the LAP area and these junctions. The model was extended slightly to the south-east, to include routes to and from the M11 via the Loughlinstown roundabout.

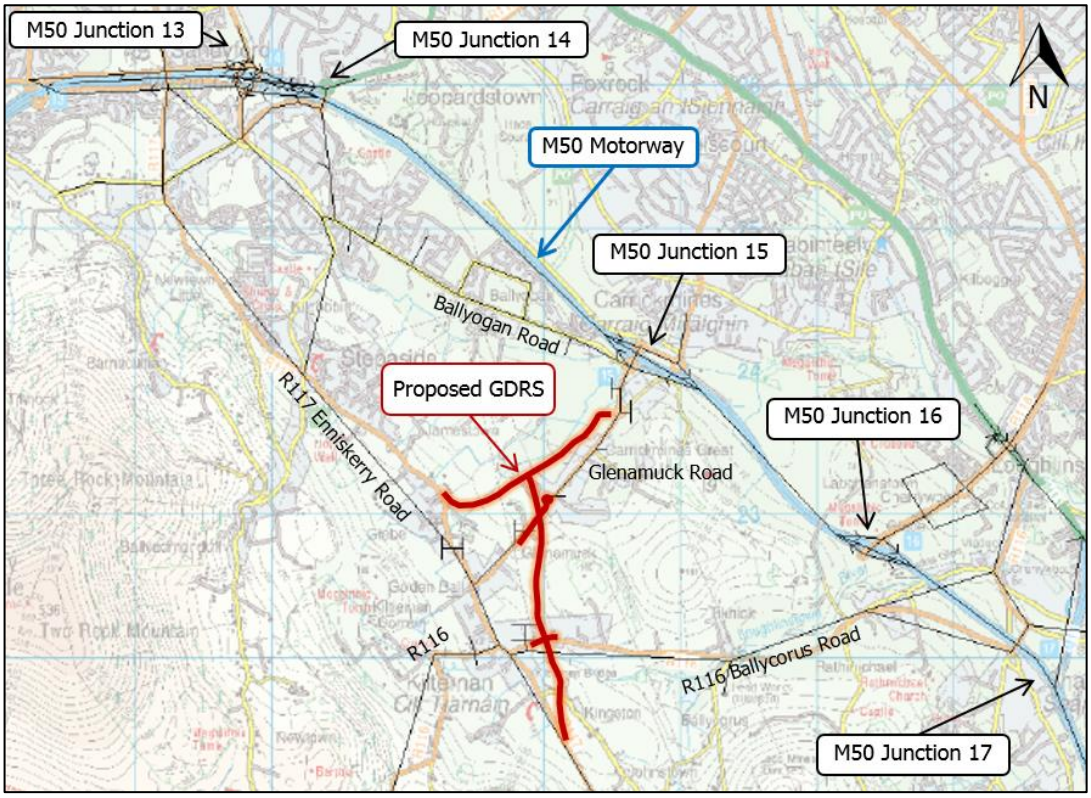


Figure 5.1: Network Extent – Base Year Model (Scheme not included in Base or Do-Nothing Models)

5.1.4 Following the extraction of key external flows and growth rates from the NTA's Eastern Regional Model (ERM) the development and refinement progresses towards this assessment's updated Local Area Models. This section summarises the development of the Base and Forecast Model in the AM and PM periods in all scenarios and the assessments to be carried out. **Section 7** details the Calibration and Validation of the Base Models.

5.2 EXISTING GLENAMUCK TRANSPORT LOCAL AREA MODEL

5.2.1 RPS Group undertook a review of the Glenamuck Local Area Plan in 2013 to develop a cost-effective method of updating the previous modelling work from 2006, to assess the existing Glenamuck LAP transportation infrastructure design remained appropriate.

5.2.2 RPS used as a starting point the SATURN local area highway model used in the 2006 National Transport Authority (NTA) / Dublin Transportation Office(DTO) modelling work. The 2007 forecast was used as the basis for the 2013 model. The model included two user classes 'HCVs and light vehicles' and covers the AM peak period 08:00 – 09:00 only. Scheduled bus services were separately coded into the model along fixed routes.

5.2.3 The network was cordoned down to include the LAP area, the various M50/M11 junctions that traffic may use to access the LAP area, and the routes between the LAP area and these junctions. The model also included routes to and from the M11 via the Loughlinstown roundabout.

5.2.4 The base year model was updated to 2012 conditions under the RPS review to correspond with what was on the ground. The zoning system within the LAP area was revised in order to tie in more closely with the system of land parcels and land uses proposed within the LAP, the proposed system of access roads by which new lands use would connect to the road network.

5.2.5 For the base year model, each LAP zone was connected to the existing road network, even where it is planned that the future connection will be made via the proposed distributor road. The future year model network contained additional zones to allow for development at Park and Cherrywood.

5.2.6 The zonal system comprised of 69 zones; 20 no. external and 49 no. internal zones. In term of internal zones, 27 no. related to the LAP lands (refer to later illustration of **Figure 5.5**), 4 no. related to Cherrywood and 3 no. related to the Park

Development. The 15 remaining internal zones covered the rest of the cordoned study area.

5.2.7 The forecast year for the RPS review was 2022.

5.3 NETWORK DEVELOPMENT

5.3.1 As mentioned previously, the former SATURN modelling of the local area highway model from the RPS 2013 Glenamuck transport model was used as a starting point for developing the updated 2017 LAM. Having adopted the previous extent of the study area to new additional links were required to be coded into the updated network.

5.3.2 The road network was refined to a level of detail that included updating all National Primary, Secondary and Regional roads and all significant local roads throughout the study area to match and reflect existing conditions. This information was collected through site visit observations, topographical surveys, 2017 google street view and aerial mapping where necessary. The information on each link included:

- Link Length;
- Link type, for example, National Regional Road, Local Urban, Local Rural etc.;
- Link capacity;
- Speed limit and free flow speed; and
- Reference to an appropriate speed flow curve

5.4 LAM ZONING SYSTEM COMPARED TO ERM STRATEGIC MODEL

5.4.1 The refinements to the highway network needed to be accompanied by a finer representation of trip demand through the use of smaller zone sizes in the Glenamuck / Kiltiernan LAM. The zoning system in the ERM is roughly based on the aggregation of Small Census Areas (CSA's), which is not suitable for a smaller local area model such as this LAM. However, the previous 2013 RPS Glenamuck transport model zone system was still fit for purpose in development the updated LAM and no new refinement of the LAM zoning system was required. However, a comparison between the ERM (Strategic, low detail) and LAM (Local assignment, high detail) systems is summarised within this section.

5.4.2 Within the ERM, the Glenamuck / Kiltiernan LAP area is covered by two large zones, Zone 23010 and part of Zone 23002 (which includes the Carrickmines urban area). Further, the Park Development is covered in one zone, Zone 23020. The zone structure local to Glenamuck / Kiltiernan LAP, Carrickmines and the Park Development from the ERM is shown in **Figure 5.2**.

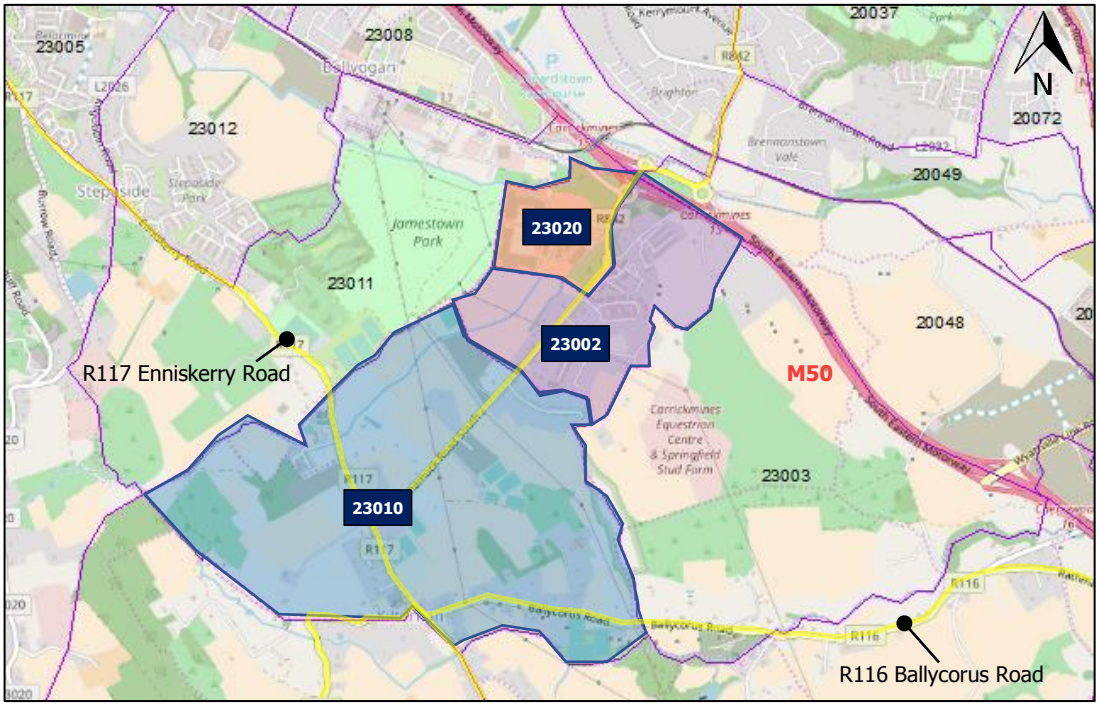


Figure 5.2: ERM Cordon Area Overview

5.4.3 **Figure 5.3** below shows the additional network detail that was added to represent Glenamuck LAP lands. The 3 zones 23010, 23002, and 23020 cover the areas of future development and hence only those zones require refinement in the Local Area Model.

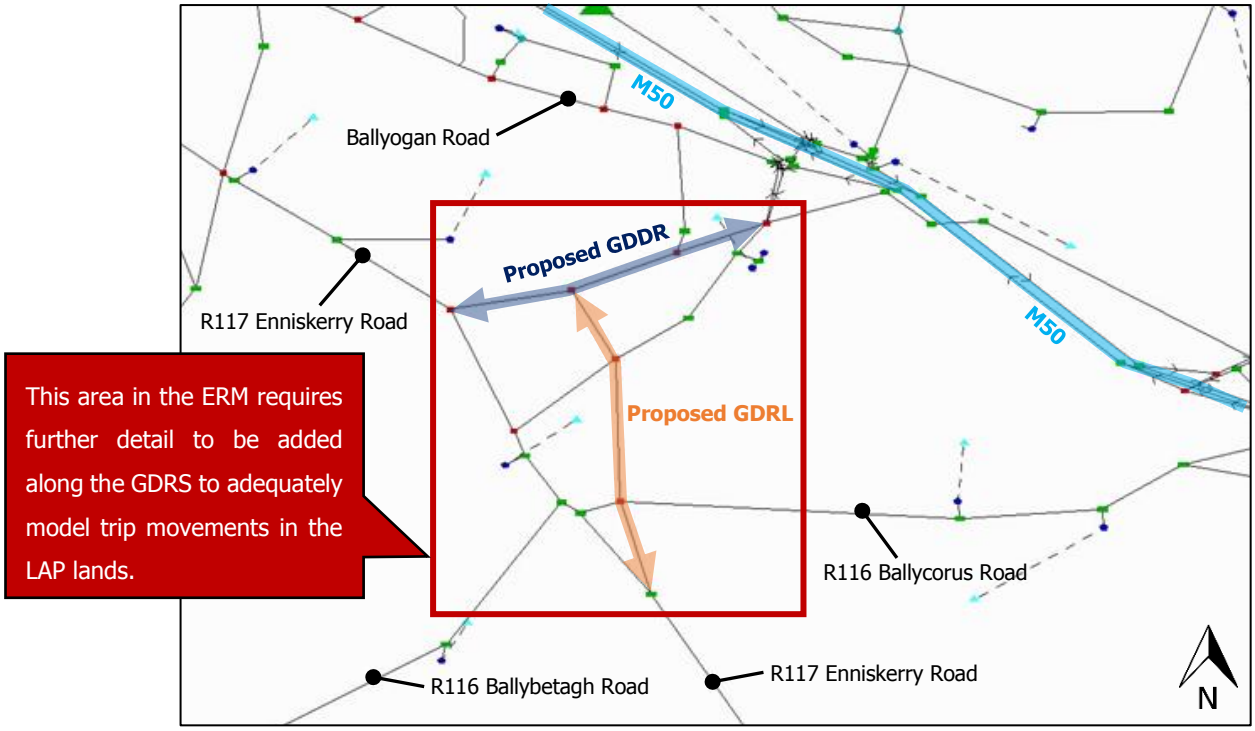


Figure 5.3: ERM with GDRS with Complementary Measures Included

5.4.4 **Figure 5.4** below compares the basic road network of cordon area extracted from the ERM with the detailed network (30 zones) of the LAM around the LAP lands, Carrickmines and the Park Development. Each of the 30 interzonal zones represents a future area of development, with access roads included throughout.

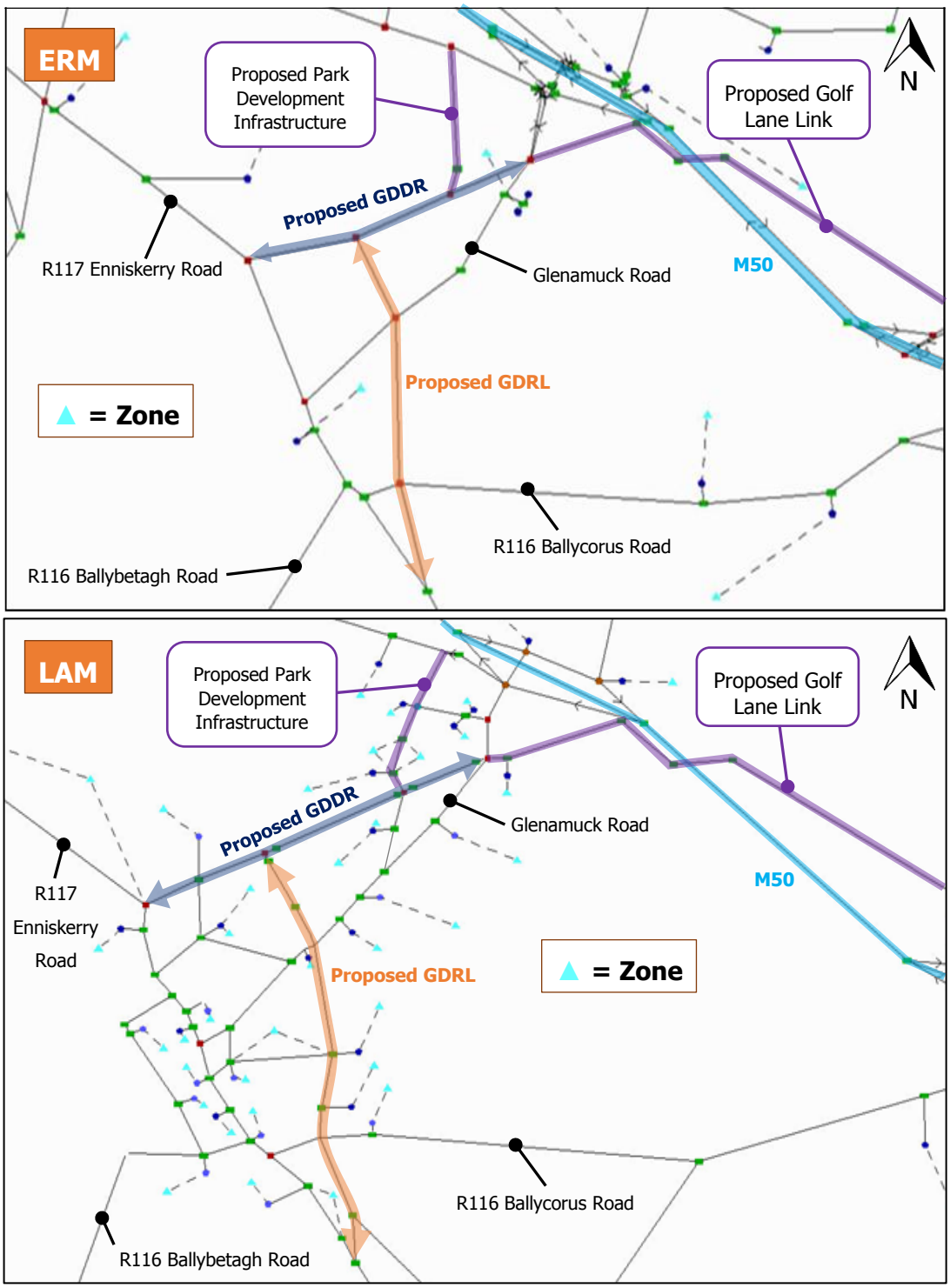


Figure 5.4: ERM Cordon and Detailed LAM

5.4.5 **Figure 5.5** below shows the relationship between the 3 No. ERM zones and the 30 LAP interzonal zones. The ERM Zone 23002 relates to 4 zones in the LAM, Zone 23020 relates to 3 zones in the LAM and Zone 23010 relates to 23 zones in the LAM.

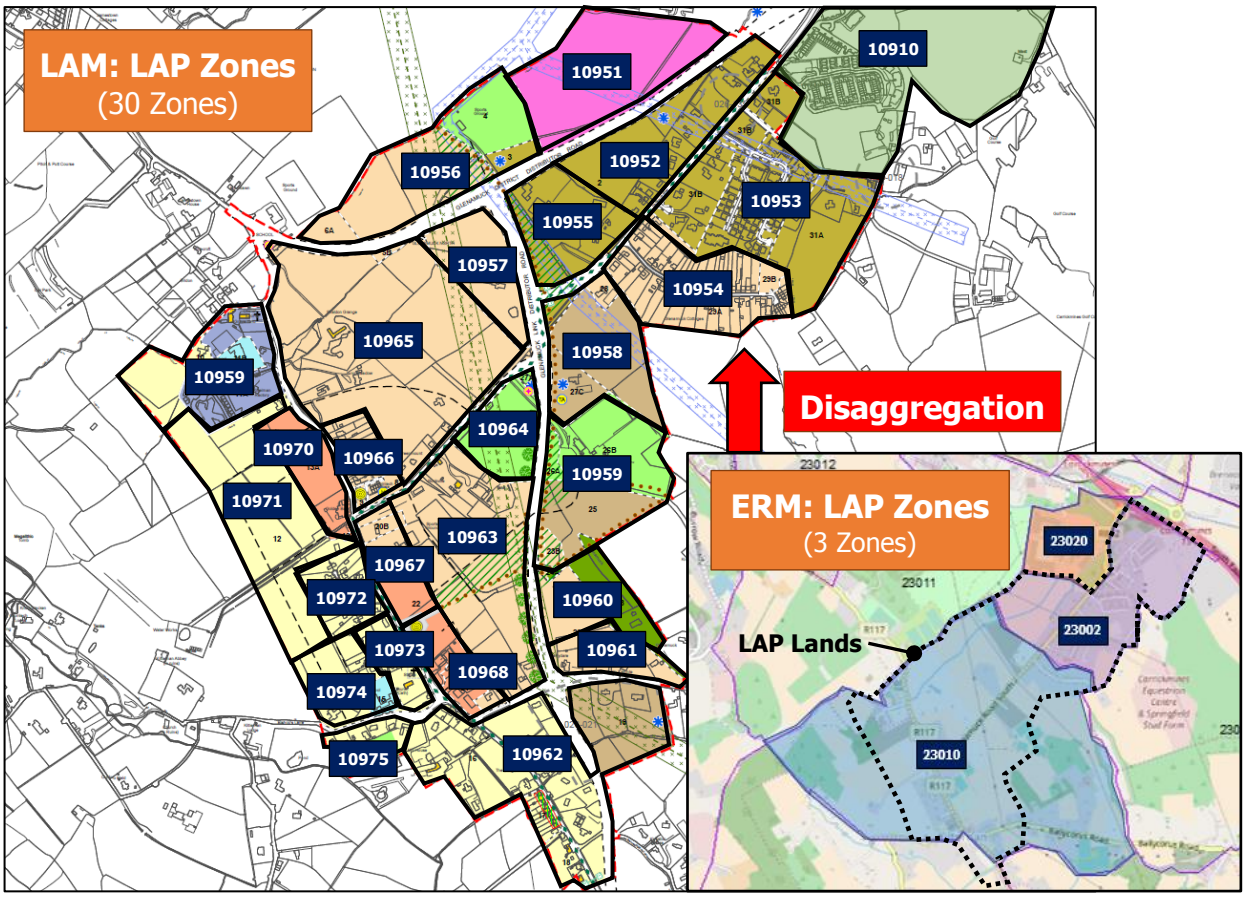


Figure 5.5: ERM and LAM Zonal Relationship for Glenamuck-Kiltiernan LAP Zones

5.5 BASE MATRIX DEVELOPMENT

5.5.1 Following the refinement and update of the previous 2013 RPS transport model network and zoning system, the development of the Base demand matrices was undertaken.

5.5.2 Based on the traffic surveys (**Section 3**), the following time periods were required for the LAM demand matrices:

- Morning peak from 08:00 – 09:00 (AM Peak Hour); and
- Evening Peak from 17:00 – 18:00 (PM Peak Hour)

5.5.3 The development of base year trip matrices forms the foundation for the future year trip matrices. They can be created from scratch but will often be based on:

- a cordon from a larger strategic model;
- an existing model which may be an older one from the area;
- from a regional model; or
- a model from an adjacent scheme.

5.5.4 In this case the older 2013 RPS transport model was used with donor flows and growth for external zones from the NTA's ERM.

5.5.5 As a starting point an AM Prior matrix was developed by applying zoned-based growth rates to all internal zones in the LAM for the period from 2012 to 2017. Growth Rates were based on TII's PAG for 'National Roads Unit 5.3 – Travel Demand Projections'. **Section 5.6** outlines the forecasting process in greater detail. For external zones flows and growth rates from the cordon ERM were used to match 2017 conditions. The resultant 'Prior' matrices were then adjusted during the calibration process using matrix estimation methods to reflect 2017 demand.

5.5.6 As there is no PM Peak Hour from the older 2013 RPS transport model an alternative approach to generate the PM Peak Hour 'Prior' matrix was adopted. The calibrated AM Peak Hour matrix was transposed to give a 'Prior' PM matrix as a starting point for the calibration process.

5.5.7 Each of these matrices were modified during the calibration process using the 2016 traffic survey data ascertained for each peak, using select link analysis and matrix estimation tools. **Section 7** details the Calibration and Validation results of the AM and PM Base Demand Matrices.

Matrix Estimation

5.5.8 For the matrix development process in this case the older local area model, the trip matrix will need be re-validated using more recent count data and cordoning data from the ERM. However, matrix estimation was performed as previously mentioned.

5.5.9 Matrix estimation is the process by which the number of trips between zone pairs is adjusted to improve the match between assigned and observed flows along a modelled link. It is good practice to avoid manipulation of the demand matrices until all other possible modifications have been made. In this way the modeller can be assured that the network coding and relevant mathematical functions are operating correctly. This will avoid a situation when a matrix manipulation seeks to find a matrix that hides errors in the network coding or assignment functions.

5.6 FORECASTING & FUTURE YEAR DEMAND DEVELOPMENT

5.6.1 Forecasting future demand for the LAM was carried out in a similar approach as the RPS review approach in 2013. The methodology to forecast demand was done by Zone-Based Growth Rates and projections made in the 2013 Glenamuck LAP Transport Study. The methodology for this assessment in calculating growth is based on TII's PAG for 'National Roads Unit 5.3 – Travel Demand Projections'. The process for developing future traffic growth projections is presented in **Figure 5.6**.

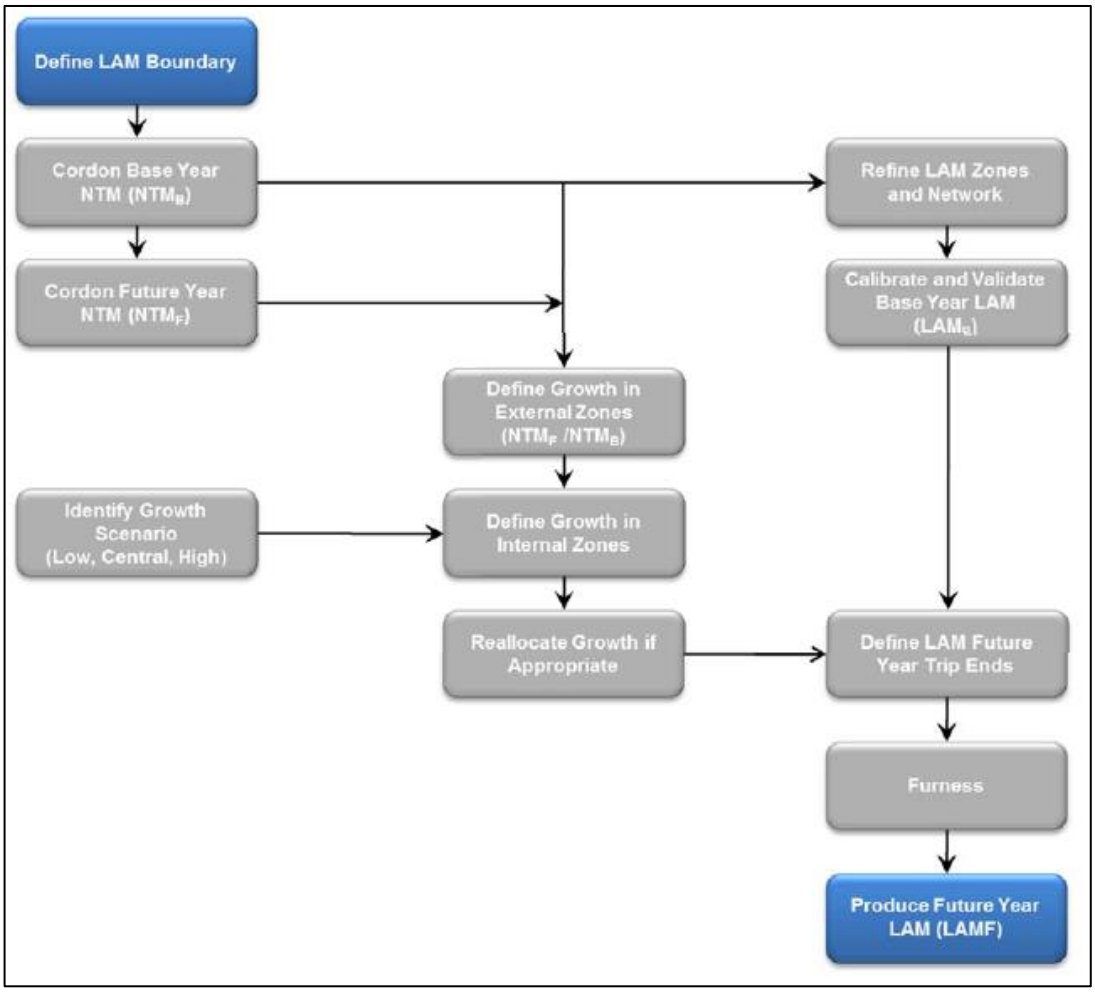


Figure 5.6: Traffic Growth Projection Methodology for Assignment Models

(Source – TII PAG Unit 5.3, Figure 5.4.1)

5.6.2 For large schemes such as the GDRS which are supported by assignment models, demand is input in the form of a matrix which allocates demand based on defined trips between geographical zones. In such cases, growth rates should be applied as increases in trip ends at a zonal level. The factoring of origins and destinations at a

zonal level leads to the definition of target trip ends. This is then translated into a future year matrix through furnessing, which adjusts the demand matrix such that row and column totals match the target trip ends.

5.6.3 This technique was applied to the background traffic growth on the network. Forecasted traffic flows from the LAP lands were applied in the design year of 2035 and calculations of these traffic flows don't diverge from the trips generated in the previous 2013 RPS transport model, the reason being that the zoning system and the land use has not changed since 2013 LAP transport study.

5.6.4 The future years models developed in this assessment were an opening year 2020 and future horizon year (+15 years) 2035. These years were selected as they complied with guidance provided on forecast assessment years outlined in TII's *Traffic and Transport Assessment (TTA) Guidelines 2014.*

5.6.5 In this assessment it should be noted that Assignment Models (VDM) will use zone-based growth rates to produce the initial demand projections for the Do-Minimum and Do-Something scenarios in the future year model. VDM techniques can then be used to adjust the demand matrices to reflect the demand responses associated with the scheme proposal.

5.6.6 The application of growth to other travel modes requires projections for public transport growth in order to allow a future year Production Attraction (PA) matrix to be developed. This was applied in the previous 2013 LAP traffic growth projections which were again used in this assessment and development of the future demand matrices.

Background Forecasting of Internal Zones

5.6.7 The application of zone-based growth rates requires a different approach for internal and external zones within the Local Area Model (LAM). For internal zones, trip end growth rates for the AM and PM is read from a shapefile that is available from the Downloads page on the TII Publications website. These growth rates are applied to the row and column totals of the base year trip matrix to produce target trip ends for the future year matrix.

5.6.8 The shapefile provides demographic and economic information for each zone in the National Transport Model (NTM), in addition to annual growth rates for origin and destination trip ends. The shapefile uses a standard naming convention to identify all variables in the data.

5.6.9 For LAM's where internal zones are smaller than NTM zones, the growth rates for the NTM should initially be applied to all LAM zones within that NTM zone. It is for this reason that it is advisable to ensure that LAM zones are defined as subzones of NTM zones to avoid any overlapping of LAM zones between adjacent NTM zones.

5.6.10 The zoning system in the NTM is based on the aggregation of Electoral Divisions (ED's). ED's are amalgamations of Census Small Areas (CSA's) which the zoning system in the ERM are based. As outlined in **Section 5.4** the LAM zones relate closely with the ERM zones and hence correlates with the zones in the NTM. **Figure 5.7** below shows the NTM zones used in the demand matrices forecasting and locations of relevant ERM zones. **Tables 5.1** and **5.2** summarises the annualised growth rates for the internal zones in the LAM.

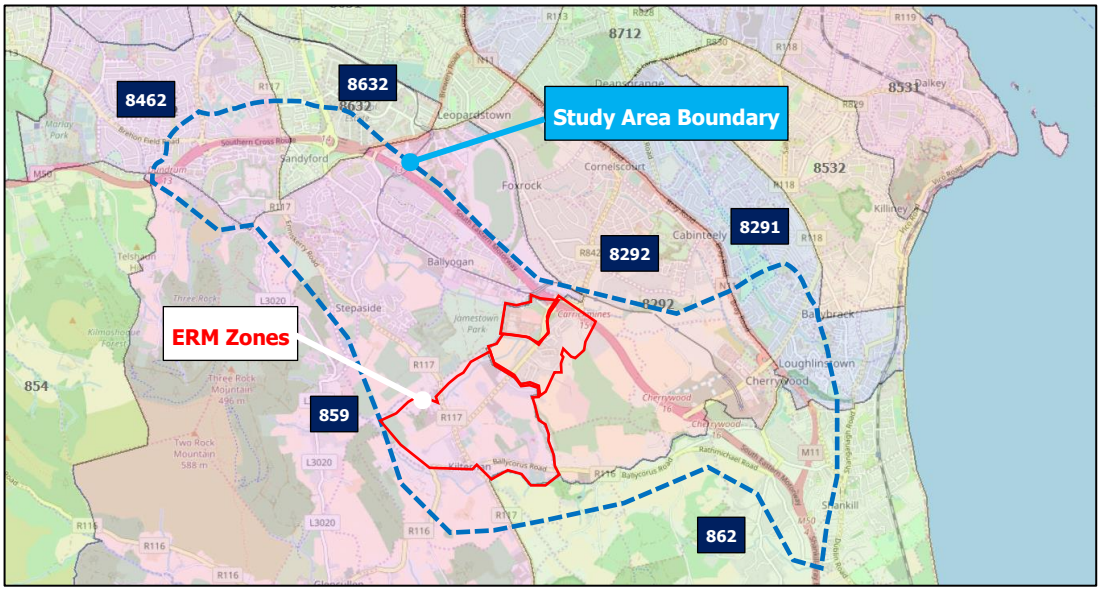


Figure 5.7: NTM Zones and Relevant ERM Zones (Red)

NTM Zone	Light Vehicles AM Period (2013-2030)		Light Vehicles PM Period (2013-2030)		Heavy Vehicles AM Period (2013-2030)		Heavy Vehicles PM Period (2013-2030)	
	Origin	Destin	Origin	Destin	Origin	Destin	Origin	Destin
859	1.0130	1.0127	1.0127	1.0130	1.0238	1.0238	1.0238	1.0238
8292	1.0141	1.0109	1.0109	1.0141	1.0238	1.0238	1.0238	1.0238
862	1.0136	1.0225	1.0225	1.0136	1.0238	1.0238	1.0238	1.0238
8632	1.0098	1.0064	1.0064	1.0098	1.0238	1.0238	1.0238	1.0238
8462	1.0105	1.0116	1.0116	1.0105	1.0238	1.0238	1.0238	1.0238

Table 5.1: Internal Zone-Based Growth Rates (Central Growth) from PAG Unit 5.3 Growth Rates (2013-2030)

NTM Zone	Light Vehicles AM Period (2030-2050)		Light Vehicles PM Period (2030-2050)		Heavy Vehicles AM Period (2030-2050)		Heavy Vehicles PM Period (2030-2050)	
	Origin	Destin	Origin	Destin	Origin	Destin	Origin	Destin
859	1.0037	1.0028	1.0028	1.0037	1.0148	1.0148	1.0148	1.0148
8292	1.0042	1.0014	1.0014	1.0042	1.0148	1.0148	1.0148	1.0148
862	1.0037	1.0028	1.0028	1.0037	1.0148	1.0148	1.0148	1.0148
8632	1.0027	1.0022	1.0022	1.0027	1.0148	1.0148	1.0148	1.0148
8462	1.0039	1.0027	1.0027	1.0039	1.0148	1.0148	1.0148	1.0148

Table 5.2: Internal Zone-Based Growth Rates (Central Growth) from PAG Unit 5.3 Growth Rates (2030-2050)

Background Forecasting of External Zones

5.6.11 As mentioned in **Section 4.4,** to define growth for external zones in the LAM, a cordoning process was necessary within the modelling approach for this assessment. This process involved creating cordon models from strategic donor models as a starting point. Cordon models are generally created from a larger strategic model e.g. the ERM (Strategic, low detail) in this case. The resulting cordon flows at the boundary extents established appropriate extracted Base Year flows and future year growths for external zones for the LAM (in both future years of 2020 and 2035).

5.6.12 Prior to creating the ERM models, the extent of the study area for the (LAM) was established. This study area was based on the previous study area boundary in the RPS 2013 Glenamuck / Kilternan LAP transport model. Care was given to ensure the extents of the cordon models were not too tightly drawn and the resultant models were sufficiently large to assess all potential 'Do Something' variants.

5.6.13 **Figure 5.8** illustrates the cordon established and the 20 locations along the boundary extent where flows were recorded for the LAM base external zone flows. **Table 5.3** lists each of the external zones in the LAM where the extracted flows will be applied and each of their geographical location, they represent along the boundary extent.

External Zone No.	Route (Location)
10202	Wattville Road (By Ballybrack)
11003	Barnslingan Lane (By Kiltiernan)
81233	R117 (Enniskerry Road, by Kiltiernan)

External Zone No.	Route (Location)
99009	R118 (By Ballybrack)
99010	R119 (Dublin Road, by Shankill)
99011	M11/M50 (By Shankill)
99012	R117 (Enniskerry Road, by Kiltiernan)
99013	R116 (Ballybetagh Road, by Kiltiernan)
99014	R113 (By Ballinteer over the M50)
99015	R826 (By Ballinteer)
99016	M50 (By Ballinteer)
99017	R133 (By Ballinteer)
99101	N11 (By Cherrywood)
99102	Glenamuck Road (North of the M50 Jn 5 Interchange)
99103	N31 (By Sandyford)
99104	Drumartin Link Road (By Sandyford)
99105	R117 (By Wedgewood)
99108	Puck's Castle Lane (By Brides Glen)
99109	Ferndale Road (By Rathmicael)
99110	Carrickmines Woods (Joining the M50 Jn 5 Interchange)

Table 5.3: List of External Zones and Representative Route & Location

Figure 5.8: Cordon Boundary and Link Extent Extraction Locations

Forecasting Future LAP Development

5.6.14 As mentioned, forecasting traffic flows from the LAP lands were applied only in the future horizon year of 2035 and calculations of these traffic flows remained mostly unaltered from the trips generated in the previous 2013 RPS transport model, the reason being that the zoning system and the land use has not changed since 2013 LAP transport study. However, one exception was education trip rates were considered too high and excluded the assumption of students walking/cycling to school. This trip rate was halved in this assessment.

5.6.15 In the previous future demand development LAP zones were firstly defined. As **Figure 5.9** illustrates how the LAP area was divided into model zones, and how these zones relate to the land parcels defined in the LAP. In most cases, each land parcel was allocated to a single zone. In a few cases, land parcels were split between two zones, where it seems likely that access arrangements will differ.

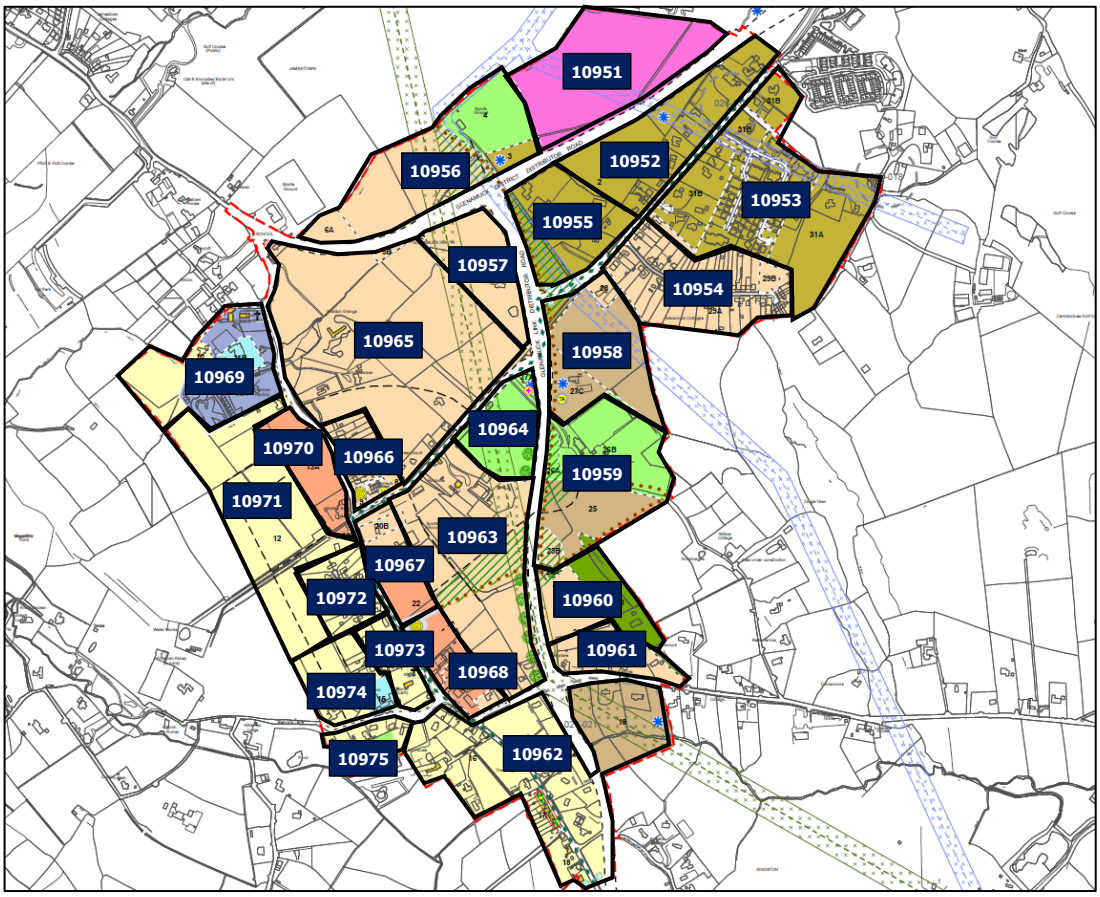


Figure 5.9: Model Zoning in LAP Area

5.6.16 **Table 5.4** presents, at model zone level, the land-use estimates of residential units, persons employed and education places.

LAP Zone	Projected Residential Units	Projected Employment (No. of Persons)	Education Places (No. of Students)
10951	0	4249	0
10952	200	0	0
10953	330	0	0
10954	95	0	0
10955	240	0	0
10956	170	0	0
10957	135	0	0
10958	14	0	0
10959	0	0	0
10960	32	0	0
10961	58	0	0
10962	201	0	0
10963	357	0	0
10964	0	0	0
10965	630	0	0
10966	20	0	0
10967	48	63	0
10968	45	94	0
10969	45	198	209
10970	0	0	0
10971	242	0	0
10972	40	0	0
10973	53	0	0
10974	102	0	321
10975	49	0	0
10976	76	0	0
LAP Total	**3182**	**4604**	**530**

Table 5.4: LAP Land Use Inputs

5.6.17 The previous 2013 RPS modelling work assumed an all-modes rates of trip generation based on older NTA modelling work (**Table 5.5**). These trip generation rates were applied for the AM peak period.

5.6.18 Development the PM forecast in the LAP lands the assumption was made that for residential and employment trip rates would exchange between generation and attraction figures from those in the AM period. However, as the PM peak period is between 17:00-18:00, education trip was assumed to be zero to reflect the presence of the two primary schools being closed at this time. **Table 5.6** outlines the all-modes trip generation rates assumed for the PM peak period in this assessment.

Land Use Data	AM Generation (trips per hour)	AM Attraction (trips per hour)
Residential (rate per unit)	0.733	0
Employment (rate per person)	0	0.772
Education (rate per student)	0	1

Table 5.5: All-mode Trip Generation Rates (AM Peak)

Land Use Data	PM Generation (trips per hour)	PM Attraction (trips per hour)
Residential (rate per unit)	0	0.733
Employment (rate per person)	0.772	0
Education (rate per student)	0	0

Table 5.6: All-mode Trip Generation Rates (PM Peak)

5.6.19 For model split the previous 2013 transport modelling work considered that the number of future year highway trips would depend on the level of public transport service and level of provision for soft modes.

5.6.20 The approach taken to calculate modal split was to sketch out a nominal pattern of public transport routes and relate mode share to indicative levels of PT service to a single typical destination.

5.6.21 The LAP area is currently served by two bus routes – the 44 which runs from Kiltiernan via Stepaside in the direction of Dundrum, and the 63 which runs from Kiltiernan via Carrickmines in the direction of Dun Laoghaire.

5.6.22 There is a Luas service at the nearby Ballyogan Wood stop just north of the Park development. In the previous 2013 transport modelling work, for trips to and from locations outside the LAP area, a non-highway mode share of 60% was assumed to be achievable for development that is directly adjacent to the Luas stop, falling in a linear fashion with walking distance until reaching a 0% non-highway share at a walking time of 50 minutes (4.17 km at an assumed walk speed of 5 km per hour).

5.6.23 In the future year, this non-highway mode share was assumed to be increased by the provision of two well-marketed bus services:

- Direct buses (based on the 44 service to Dundrum)
- A system of shuttle buses connecting with the Luas at Ballyogan Wood (based on an assumption that the 63 service could be diverted).

5.6.24 Within the calculation, the level of Public Transport services was specified by the user in the form of:

- a frequency for each of these services (in the form of headway – the number of minutes between services in the peak hour);
- nominal bus fares;
- a multiplier on bus times (set to 1 if bus lanes are to be provided to maintain existing speeds, less than 1 if speed can be increased above base year speeds by a higher level of investment, and greater than 1 in proportion to highway times if buses are left to mix with regular traffic. This multiplier was not applied in any forecast model);
- headway of the Luas service, allowed representation of possible future increases in frequency; and
- a multiplier on Luas speed, reflected possible future scope for a faster Metro-style service.

5.6.25 The previous calculations then estimated that for each zone of the model, a corresponding increase in public transport mode share, on the basis that:

- mode share is determined by whichever of the three options – direct bus, shuttle to the Luas – walk to the Luas – offers the lowest generalised cost for each zone;
- walk time and wait time have a weighting factor of 2.0 relative to in-vehicle time;

- average wait time is 0.4 times headway; and
- no interchange penalty or crowding penalty applies.

5.6.26 The resulting highway mode shares were assumed to apply equally to trip generations and attractions from each zone. **Tables 5.7** and **5.8** summarises the difference between the Base (2017) and Future (2035) years Public transport share and the resultant Future year road trip generations and attractions in the both the AM and PM peak periods.

LAP Zone	Base Year PT Mode Share	Future Year PT Mode Share	Future Year Trip Generation (No. Road Trips)	Future Year Trip Attraction (No. Road Trips)
10951	39.8%	39.8%	0.0	1976.2
10952	40.0%	40.0%	88.0	0.0
10953	39.1%	39.1%	147.2	0.0
10954	34.9%	34.9%	45.3	0.0
10955	36.9%	36.9%	110.9	0.0
10956	34.4%	34.4%	81.8	0.0
10957	32.3%	32.3%	67.0	0.0
10958	33.5%	33.5%	6.8	0.0
10959	27.4%	30.0%	0.0	0.0
10960	24.3%	31.5%	16.3	0.0
10961	20.4%	33.4%	28.1	0.0
10962	16.6%	37.0%	93.0	0.0
10963	24.4%	36.3%	166.6	0.0
10964	29.8%	34.2%	0.0	0.0
10965	27.4%	37.3%	289.4	0.0
10966	23.4%	39.1%	8.9	0.0
10967	22.1%	38.3%	21.6	30.1
10968	17.8%	39.0%	20.2	44.1
10969	18.2%	40.4%	51.4	137.6
10970	22.7%	39.7%	0.0	0.0
10971	17.0%	32.6%	119.8	0.0
10972	22.0%	38.6%	18.0	0.0

LAP Zone	Base Year PT Mode Share	Future Year PT Mode Share	Future Year Trip Generation (No. Road Trips)	Future Year Trip Attraction (No. Road Trips)
10973	19.8%	38.5%	23.7	0.0
10974	13.3%	34.9%	101.5	77.8
10975	17.0%	37.5%	22.3	0.0
10976	15.4%	32.7%	14.8	0.0
		LAP Total	**1543**	**2266**

Table 5.7: PT Mode Share & Resultant Future Year Zonal Road Trips (AM Peak)

LAP Zone	Base Year PT Mode Share	Future Year PT Mode Share	Future Year Trip Generation (No. Road Trips)	Future Year Trip Attraction (No. Road Trips)
10951	39.8%	39.8%	1976.2	0.0
10952	40.0%	40.0%	0.0	88.0
10953	39.1%	39.1%	0.0	147.2
10954	34.9%	34.9%	0.0	45.3
10955	36.9%	36.9%	0.0	110.9
10956	34.4%	34.4%	0.0	81.8
10957	32.3%	32.3%	0.0	67.0
10958	33.5%	33.5%	0.0	6.8
10959	27.4%	30.0%	0.0	0.0
10960	24.3%	31.5%	0.0	16.3
10961	20.4%	33.4%	0.0	28.1
10962	16.6%	37.0%	0.0	93.0
10963	24.4%	36.3%	0.0	166.6
10964	29.8%	34.2%	0.0	0.0
10965	27.4%	37.3%	0.0	289.4
10966	23.4%	39.1%	0.0	8.9
10967	22.1%	38.3%	30.1	21.6
10968	17.8%	39.0%	44.1	20.2

LAP Zone	Base Year PT Mode Share	Future Year PT Mode Share	Future Year Trip Generation (No. Road Trips)	Future Year Trip Attraction (No. Road Trips)
10969	18.2%	40.4%	137.6	51.4
10970	22.7%	39.7%	0.0	0.0
10971	17.0%	32.6%	0.0	119.8
10972	22.0%	38.6%	0.0	18.0
10973	19.8%	38.5%	0.0	23.7
10974	13.3%	34.9%	77.8	101.5
10975	17.0%	37.5%	0.0	22.3
10976	15.4%	32.7%	0.0	14.8
		LAP Total	**2266**	**1543**

Table 5.8: PT Mode Share & Resultant Future Year Zonal Road Trips (PM Peak)

5.7 SCENARIOS TESTED

5.7.1 Firstly, the assessment years that were tested as part of this assessment as per TII guidelines were:

- Base Year – 2017;
- Opening Year – 2020; and
- Future Horizon Year (15+ years) – 2035

5.7.2 The following is a list of scenarios undertaken as part of this Local Area Model assessment: -

Base

- **A1** – 2017 Base Traffic Flows (Existing Network)

Do Nothing

- **B1** – 2020 Base Traffic Flows (No Glenamuck District Roads Scheme)
- **B2** – 2035 Base Traffic Flows & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (No Glenamuck District Roads Scheme)

Do Something

- **C1** – 2020 Base Traffic Flows (With Glenamuck District Roads Scheme + Bus Gates)
- **C2** – 2035 Base & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (With Glenamuck District Roads Scheme+ Bus Gates)
- **C3** – 2035 Base & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (With Glenamuck District Roads Scheme + Bus Gates) + Proposed Complementary Road Infrastructure

5.7.3 An additional scenario was assessed solely in the assessment for a sensitivity test to investigate the efficiency of the Bus Gate. Then the bus gates were removed and compared to modelling results with the Bus Gates still in place. For clarity, each of the 'Do Something' scenarios above (C1 – C3) include for the provision of 24/7 bus gates at the locations illustrated in **Figure 5.10** below.

5.7.4 **Figure 5.10** illustrates all relevant infrastructure applicable to LAM scenarios undertaken as part of this assessment. As part of this assessment additional complementary road infrastructure was included into a separate 2035 Do Something scenario in both the Regional Model and LAM. These complementary measures included were:

- The Park Development infrastructure to connect the GDR scheme with the Ballyogan Road;
- The Golf Lane Link to connect Cherrywood over the M50 to the GDRS; and
- The roundabout junction at the Glenamuck Road / Golf Lane intersection was updated to a signalised junction.

5.7.5 For all 'Do Something' scenarios in this assessment a new bus gate will be provided on the existing Enniskerry Road where it joins with the extended GLDR. This will only allow public transport vehicles, cyclists and pedestrians access to and from Kiltiernan Village from the Enniskerry Road at the bus gate. All other vehicles will not be allowed to make this movement. A four-armed junction between the existing Glenamuck Road and the GLDR will facilitate the movement of public transport from Glenamuck Road (West) and the GLDR to Glenamuck Road (East), via another bus gate. Public transport vehicles, cyclists and pedestrians will be able to access and

egress from Glenamuck Road (East) onto the GLDR. All other vehicles will not be allowed to access or egress from Glenamuck Road (East) onto the GLDR.

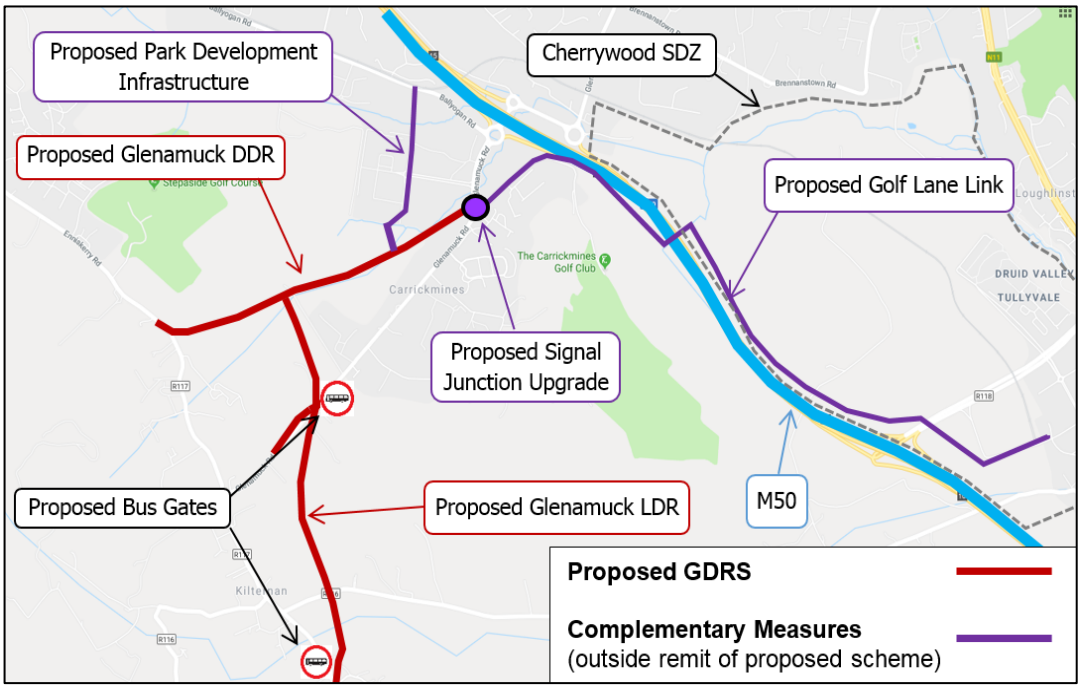


Figure 5.10: Proposed Bus Gates & Complementary Road Infrastructure

5.8 GENERALISED COST & ASSIGNMENT ALGORITHM

Generalised Cost

5.8.1 Within the LAM models, the demand for travel is represented by the trip demand matrices which are applied to the available transport network. The 'generalised cost' of a journey, represented by a combination of time, distance and tolls is compared in a route choice algorithm, and a stable output is produced, where ideally, all possible routes between an origin and destination have the same 'cost'. Generalised cost is computed as follows:

Generalised Cost = Value of Time * Time + Vehicle Operating Cost * Distance + Toll

5.8.2 The values of time and vehicle operating costs was calculated using the values available in PAG Unit 6.11: National Parameter Values Sheet.

Assignment Algorithm

5.8.3 The Route Choice Algorithm selected is based on Equilibrium Lohse. This assignment method models the learning process of road users using the network. The first iteration step is an 'all or nothing' assignment, which means that all trips are assigned onto the lowest impedance route (route with the lowest generalised cost) of the unloaded network. No congestion or delay is taken into account in the route choice for each trip.

5.8.4 In each subsequent iteration, the new lowest impedance route for each OD pair is found. Drivers make use of information gained during their previous trips for the new route search and all known 'shortest' routes are searched for in an iterative process. For the route search the impedance is deduced from the impedance of the current volume and the estimated impedance from the previous iteration step. In other words, the route search estimates delay based on impedance in the previous iteration and uses this to inform the new route choice.

5.8.5 The assignment terminates when a stable solution is calculated, and user equilibrium is reached. When equilibrium conditions have been reached, no user can further reduce the impedance of their trip by switching route.

6.0 TRANSYT METHODOLOGY

6.1 SOFTWARE OVERVIEW

6.1.1 TRANSYT is an off-line computer program for studying everything from isolated road junctions to large signal-coordinated networks. TRANSYT produces optimised signal timings to progress platoons of traffic through a network. It is possible to model priority (non-signal controlled) intersections, including roundabouts within a TRANSYT model, but this is only appropriate where these intersections form part of a larger network comprised of signalised intersections.

6.1.2 TRANSYT contains two main components – a traffic model and a signal optimiser (**Figure 6.1**). The traffic model predicts a Performance Index (PI) for a network based on a fixed signal timing plan and set of average traffic flows. The PI is a measure of the overall cost associated with congestion and is a weighted combination of total vehicle delays and stops experienced by traffic within the modelled network. The performance index is the main method of comparing alternative network configurations.

6.1.3 The signal optimisation component within TRANSYT modifies signal timings and assesses whether those adjustments have reduced the PI. Optimisation is usually achieved using the Platoon Dispersion Model (PDM) which contains a simplified queuing model. Using this model TRANSYT cannot implicitly predict spatial phenomena such as cross intersection exit-blocking. However, the use of the alternative Cell Transmission Model (CTM) or Congested Platoon Dispersion Model (CPDM) modelling techniques can be applied to overcome this limitation.

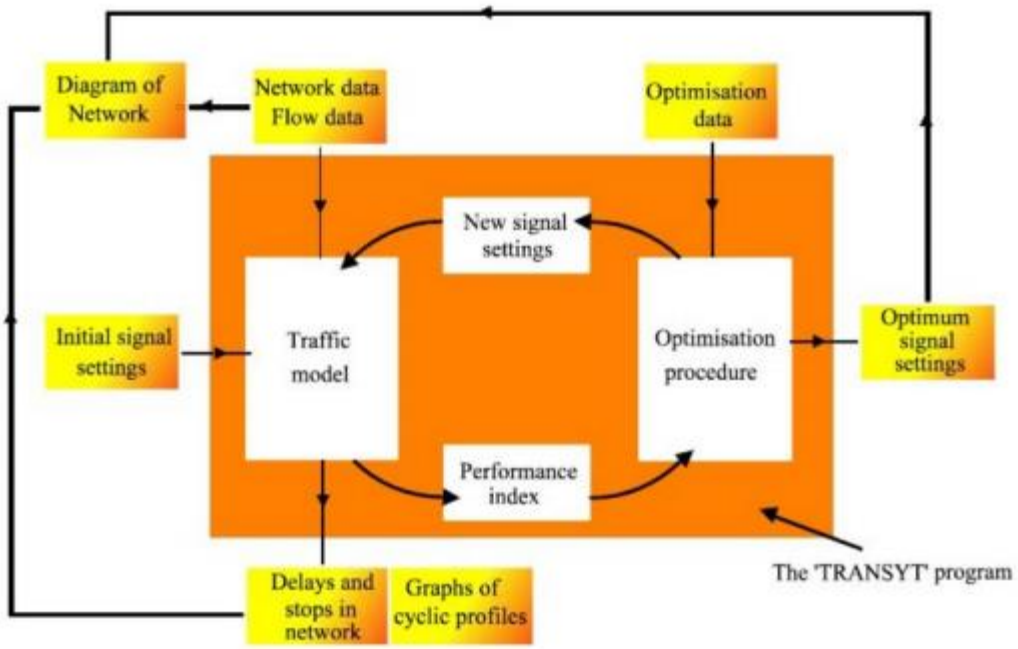


Figure 6.1: The basic structure of the TRANSYT program

6.2 APPROACH

6.2.1 The approach undertaken for carrying out TRANSYT analyses is to extract forecasted traffic flows along the GDRS from the Local Area Model to assist in the design, refinement and future operational performance of key junctions on the GDRS (**Figure 6.2**).

6.2.2 Results based on the TRANSYT analyses are outlined and provided in **Section 10** in this Traffic Modelling Report.

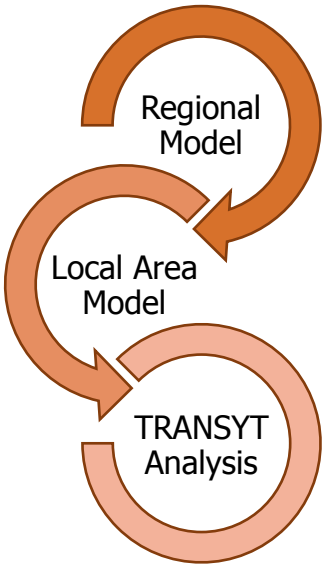


Figure 6.2: Outline of Approach Undertaken

6.3 ASSUMPTIONS

6.3.1 ***Flares***: In modelling the short lanes in TRANSYT consideration was needed to the effects on adjacent lanes. In TRANSYT these short lanes are called "FLARED" lanes. They are not modelled automatically as in some other modelling tools. It is the modeller's responsibility to model these to reflect the expected traffic conditions particularly slipways and right turn lanes. Here flares in the TRANSYT model were set as "Flare" as opposed to PDM or CPDM.

6.4 SCENARIOS TESTED

6.4.1 As part of the TRANSYT analyses, four key junctions along the GDRS were assessed. As summarised in **Table 6.1** and illustrated in **Figure 6.3**.

Junction No.	Junction Name
1	R117 Enniskerry Road / GDDR
2	GDDR / GDLR
3	GDLR / Glenamuck Road
4	GDLR / R116 Ballycorus Road

Modelled / Forecast Years

6.4.2 The following forecast years were tested as part of this assessment:

- 2020; and
- 2035

Scenarios

6.4.3 The following is a list of scenarios undertaken as part of this assessment: -

- C1 – 2020 Base Traffic Flows (With Glenamuck District Roads Scheme + Bus Gates)
- C2 – 2035 Base & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (With Glenamuck District Roads Scheme+ Bus Gates)
- C3 – 2035 Base & Local Area Plan Lands Traffic Flows & Committed Developments Traffic Flows (With Glenamuck District Roads Scheme + Bus Gates) + Proposed Complementary Road Infrastructure.

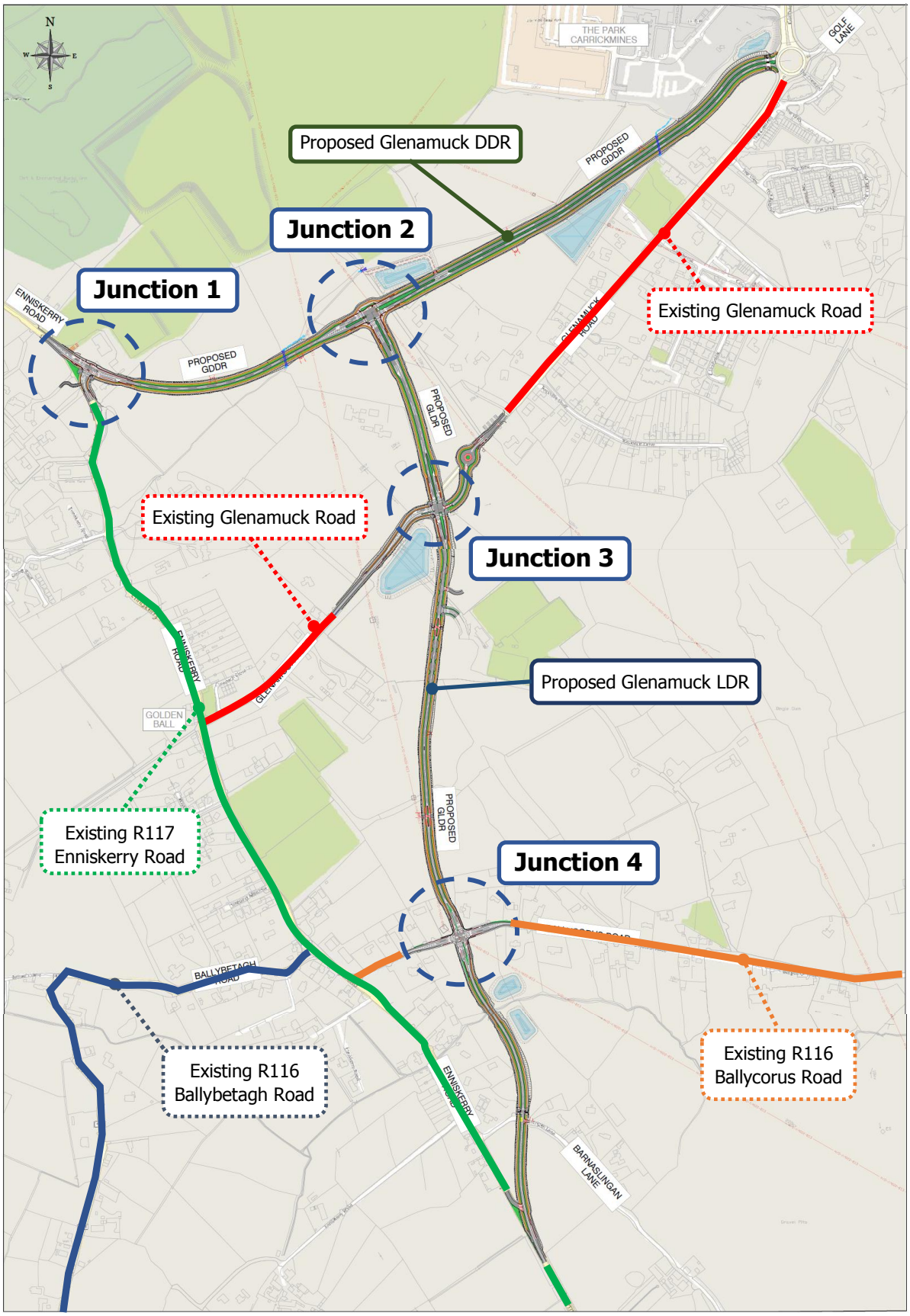


Figure 6.3: Key GDRS Junctions that were assessed in TRANSYT Analysis

6.5 BASE MODELS

Overview

6.5.1 Where Base TRANSYT models are required the models would be calibrated and validated by the following methodology

Models Calibration

6.5.2 Traffic models are as accurate as the calibration and validation processes undertaken during development. The modeller has considered the most appropriate techniques to accurately calibrated and validated the base model form the basis for scenario options modelling.

6.5.3 Calibration describes the process of placing verifiable data into a traffic model to replicate observed traffic conditions. All input data for calibration has been auditable, such as signal timings and on-street measurements (e.g. lane distance, saturation flows). Calibration assisted in finding adjustments to model parameters to recreate observed behaviour and replicated to both time periods being modelled.

6.5.4 The calibrated TRANSYT base model has the correct link structure and geometric input data, and representative signal timings for the modelled period. During the calibration stage, it was possible to identify issues which may hinder future development of the model.

Models Validation

6.5.5 Validation is the process of comparing model output against independently measured data that was not used during the calibration process. The purpose of validation is to verify that a model has been correctly calibrated and is therefore capable of producing valid predictions for project scenarios.

6.5.6 The overarching aim of validation is to produce a model that is fit for purpose. Common validation parameters such as degree of saturation and journey times, and queue length are used to show confidence that calibrated model results accurately reflect observed on-street behaviour.

6.5.7 Validation criteria are used to demonstrate that the modelled results fall within an acceptable tolerance of measured data. These criteria vary according to the modelling software used. If a model fails to validate it is often an indication that poor data collection practices were adopted or that further calibration is required.

6.5.8 This case the maximum queue lengths were used to check and validate the base models. Queue Length data came from a simultaneous queue length survey as the traffic count surveys on Tuesday 7th, Thursday 9th and Saturday 11th November 2017 and from CCTV footage and site inspections.

7.0 LOCAL AREA MODEL CALIBRATION & VALIDATION

7.1 OVERVIEW

7.1.1 This section summarises the calibration and validation of the LAM base model. The calibration and validation will follow guidance set out by the 'Project Appraisal Guidelines for National Roads Unit 5.1 – The Construction of Transport Models'.

7.1.2 The calibration process will be carried out on both the network and the base matrix. The following calibration checks were undertaken on the LAM base model:

- Turning proportions at junctions; and
- Flows on individual links.

7.1.3 The following validation checks were undertaken on the LAM base model:

- Journey times along critical routes.

7.2 MATRIX ESTIMATION

7.2.1 Matrix Estimation (ME) is the process in which the number of trips assigned along a model link is adjusted to match an observed total. ME can be undertaken manually through select link (flow bundle) analysis or through the "ME2" matrix estimation tool provided in the Saturn software. "ME2" is designed to automatically adjust trip matrices to match modelled volumes to observed volumes along multiple links or turns.

7.2.2 The Glenamuck / Kiltiernan LAM for the base scenario was calibrated utilising flow bundle analysis as it allowed greater control over the calibration process than "ME2". Flow bundle matrices were extracted, examined and subsequently adjusted to match observed flows both up and downstream of the point at which the flow bundle was taken.

7.3 CALIBRATION CRITERIA

7.3.1 The model calibration process has been undertaken based on the requirements of the TII PAG Unit 5.2: Construction of Traffic Models and with reference to the calibration criteria outlined in Table 5.1.3 of that document. The PAG specifies the acceptable values for modelled and observed flow comparisons and suggests how calibration should relate to the magnitude of the values being compared. A summary of these targets is shown in **Table 7.1** below:

Criteria & Measures	Guidelines
Assigned Hourly Flows (e.g. links or turning movements) vs. Observed Flows:	
Individual flows within 100 vph for flows <700 vph	> 85% of cases
Individual flows within 15% for flows 700 – 2700 vph	
Individual flows within 400 vph for flows > 2700	

Table 7.1: Model Calibration Criteria: Individual Flows

7.3.2 The standard method used to compare modelled values against observations on a link involves the calculation of the Geoff E. Havers (GEH) statistic (Chi-squared statistic), incorporating both relative and absolute errors. The GEH statistic is a measure of comparability that takes account of not only the difference between the observed and modelled flows, but also the significance of this difference with respect to the size of the observed flow. The GEH statistic is calculated as follows:

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

7.3.3 Guidance in the PAG sets out the following criteria (**Table 7.2**) in relation to GEH values:

Criteria & Measures		Requirement
GEH Statistic	Individual Flows: GEH < 5	> 85% of cases

Table 7.2: Model Calibration Criteria: GEH Values

7.4 CALIBRATION RESULTS

7.4.1 A total of 50 links flows were used in the calibration process, the results of which are summarised in **Tables 7.3** and **7.4**. **Figures 7.1** and **7.2** graphs the R-square analysis of the calibrated link flows. R-square analyses is a statistical measure of how close data are to the fitted to the regression i.e. how observed data matches

modelled data with high R-squared (close to 1) results indicating data fits well in the model. The calibration results in full can be found in **Appendix B** of this report.

% of Calibration Sites Meeting Individual Flow Criteria		
Time Period	**% Link Flows Met**	**Required**
AM Peak	88% (44 out of 50)	> 85%
PM Peak	86% (43 out of 50)	> 85%

Table 7.3: Link Calibration Results: Individual Flows

% of Calibration Sites Meeting Individual Flow Criteria		
Time Period	**% Link Flows Met**	**Required**
AM Peak	86% (43 out of 50)	> 85%
PM Peak	86% (43 out of 50)	> 85%

Table 7.4: Link Calibration Results: GEH Values

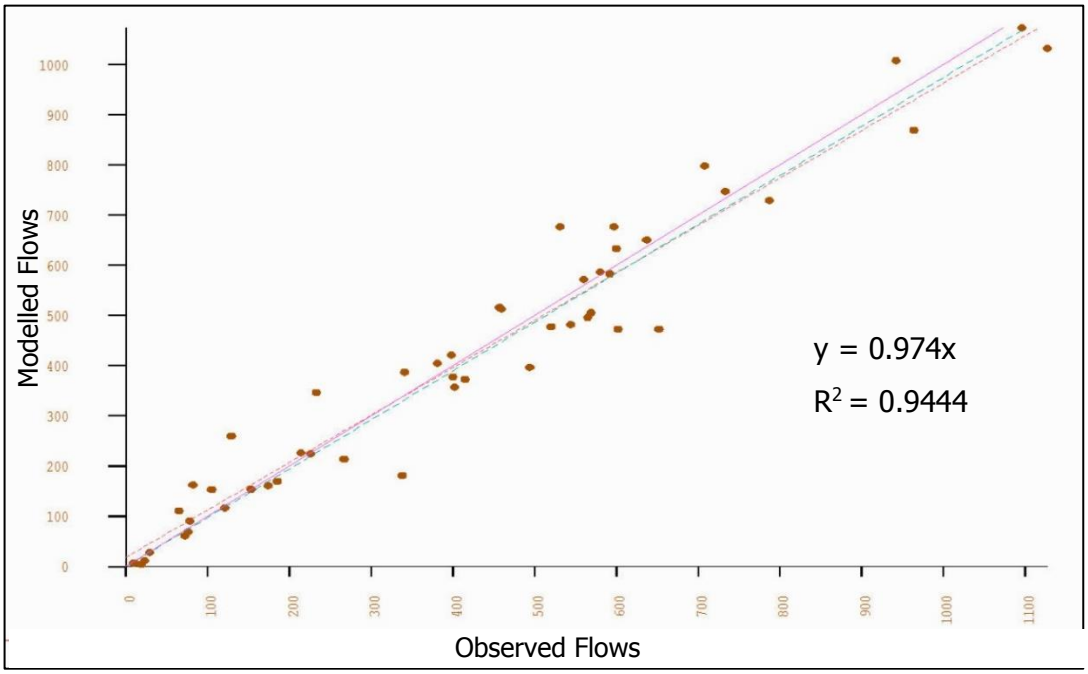


Figure 7.1: Link Calibration Results: R-square Graph for AM Base Model

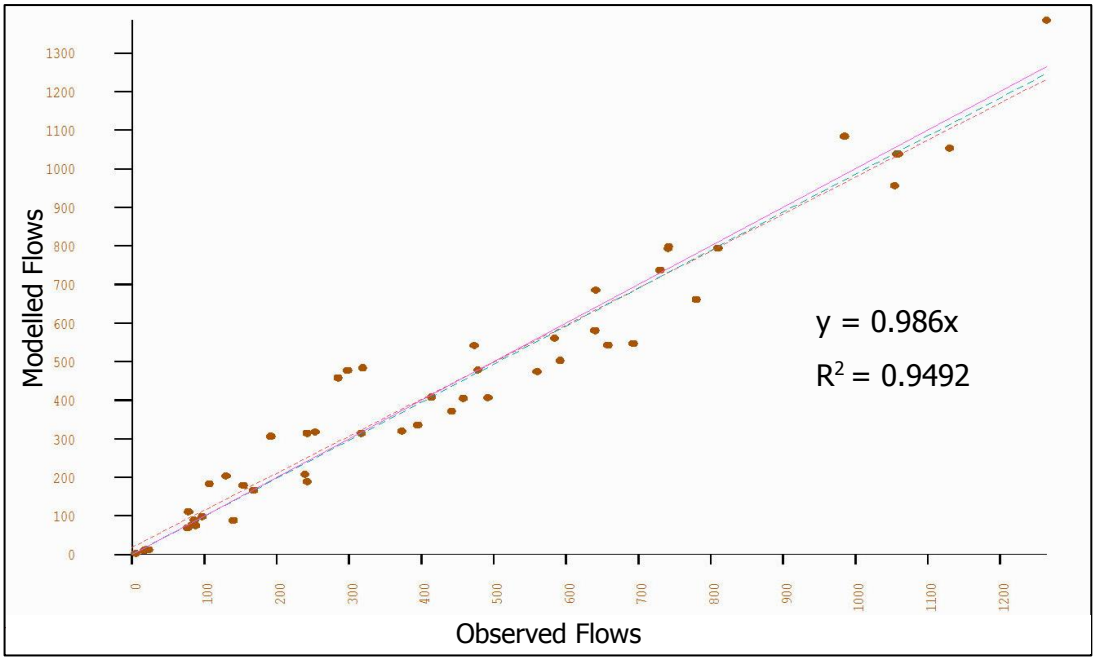


Figure 7.2: Link Calibration Results: R-square Graph for PM Base Model

7.4.2 The comparison of modelled and observed flows demonstrates that the AM and PM Peak period models match the flow criteria. The results therefore confirm that the models have been calibrated to a standard compliant with the PAG criteria in all-time periods. Similarly, the both R-square analyses shows that R^2 is close to 1 which corresponds to only minor differences between the modelled and observed flows used for the calibration of the base AM and PM models.

7.5 MODEL VALIDATION

7.5.1 Model validation comprises the comparison of calibrated data against an independent dataset which was not used as part of the calibration process. Validation checks for the GDRS assessment was journey times.

7.5.2 Comparisons of journey times are a key validation exercise and forms a check on the quality of the network and assignment. The criteria associated with the validation of journey times in transport models are outlined in **Table 7.5**, this is based on the requirements of the TII PAG Unit 5.2: Construction of Traffic Models and with reference to the validation criteria outlined in Table 5.1.5 of that document.

Criteria & Measures	Guidelines
Modelled journey times compared with observed times	
Times within 15% or 1 minute if higher.	> 85% of cases

Table 7.5: Model Validation Criteria: Journey Times

7.5.3 As part of the validation process, the modelled journey times were compared against the 20 surveyed journey times to ensure the model gave a reasonable representation of existing conditions. The results of the journey time validation are presented in **Tables 7.6** and **7.7** for the AM and PM peak hours respectively, for the journey time routes shown previously in **Figure 3.3**.

Route		Average Duration (secs)		ABS Diff (secs)	% Diff	Within 1 Minute	Validated
Start	Finish	Observed AM	Modelled AM				
OD 1	OD 2	413	414	1	0%	Yes	✓
OD 1	OD 3	337	362	25	7%	Yes	✓
OD 1	OD 4	337	354	17	5%	Yes	✓
OD 1	OD 5	281	342	61	22%	No	×
OD 2	OD 1	413	369	44	11%	Yes	✓
OD 2	OD 3	153	134	19	12%	Yes	✓
OD 2	OD 4	168	148	20	12%	Yes	✓
OD 2	OD 5	234	204	30	13%	Yes	✓
OD 3	OD 1	291	311	20	7%	Yes	✓
OD 3	OD 2	154	163	7	5%	Yes	✓
OD 3	OD 4	74	70	4	5%	Yes	✓
OD 3	OD 5	144	104	40	27%	Yes	×
OD 4	OD 1	279	301	22	8%	Yes	✓
OD 4	OD 2	174	197	23	13%	Yes	✓

Route		Average Duration (secs)		ABS Diff (secs)	% Diff	Within 1 Minute	Validated
Start	Finish	Observed AM	Modelled AM				
OD 4	OD 3	90	84	6	6%	Yes	✓
OD 4	OD 5	149	128	21	14%	Yes	✓
OD 5	OD 1	374	289	85	23%	No	×
OD 5	OD 2	266	287	21	8%	Yes	✓
OD 5	OD 3	156	142	14	9%	Yes	✓
OD 5	OD 4	188	166	22	12%	Yes	✓
Percentage Validated							**85%**

Table 7.6: AM Peak Modelled/Observed Journey Times

Route		Average Duration (secs)		ABS Diff (secs)	% Diff	Within 1 Minute	Validated
Start	Finish	Observed PM	Modelled PM				
OD 1	OD 2	517	520	3	1%	Yes	✓
OD 1	OD 3	479	446	33	7%	Yes	✓
OD 1	OD 4	418	389	29	7%	Yes	✓
OD 1	OD 5	507	489	18	4%	Yes	✓
OD 2	OD 1	393	421	28	7%	Yes	✓
OD 2	OD 3	187	196	9	5%	Yes	✓
OD 2	OD 4	179	190	11	6%	Yes	✓
OD 2	OD 5	262	253	9	3%	Yes	✓
OD 3	OD 1	377	364	13	3%	Yes	✓
OD 3	OD 2	173	188	15	9%	Yes	✓
OD 3	OD 4	79	68	11	14%	Yes	✓
OD 3	OD 5	167	157	10	6%	Yes	✓

Route		Average Duration (secs)		ABS Diff (secs)	% Diff	Within 1 Minute	Validated
Start	Finish	Observed PM	Modelled PM				
OD 4	OD 1	339	356	17	5%	Yes	✓
OD 4	OD 2	193	201	8	4%	Yes	✓
OD 4	OD 3	120	104	16	13%	Yes	✓
OD 4	OD 5	118	110	8	7%	Yes	✓
OD 5	OD 1	374	345	29	8%	Yes	✓
OD 5	OD 2	298	290	8	3%	Yes	✓
OD 5	OD 3	223	160	63	28%	No	×
OD 5	OD 4	183	132	51	27%	Yes	×
Percentage Validated							90%

Table 7.7: PM Peak Modelled/Observed Journey Times

7.5.4 All models satisfy the PAG requirement that 85% of all modelled journey times are within 15% of observed data or within 1 minute if higher than 15%. As such, the base year models are considered validated to the requirements of PAG Unit 5.2: Construction of Transport Models in terms of journey times.

7.6 MODEL CONVERGENCE

7.6.1 The model assignment procedure involves the model reaching a point of equilibrium through an iterative process. The model must therefore achieve a satisfactory point of convergence in order to produce results that are both reflective of the network over a number of iterations of assigning demand to the network.

7.6.2 The convergence indicators vary by different transport modelling packages; therefore, multiple criteria are outlined in the UK Department for Transport (DFT) Transport Appraisal Guidance (TAG) Unit M3.1 – Highway Assignment Modelling (Jan 2014).

7.6.3 The criterion that is used to show that the Saturn software reaches a level of convergence is as follows:

- 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' (<0.1%); and
- The percentage (P) of links on which flows, or costs change by less than a fixed percentage (<5%) 2 for four consecutive iterations greater than 98%.

7.6.4 The model software produces the convergence information by user class, defining the percentage difference in link volume per vehicle class. **Table 7.8** below indicates that the AM Peak and PM Peak models have reached a satisfactory level of convergence.

Time Period	% GAP	No. of Iterations	P
AM	0.051	7	99.09%
PM	0.060	7	99.91%

Table 7.8: Model Convergence

8.0 REGIONAL MODEL RESULTS

8.1 OVERVIEW

8.1.1 This section presents modelling analysis at a strategic level for AM and PM peak hours, 08:00-09:00 and 17:00-18:00 respectively as determined following traffic surveys undertaken as outlined in Section 3.3.4.

8.2 EXTRACTED FLOWS FROM EASTERN REGIONAL MODEL

8.2.1 As part of the cordon process, the resulting cordon regional model flows at the boundary extents established appropriate extracted Base Year flows and future year growths for external zones for the Local Area Model (LAM). **Figure 8.1** illustrates the cordon established and the 20 locations along the boundary extent where flows were recorded for the LAM base external zone flows. **Table 8.1** lists each of the external zones in the LAM where the extracted flows will be applied and each of their geographical location, they represent along the boundary extent. **Appendix D** summarises Eastern Regional Model (ERM) traffic flows along the GDRS, produced in each assessment scenario.

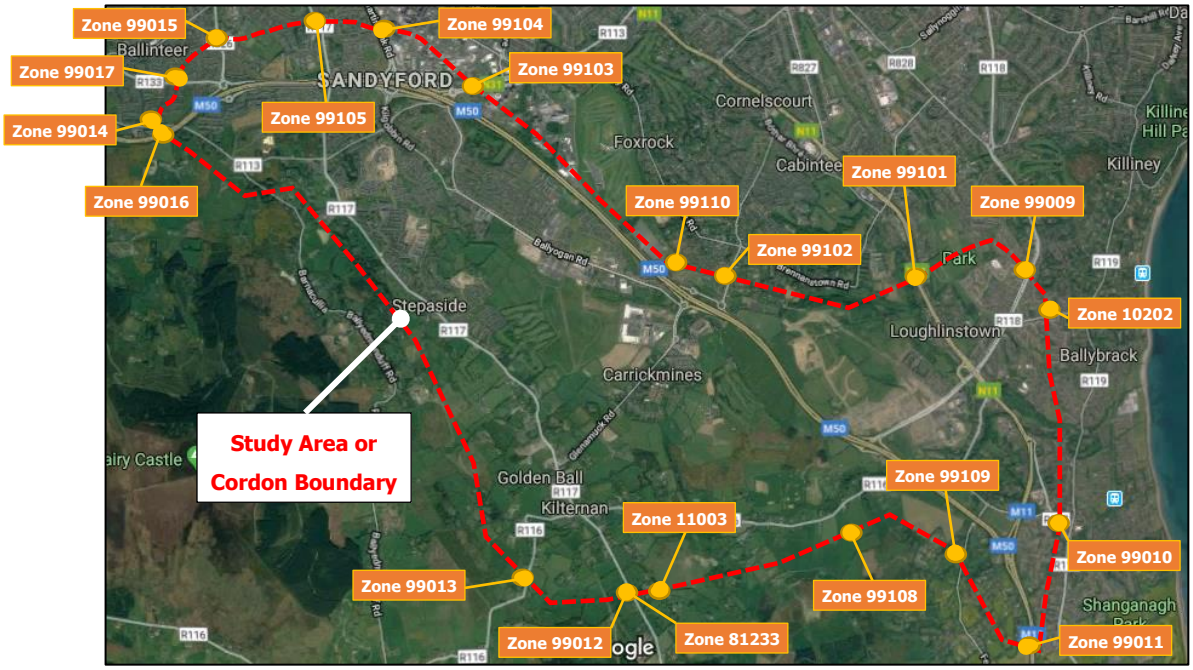


Figure 8.1: Cordon Boundary and Link Extent Extraction Locations

External Zone No.	Route (Location)
10202	Wattville Road (By Ballybrack)
11003	Barnslingan Lane (By Kiltiernan)
81233	R117 (Enniskerry Road, by Kiltiernan)
99009	R118 (By Ballybrack)
99010	R119 (Dublin Road, by Shankill)
99011	M11/M50 (By Shankill)
99012	R117 (Enniskerry Road, by Kiltiernan)
99013	R116 (Ballybetagh Road, by Kiltiernan)
99014	R113 (By Ballinteer over the M50)
99015	R826 (By Ballinteer)
99016	M50 (By Ballinteer)
99017	R133 (By Ballinteer)
99101	N11 (By Cherrywood)
99102	Glenamuck Road (North of the M50 Jn 5 Interchange)
99103	N31 (By Sandyford)
99104	Drumartin Link Road (By Sandyford)
99105	R117 (By Wedgewood)
99108	Puck's Castle Lane (By Brides Glen)
99109	Ferndale Road (By Rathmicael)
99110	Carrickmines Woods (Joining the M50 Jn 5 Interchange)

Table 8.1: List of External Zones and Representative Route & Location

8.2.2 The following tables (**Tables 8.2**, **8.3**, **8.4** and **8.5**) presents traffic flows derived in the Eastern Regional Model and were extracted to be utilised in the Local Area Model for Kiltiernan / Glenamuck LAP as traffic flows for external zones. Each table compares the Base model traffic flows to each scenario assessed. **Tables 8.2** and **8.3** summarises extracted ERM traffic flows for the AM period and while **Tables 8.4** and **8.5** presents extracted flows from the PM period. In the tables 'O' represents zone origin or inbound traffic and 'D' represents zone destination or outbound traffic.

Zone	2017 Base		2020 DN		Difference from Base		2020 DS		Difference from Base	
	O	D	O	D	O	D	O	D	O	D
10202	407	463	472	371	65	-92	472	380	65	-83
11003	11	9	25	18	14	9	26	19	15	10
81233	145	172	153	172	8	0	149	162	4	-10
99009	1011	1394	994	1358	-17	-36	1009	1363	-2	-31
99010	531	338	599	341	68	3	542	347	11	9
99011	5051	2749	5151	2524	100	-225	5126	2573	75	-176
99012	656	149	616	143	-40	-6	768	64	112	-85
99013	260	112	229	95	-31	-17	232	80	-28	-32
99014	589	386	630	368	41	-18	640	385	51	-1
99015	915	1483	918	1508	3	25	926	1511	11	28
99016	6097	4961	6032	4768	-65	-193	6048	4843	-49	-118
99017	198	418	200	417	2	-1	202	413	4	-5
99101	1090	1901	1042	1896	-48	-5	1053	1883	-37	-18
99102	628	687	691	687	63	0	593	694	-35	7
99103	1309	2905	1102	2899	-207	-6	1159	2932	-150	27
99104	952	2349	924	2394	-28	45	892	2416	-60	67
99105	332	740	356	771	24	31	358	765	26	25
99108	43	32	45	32	2	0	45	32	2	0
99109	334	59	406	60	72	1	371	62	37	3
99110	56	178	53	177	-3	-1	46	126	-10	-52

Table 8.2: Extracted Traffic Flows for External Zone in the AM period (2017 Base, 2020 Do Nothing and 2020 Do Something)

8.2.3 **Table 8.2** above presents traffic flows from the ERM to be used in the LAM's external zones. Comparing the 2017 Base to the 2020 Do Nothing and Do Something scenarios in the AM peak period, shows small growths in background traffic which is reflective to growth rates for a three-year period, and small decreases in traffic from redistribution on the network.

8.2.4 Noted is the reduction in traffic in zones 99016 and 99103, this is due to the introduction of the Luas Cross City and its benefits for Sandyford. Further, the main difference between the Do Nothing and the Do Something for the open year of 2020 is an increase in inbound (origin) traffic at zones 99011 (the M50/M11) and 99012 (R117 Enniskerry Road).

Zone	2017 Base		2035 DN		Difference from Base		2035 DS		Difference from Base		2035 DS + CM		Difference from Base	
	O	D	O	D	O	D	O	D	O	D	O	D	O	D
10202	407	463	441	285	34	-178	441	258	34	-205	451	292	44	-171
11003	11	9	30	24	19	15	30	24	19	15	30	24	19	15
81233	145	172	147	134	2	-38	157	148	12	-24	157	139	12	-33
99009	1011	1394	928	1315	-83	-79	928	1322	-83	-72	931	1348	-80	-46
99010	531	338	727	612	196	274	727	672	196	334	725	706	194	368
99011	5051	2749	4258	961	-793	-1788	4042	933	-1009	-1816	4071	914	-980	-1835
99012	656	149	773	216	117	67	958	223	302	74	928	175	272	26
99013	260	112	161	724	-99	612	184	583	-76	471	179	568	-81	456
99014	589	386	657	392	68	6	679	399	90	13	680	388	91	2
99015	915	1483	733	910	-182	-573	710	897	-205	-586	718	903	-197	-580
99016	6097	4961	2519	2801	-3578	-2160	2498	2871	-3599	-2090	2488	2864	-3609	-2097
99017	198	418	566	532	368	114	543	485	345	67	540	490	342	72
99101	1090	1901	1359	2093	269	192	1357	2089	267	188	1345	1993	255	92
99102	628	687	810	553	182	-134	808	528	180	-159	798	576	170	-111
99103	1309	2905	314	391	-995	-2514	315	387	-994	-2518	315	384	-994	-2521
99104	952	2349	588	2267	-364	-82	587	2303	-365	-46	591	2251	-361	-98
99105	332	740	338	917	6	177	327	883	-5	143	331	927	-1	187
99108	43	32	49	34	6	2	48	34	5	2	49	34	6	2
99109	334	59	638	440	304	381	674	424	340	365	694	420	360	361
99110	56	178	97	697	41	519	106	725	50	547	126	721	70	543

Table 8.3: Extracted Traffic Flows for External Zone in the AM period (2017 Base, 2035 Do-Nothing, 2035 Do Something and 2035 Do Something & Complementary Road)

8.2.5 **Table 8.3** above presents traffic flows from the ERM to be used in the LAM's external zones. Comparing the 2017 Base to the 2035 Do Something and Do

Something with Complementary Measures (CM) scenarios in the AM peak period, shows both increases in background traffic which are reflective to growth rates and envisaged developments flows from LAP lands and surrounding environs for an eighteen-year period, and decreases in traffic from redistribution on the network.

8.2.6 Note that the full suite of transport network measures proposed under the 'Greater Dublin Area Transport Strategy 2016-2035' is included both the 2035 Do Something and 2035 Do Something & Complementary Road scenarios. This accounted for reductions in traffic particularly zones 99011 and 99016 (M50 Motorway Traffic), 99103, 99104, 99105 and 99015 (Sandyford / Dundrum Area due to Metrolink and BusConnect Infrastructure).

8.2.7 These additional complementary measures included were:

- The Park Development infrastructure to connect the GDR scheme with the Ballyogan Road;
- The Golf Lane Link to connect Cherrywood over the M50 to the GDRS; and
- The roundabout junction at the Glenamuck Road / Golf Lane intersection was updated to a signalised junction.

8.2.8 There were increases in traffic but this due primarily to future residential and employment developments. Zone 99010 experienced an increase in both origin and destination traffic due to the development of the Woodbrook Local Area and Bray including Fassaroe. The growth of these areas was assumed in the ERM 2035 Horizon year. Zone 99012 had an increase in origin traffic due to the introduction of the GDRS. Zone 99017 had an increase in both origin and destination traffic due to extra capacity on the M50. Zones 99101 and 99102 had increases in traffic due to the development of Cherrywood SDZ. Zones 99109 had an increase in both origin and destination traffic due to the strategic residential development of Old Conna, on the north-western fringe of Bray. Finally, zone 99110 had an increase in destination traffic due to mixture of the GDRS, additional traffic on the M50 and the development of Cherrywood SDZ.

8.2.9 Comparing the differences between both 2035 Future Horizon Year scenarios, there were only slight differences in the scenarios. Generally, the complementary measures gave small increases in capacity on the wider network with redistribution assignment factors included. It should be noted that the complementary measures had a greater impact in the immediate area of the GDRS which would be reflected in the extracted cordon traffic flows.

Zone	2017 Base		2020 DN		Difference from Base		2020 DS		Difference from Base	
	O	D	O	D	O	D	O	D	O	D
10202	238	463	231	461	-7	-2	247	461	9	-2
11003	13	26	13	27	0	1	13	27	0	1
81233	144	293	147	287	3	-6	139	294	-5	1
99009	1075	1096	1032	1079	-43	-17	1030	1098	-45	2
99010	323	255	326	281	3	26	299	270	-24	15
99011	3160	4167	2920	4234	-240	67	2999	4262	-161	95
99012	138	159	150	171	12	12	63	107	-75	-52
99013	67	155	61	154	-6	-1	33	216	-34	61
99014	285	310	291	313	6	3	584	393	299	83
99015	1185	1223	1195	1211	10	-12	1191	1108	6	-115
99016	4967	5157	4952	5120	-15	-37	4992	5088	25	-69
99017	375	693	386	780	11	87	397	771	22	78
99101	1623	1033	1616	957	-7	-76	1617	967	-6	-66
99102	779	596	776	553	-3	-43	777	506	-2	-90
99103	2076	1312	2059	1242	-17	-70	1982	1238	-94	-74
99104	1332	983	1349	990	17	7	1353	991	21	8
99105	591	324	630	340	39	16	715	420	124	96
99108	30	45	31	47	1	2	31	47	1	2
99109	35	109	38	131	3	22	38	144	3	35
99110	381	146	425	148	44	2	497	157	116	11

Table 8.4: Extracted Traffic Flows for External Zone in the PM period (2017 Base, 2020 Do Nothing and 2020 Do Something)

8.2.10 **Table 8.4** above presents traffic flows from the ERM to be used in the LAM's external zones. Comparing the 2017 Base to the 2020 Do Nothing and Do Something scenarios in the PM peak period, shows small growths in background traffic which is reflective of growth rates for a three-year period, and small decreases in traffic from redistribution on the network. There were little differences to be noted when

redistribution assignment factors are considered which was the main reason for a reduction in traffic in zones 99011 and 99103.

Zone	2017 Base		2035 DN		Difference from Base		2035 DS		Difference from Base		2035 DS + CM		Difference from Base	
	O	D	O	D	O	D	O	D	O	D	O	D	O	D
10202	238	463	236	317	-2	-146	248	313	10	-150	239	323	1	-140
11003	13	26	24	41	11	15	24	41	11	15	24	41	11	15
81233	144	293	130	288	-14	-5	132	301	-12	8	129	290	-15	-3
99009	1075	1096	1177	809	102	-287	1142	827	67	-269	1176	827	101	-269
99010	323	255	544	497	221	242	513	451	190	196	540	542	217	287
99011	3160	4167	979	2775	-2181	-1392	1022	2673	-2138	-1494	1011	2722	-2149	-1445
99012	138	159	462	270	324	111	314	405	176	246	339	285	201	126
99013	67	155	332	482	265	327	265	630	198	475	245	600	178	445
99014	285	310	994	520	709	210	831	482	546	172	862	497	577	187
99015	1185	1223	1181	628	-4	-595	1137	590	-48	-633	1131	630	-54	-593
99016	4967	5157	2250	2725	-2717	-2432	2283	2638	-2684	-2519	2282	2657	-2685	-2500
99017	375	693	262	773	-113	80	263	634	-112	-59	268	678	-107	-15
99101	1623	1033	1887	1089	264	56	1861	1132	238	99	1850	1089	227	56
99102	779	596	854	551	75	-45	844	503	65	-93	838	529	59	-67
99103	2076	1312	382	312	-1694	-1000	380	309	-1696	-1003	365	309	-1711	-1003
99104	1332	983	1116	881	-216	-102	1109	898	-223	-85	1104	900	-228	-83
99105	591	324	616	502	25	178	604	492	13	168	604	483	13	159
99108	30	45	31	47	1	2	31	47	1	2	31	47	1	2
99109	35	109	444	642	409	533	453	603	418	494	462	610	427	501
99110	381	146	314	280	-67	134	447	259	66	113	239	399	-142	253

Table 8.5: Extracted Traffic Flows for External Zone in the PM period (2017 Base, 2035 Do Nothing, 2035 Do Something and 2035 Do Something & Complementary Road)

8.2.11 **Table 8.5** above presents traffic flows from the ERM to be used in the LAM's external zones. Comparing the 2017 Base to the 2035 Do Something and Do Something with Complementary Measures (CM) scenarios in the AM peak period, shows both increases in background traffic which are reflective to growth rates and

envisaged developments flows from LAP lands and surrounding environs for an eighteen-year period, and decreases in traffic from redistribution on the network.

8.2.12 Note that the full suite of transport network measures proposed under the 'Greater Dublin Area Transport Strategy 2016-2035' is included both the 2035 Do Something and 2035 Do Something & Complementary Road scenarios. This accounted for reductions in traffic particularly zones 99011 and 99016 (M50 Motorway Traffic), 99103, 99104, 99105 and 99015 (Sandyford / Dundrum Area due to Metrolink and BusConnect Infrastructure).

8.2.13 These additional complementary measures included were:

- The Park Development infrastructure to connect the GDR scheme with the Ballyogan Road;
- The Golf Lane Link to connect Cherrywood over the M50 to the GDRS; and
- The roundabout junction at the Glenamuck Road / Golf Lane intersection was updated to a signalised junction.

8.2.14 There were increases in traffic but this due primarily to future residential and employment developments. Zone 99010 experienced an increase in both origin and destination traffic due to the development of the Woodbrook Local Area and Bray including Fassaroe. Zone 99012 had an increase in origin traffic due to the introduction of the GDRS. Zone 99101 had an increase in traffic due to the development of Cherrywood SDZ. Zones 99109 had an increase in both origin and destination traffic due to the strategic residential development of Old Conna, on the north-western fringe of Bray. Finally, zone 99110 had an increase in destination traffic due to mixture of the GDRS, additional traffic on the M50 and the development of Cherrywood SDZ.

8.2.15 Comparing the differences between both 2035 Future Horizon Year scenarios, there were only slight differences in the scenarios. Generally, the complementary measures gave small increases in capacity on the wider network with redistribution assignment factors included. It should be noted that the complementary measures had a greater impact in the immediate area of the GDRS which would be reflected in the extracted cordon traffic flows.

8.3 IMPACT ON THE M50 MOTORWAY – STRATEGIC FLOWS

8.3.1 A strategic impact assessment for motorway flows was undertaken on the following junctions on the M50: -

- Junction 13 (Sandyford, Dundrum Interchange);
- Junction 14 (Stillorgan, Dun Laoghaire Interchange);
- Junction 15 (Kilternan, Leopardstown Interchange); and
- Junction 16 (Loughlinstown, Cherrywood Interchange).

8.3.2 Strategic level flows using the National Transport Authority's (NTA) Eastern Regional Model (ERM) were compared for each scenario and analysed at key locations based on the TII permanent ATC traffic counter locations as specified in **Figure 8.2**. It should be noted that between the 2020 and 2035 Do-Nothing scenarios there is a marked decrease in AADT. The reason for this is that the NTA ERM model for 2035 includes a full suite of transport measures (mentioned in **Section 4.3**) included in it to reflect the GDA Transport Strategy which includes large public transport infrastructural projects (like the Metrolink, Core Bus corridors and new Luas lines), a fully realised cycle network and TII's Demand Management Measures on the M50 to reduce traffic on the motorway and address future capacity. The combination of all of these reduces demand on the M50 corridor. Changes between the Do-Nothing (DN) and Do-Something (DS) scenarios at each model year reflects the impact on the M50 by the proposed GDRS.

Figure 8.2: Location of TII Permanent ATC's Used in this Assessment

8.3.3 This assessment found that there were marginal differences in AADT flow on the M50 at key locations from the proposed scheme as outlined in Table 8.6. For the model year 2020, AADT flows in the locations between Junctions 12-13 and 16-17 presented only have small increase in flows and a decrease in flow between Junctions 14 and 15. There was 2% increase in AADT for the opening year 2020 between junctions 15 and 16.

Counter ID	Location Between M50 Junctions	2017 Base	2020 DN	2020 DS	2020 % Diff DN vs DS	2035 DN	2035 DS	2035 % Diff DN vs DS	2035 DS + CM	2035 % Diff DN vs DS+CM
TMU M50 035.0 S	12	74,500	85,550	86,000	+0.53%	30,650	29,950	-0.22%	30,750	+0.00%
	13									
TMU M50 040.0 S	14	72,550	88,200	87,450	-0.85%	39,350	39,700	+0.89%	39,000	-0.89%
	15									
TMU M50 035.0 N	15	69,250	84,350	86,050	+2.02%	49,650	49,600	-0.10%	46,300	-6.75%
	16									
TMU M50 040.0 N	16	49,500	60,850	60,900	+0.08%	36,600	33,250	-9.15%	33,450	-8.60%
	17									

* All AADT values are rounded up to the nearest 50

Table 8.6: Base and Forecasted Strategic Flows at M50 Traffic Counter Locations

8.3.4 For the model year 2035 the impact at the locations between M50 Junctions 12-13, 14-15 and 15-16 were slight or marginal. However, AADT between junction 16 and 17 showed a 9.15% decrease in flow as trips to and from zones south of the proposed GDRS were diverted onto the scheme. The major difference with the inclusion of the complementary measures was a 6.75% decrease in AADT flow to the Do-Nothing scenario between junctions 15 and 16, mostly due to traffic using the proposed Golf Lane Link as an alternative to travel on the M50.

8.3.5 ERM SATURN plots of with demand flows of each of the junctions on the M50 can be found in **Appendix E**.

8.4 IMPACT ON THE M50 MOTORWAY – STRATEGIC QUEUING

8.4.1 A strategic impact assessment for motorway queuing was undertaken on the following junctions on the M50: -

- Junction 13 (Sandyford, Dundrum Interchange);
- Junction 14 (Stillorgan, Dun Laoghaire Interchange);
- Junction 15 (Kilternan, Leopardstown Interchange); and
- Junction 16 (Loughlinstown, Cherrywood Interchange).

8.4.2 Similar to the aforementioned assessment of strategic flows, strategic queuing levels were compared for each scenario and analysed at key junction in the following sections using the National Transport Authority's (NTA) Eastern Regional Model (ERM). ERM SATURN plots of with average queue lengths of each of the junctions on the M50 can be found in **Appendix E**.

Junction 13

8.4.3 The following key links at Junction 13 on the M50 were investigated in this assessment as illustrated in **Figure 8.3**. **Tables 8.7** and **8.8** summarises the average queue lengths (in pcus) for both the AM and PM peak hours respectively.

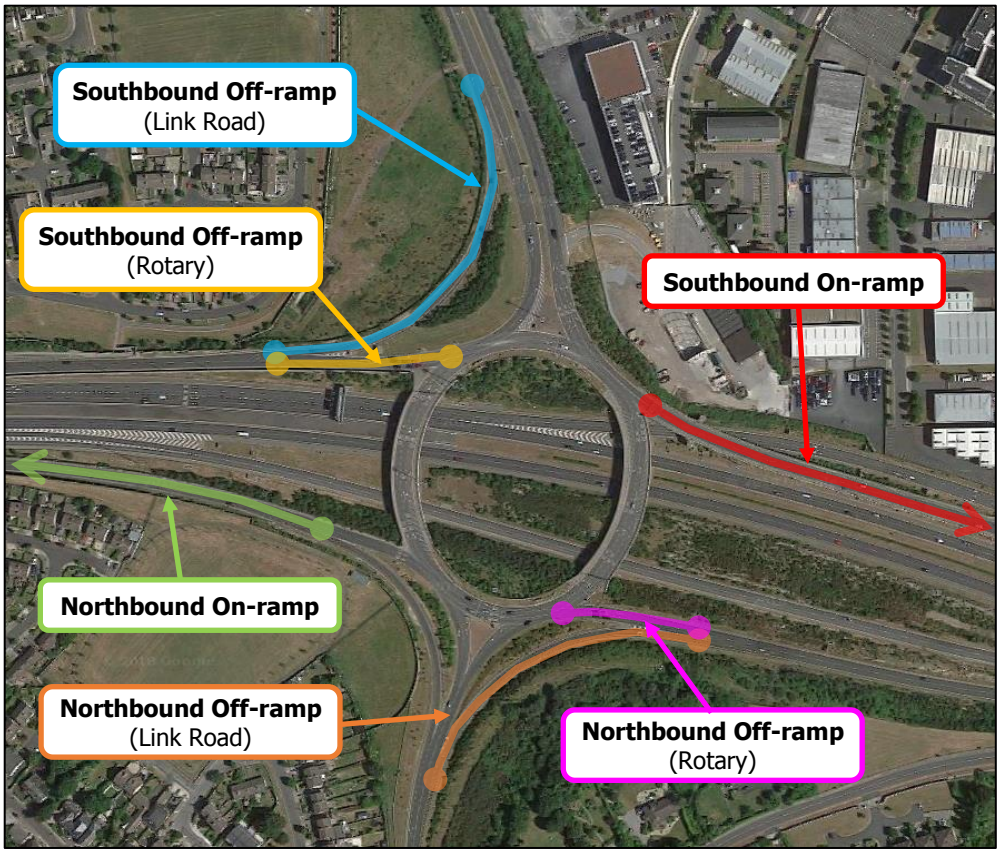


Figure 8.3: Junction 13 - Key Links Investigated in Queuing Assessment

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp (Rotary)	3	3	3	1	1	1
Southbound Off-ramp (Link Road)	0	0	0	0	0	0
Southbound On-ramp	0	0	0	0	0	0
Northbound Off-ramp (Rotary)	3	3	3	2	2	2
Northbound Off-ramp (Link Road)	0	0	0	0	0	0
Northbound On-ramp	0	1	0	5	7	7

Table 8.7: Base and Forecasted Strategic Queuing at M50 Junction 13 (AM Peak Hour)

8.4.4 Comparing the various scenarios for the AM peak hour in **Table 8.7**, the overall results found was that the proposed GDRS has no impact in terms of queuing on Junction 13. Though there was a marginal increase of 2 pcus on the Northbound On-Ramp in the 2035 future year scenarios.

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp (Rotary)	5	6	6	3	3	3
Southbound Off-ramp (Link Road)	0	0	0	0	0	0
Southbound On-ramp	0	0	0	0	0	0
Northbound Off-ramp (Rotary)	2	2	2	0	0	0
Northbound Off-ramp (Link Road)	0	0	0	0	0	0
Northbound On-ramp	0	0	0	1	1	1

Table 8.8: Base and Forecasted Strategic Queuing at M50 Junction 13 (PM Peak Hour)

8.4.5 Comparing the various scenarios for the PM peak hour in **Table 8.8**, the overall results found was that the proposed GDRS has no impact in terms of queuing on Junction 13. No differences were found in queuing contrasting the Do-Nothing and Do-Something.

8.4.6 In summary, the proposed GDRS would have no impact in terms of strategic queuing at Junction 13 on the M50.

Junction 14

8.4.7 The following key links at Junction 14 on the M50 was investigated in this assessment as illustrated in **Figure 8.4**. **Tables 8.9** and **8.10** summarises the average queue lengths (in pcus) for both the AM and PM peak hours respectively.

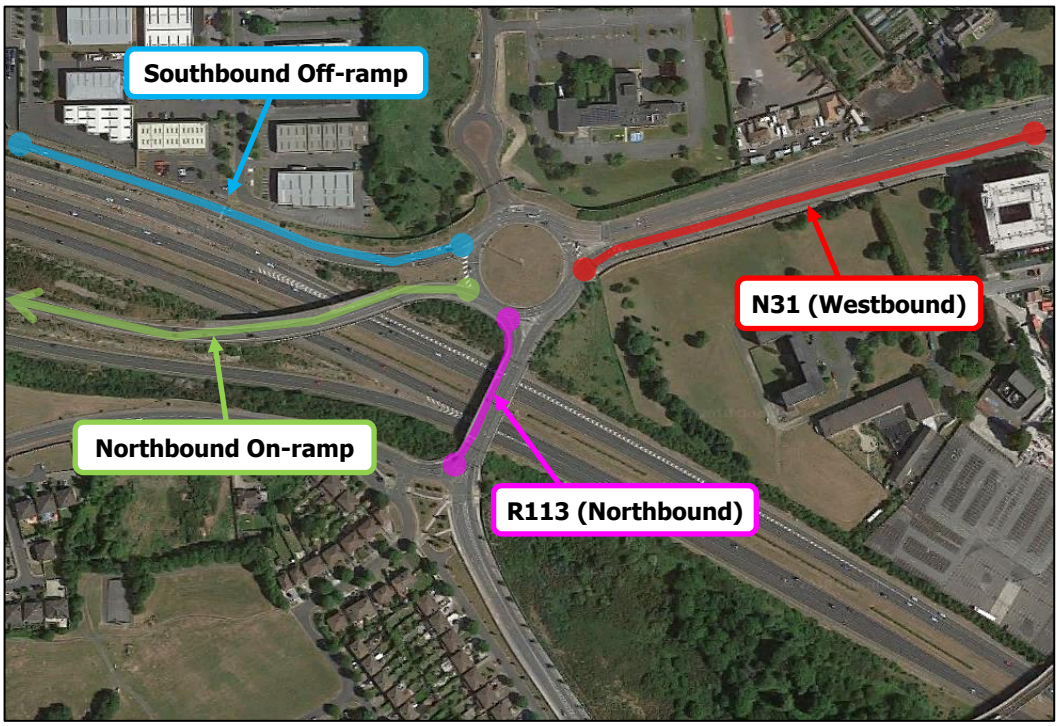


Figure 8.4: Junction 14 - Key Links Investigated in Queuing Assessment

8.4.8 It should be noted that by 2035 this interchange is cited to be upgraded and the ERM network for 2035 has reflected this.

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp	83	87	90	43	40	39
Northbound On-ramp	0	0	0	0	0	0

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
R113 (Northbound)	27	27	27	7	7	6
N31 (Westbound)	0	0	0	24	24	24

Table 8.9: Base and Forecasted Strategic Queuing at M50 Junction 14 (AM Peak Hour)

8.4.9 Comparing the various scenarios for the AM peak hour in **Table 8.9**, the overall results found was that the proposed GDRS has no impact in terms of queuing on Junction 14. Though there was a marginal increase of 3 pcus on the Southbound Off-Ramp in the 2020 Opening Year, however for the 2035 future year scenario there is a decrease of 3 pcus between the Do-Nothing and Do-Something scenarios.

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp	0	0	0	15	14	14
Northbound On-ramp	0	0	0	0	0	0
R113 (Northbound)	1	1	0	2	5	2
N31 (Westbound)	58	61	73	28	28	28

Table 8.10: Base and Forecasted Strategic Queuing at M50 Junction 14 (PM Peak Hour)

8.4.10 Comparing the various scenarios for the PM peak hour in **Table 8.10**, the ERM results found that the proposed GDRS has a slight impact in terms of queuing on N31 Westbound link only with an increase of 12 pcus between the Do Nothing and Do Something scenarios for the opening year of 2020. However, there was marginal differences found in queuing when contrasting the Do-Nothing and Do-Something for the future year of 2035.

8.4.11 In summary, the proposed GDRS would have a slight impact on the N31 (Westbound) link at Junction 14 in the 2020 PM peak hour however in terms of strategic queuing. However, the impact on the junction is nil to slight comparing to other scenarios, years and time periods.

Junction 15

8.4.12 The following key links at Junction 15 on the M50 were investigated in this assessment as illustrated in **Figure 8.5**. **Tables 8.11** and **8.12** summarises the average queue lengths (in pcus) for both the AM and PM peak hours respectively.

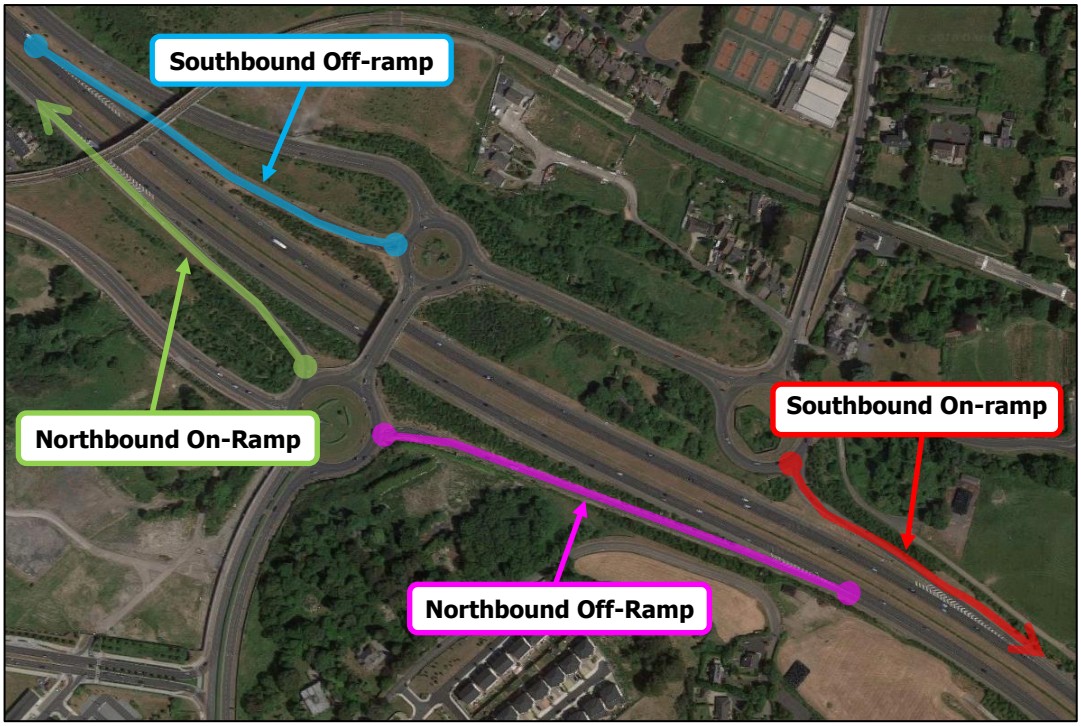


Figure 8.5: Junction 15 - Key Links Investigated in Queuing Assessment

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp	12	17	14	1	1	1
Southbound On-ramp	0	0	1	0	0	0
Northbound Off-ramp	0	0	0	1	1	1
Northbound On-ramp	18	18	32	0	0	0

Table 8.11: Base and Forecasted Strategic Queuing at M50 Junction 15 (AM Peak Hour)

8.4.13 Comparing the various scenarios for the AM peak hour in **Table 8.11**, the ERM results found that the proposed GDRS would have an impact in terms of queuing on Junction 15 in the opening year of 2020. The Southbound Off-Ramp would experience a decrease in queuing by 3 pcus and The Northbound Off-Ramp would increase by 14 pcus. However, in the future year of 2035, in all scenarios there is none to negligible queuing at Junction 15 showing an efficiently operational motorway interchange.

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp	18	20	24	1	1	1
Southbound On-ramp	0	2	2	0	0	0

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Northbound Off-ramp	0	0	1	0	5	0
Northbound On-ramp	1	1	1	0	0	0

Table 8.12: Base and Forecasted Strategic Queuing at M50 Junction 15 (PM Peak Hour)

8.4.14 Comparing the various scenarios for the PM peak hour in **Table 8.8**, the overall results found was that the proposed GDRS has a slight impact in terms of queuing on Junction 15. There was a marginal increase of 4 pcus on the Southbound Off-Ramp in the 2020 opening year between the Do-Nothing and Do-Something scenarios. Similarly, in the 2035 future year there was a 5 pcus increase from 0 pcus on the Northbound Off-Ramp between the Do-Nothing and Do-Something scenarios.

8.4.15 In summary, the proposed GDRS would have a slight impact in terms of strategic queuing at Junction 15 on the M50. The only point of note would be that the Northbound Off-Ramp would increase by 14 pcus in the 2020 opening year. However, the ERM results show that in the future year of 2035, in all scenarios there is none to negligible queuing at Junction 15 showing an efficiently operational motorway interchange where the proposed GDRS has marginal impact on the motorway junction.

Junction 16

8.4.16 The following key links at Junction 16 on the M50 were investigated in this assessment as illustrated in **Figure 8.6**. **Tables 8.13** and **8.14** summarises the average queue lengths (in pcus) for both the AM and PM peak hours respectively.

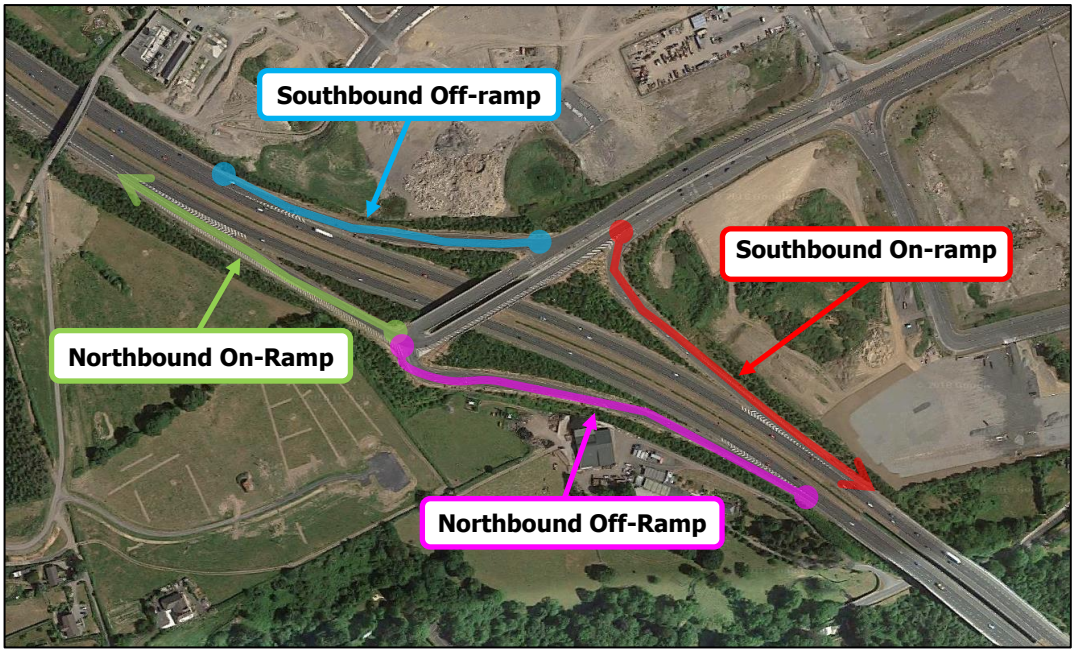


Figure 8.6: Junction 16 - Key Links Investigated in Queuing Assessment

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp	8	9	10	5	6	4
Southbound On-ramp	0	0	0	0	0	0
Northbound Off-ramp	1	1	1	2	2	2
Northbound On-ramp	1	1	1	0	0	0

Table 8.13: Base and Forecasted Strategic Queuing at M50 Junction 16 (AM Peak Hour)

8.4.17 Comparing the various scenarios for the AM peak hour in **Table 8.13**, the overall results found was that the proposed GDRS has a marginal impact in terms of

queuing on Junction 16. Though there was an increase of 1 pcu on the Southbound Off-Ramp in the 2020 opening year scenarios.

Link	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)	(in pcus)
Southbound Off-ramp	6	6	6	4	4	4
Southbound On-ramp	0	0	0	0	0	0
Northbound Off-ramp	0	0	0	0	0	0
Northbound On-ramp	0	0	0	0	0	0

Table 8.14: Base and Forecasted Strategic Queuing at M50 Junction 16 (PM Peak Hour)

8.4.18 Comparing the various scenarios for the PM peak hour in **Table 8.14**, the overall results found was that the proposed GDRS has no impact in terms of queuing on Junction 16. No differences were found in queuing contrasting the Do-Nothing and Do-Something scenarios.

8.4.19 In summary, the proposed GDRS would have no impact in terms of strategic queuing at Junction 16 on the M50.

9.0 LOCAL AREA MODEL ASSESSMENT

9.1 OVERVIEW

9.1.1 This section presents a range of scenario tests performed using the LAM SATURN model to look at network performance in more detail in the area. The LAM was utilised to extract forecasted traffic flows along the GDRS to assist in the design and future operational performance of key junctions on the GDRS through TRANSYT analyses.

9.1.2 **Appendix D** provides more detail on the local traffic flows forecasted and extracted for the TRANSYT analyses from the LAM scenarios tested in both the AM and PM peak periods.

9.2 NETWORK STATISTICS

9.2.1 The following section compares the network results for each of the scenarios tested in the LAM. This LAM analysis was developed based on the impacts on the network performance parameters:

- Total Network Travel Time (hrs) for all vehicles;
- Total Network Vehicle Kilometres (hrs) for all vehicles; and
- Total Delays (hrs).

9.2.2 Total delay in this assessment was measured by two SATURN key statistics, Transient Queues and Over Capacity Queues. These types of queuing are defined as follows:

- Transient queues are under capacity queues that form during the red phases of signals; and
- Over-capacity queues are the queues that form due to capacity shortage at a junction where a permanent queue develops and is unable to clear in a single cycle.

9.2.3 These two combined statistics of Transient Queues and Over Capacity Queues to give total delay gives an overview measure of how vehicles perform travelling through the LAM network.

9.2.4 **Tables 9.1** and **9.2** summarises the key network statistics for each of the scenarios tested in the AM and PM peak periods, while **Figures 9.1** and **9.2** compares delays in each of the scenarios.

Key Statistic (AM Peak Hour)	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
Includes LAP Flows	NO	NO	NO	Yes	YES	YES
Transient Queues (Hours)	303.7	316.9	475.8	367.8	507.3	551.6
Over Capacity Queues (Hours)	2306.3	2571.2	1572.8	3656.3	2267.2	1754.3
Total Delay (Hours)	2610	2888.1	2048.6	4024.1	2774.5	2305.9
Total Travel Times (Hours)	4096.2	4407.1	3838.7	5576.6	4478	3712.6
Travel Distance (km)	107926.5	110008.2	123131.3	97627.4	104495.9	106503.7

Table 9.1: Key LAM Network Statistics for AM Peak Period

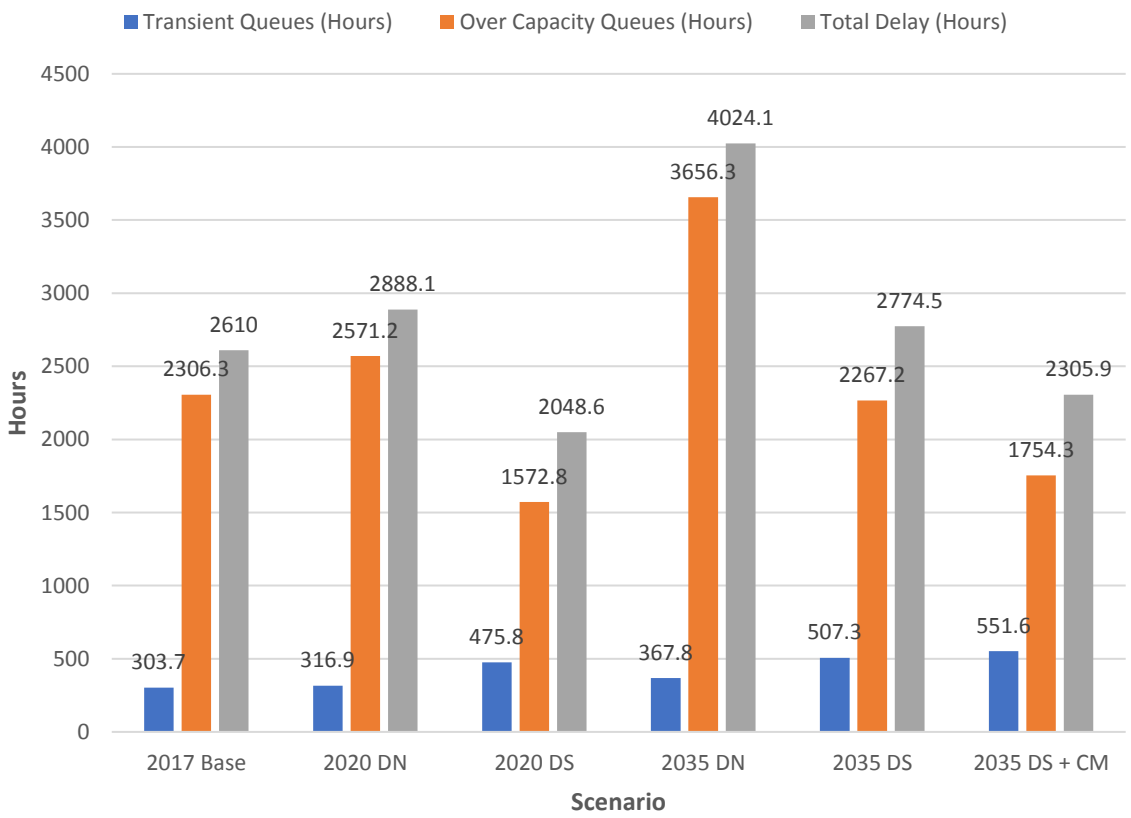


Figure 9.1: LAM Modelled Queues and Total Delay

9.2.5 Comparing the AM peak periods in each of the scenarios the trend generally describes that the GDRS improves traffic conditions as there is a reduction in delay in the 2020 and 2035 opening and horizon years and with the complementary measures there is further benefits with greater demand following the development of the LAP lands (with up to 3,000 residential units) and committed developments. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035, there is a significant reduction in delay across the network, highlighting the benefits of the proposed GDRS and that the existing road network as it stands is unsustainable for catering traffic in the future horizon year of 2035.

Key Statistic (PM Peak Hour)	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
Includes LAP Flows	NO	NO	NO	YES	YES	YES
Transient Queues (Hours)	319.8	318.8	409.1	442.5	467.5	544.3
Over Capacity Queues (Hours)	2030	2040.6	1557.3	3306.8	2229.2	1571.1
Total Delay (Hours)	2349.8	2359.4	1966.4	3749.3	2696.7	2115.4
Total Travel Times (Hours)	3891	3890.9	4685.5	5385.2	4784	4311.3
Travel Distance (km)	107567.8	106848.4	114833	100523.2	97062.3	99193.9

Table 9.2: Key LAM Network Statistics for PM Peak Period

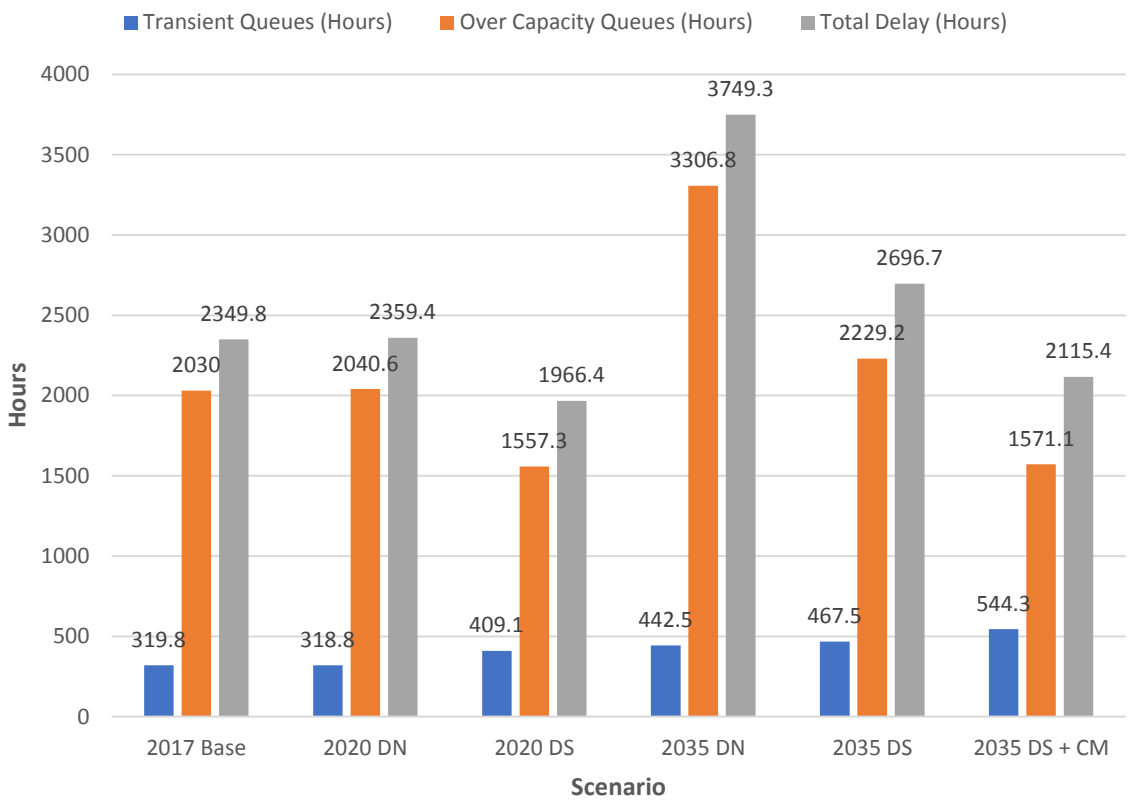


Figure 9.2: LAM Modelled Queues and Total Delay for PM Peak Period

9.2.6 Comparing the PM peak periods in each of the scenarios the trend generally describes that the GDRS improves traffic conditions as there is a reduction in delay in the 2020 and 2035 opening and horizon years comparing the Do-Nothing and Do-Something scenarios. The complementary measures show further improvements with greater demand following the development of the LAP lands (with up to 3,000 residential units) and committed developments compared to the Do-Something scenarios. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035, there is a significant reduction in delay across the network, highlighting the benefits of the proposed GDRS and that the existing road network as it stands is unsustainable for catering traffic in the future horizon year of 2035.

9.3 AVERAGE VEHICLE SPEEDS

9.3.1 Investigating the efficiency of the network in each scenario assessed, the average speeds on the network for general traffic and buses are presented in **Tables 9.3** and **9.4** while **Figures 9.3** and **9.4** compares average speeds in each of the scenarios.

Average Speed for General Traffic (kph)	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
Includes LAP Flows	NO	NO	NO	YES	YES	YES
AM Peak Period	26.3	24.7	32.3	17.5	27.6	28.7
PM Peak Period	27.6	27.5	28.8	18.7	20.5	24.8

Table 9.3: LAM General Traffic Average Speed (kph)

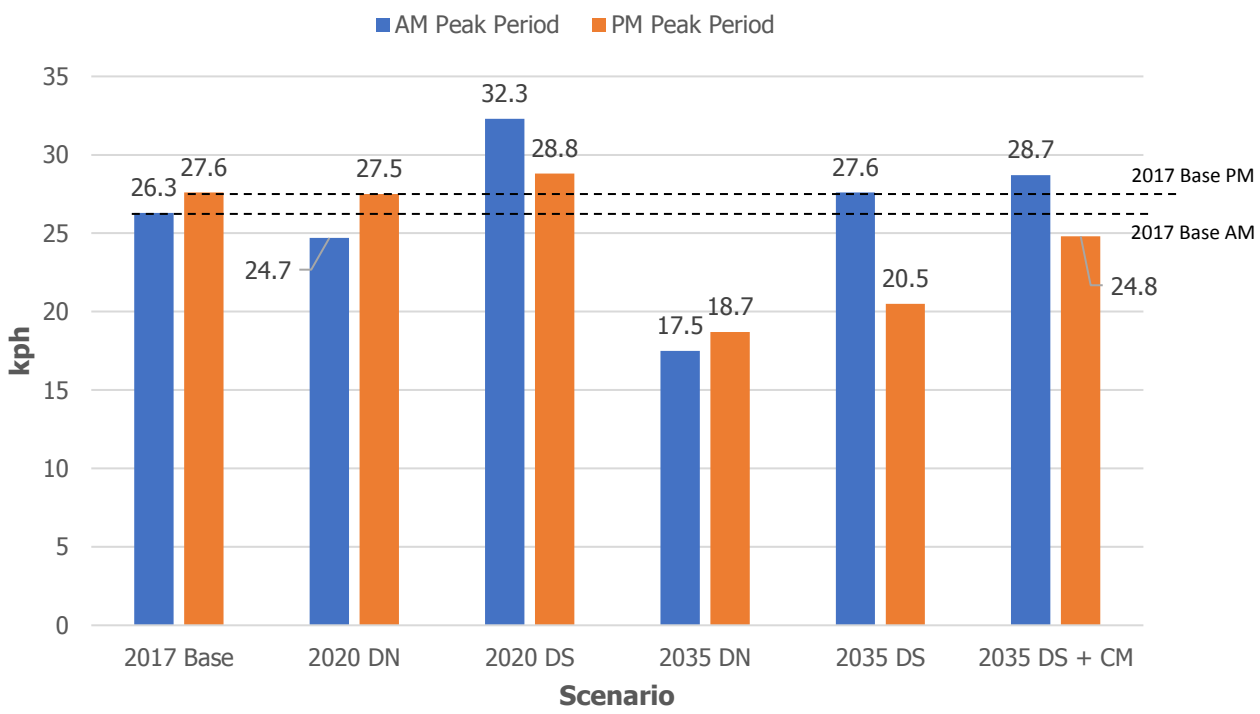


Figure 9.3: Average Speed for General Traffic (kph)

9.3.2 Comparing the average speeds for general traffic, the overall trend is that average speed increases in the AM peak period in the Do-Something scenarios as opposed

to a downward trend in the Do-Nothing scenarios. There is a slight decrease between the 2017 base and 2020 Do Nothing, this is correlating to a slight increase in background traffic. Comparing the 2020 and 2035 Do Something there is a noticeable decrease in average speed, this is correlating to an increase in background traffic over a 15-year period, however with the introduction of the complementary measures outside the remit of the proposed GDRS, average speed is improved. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035 and the 2017 Base, there is a significant reduction in average speed across the network, however with the introduction of the proposed GDRS average speed improves. This shows that the existing network as it stands is not efficiently catering traffic in the future horizon year of 2035.The PM peak period reflects a similar trend as in the AM peak period.

9.3.3 Comparing the average speeds for bus traffic only, the overall trend is that average speed increases in the AM peak period in all Do-Something scenarios as opposed to a downward trend in the Do-Nothing scenarios. There is a slight decrease between the 2017 base and 2020 Do Nothing, this is correlating to a slight increase in background traffic and the delay paralleled with this increase in traffic. This continues to the 2035 Do-Nothing scenario. High average bus speeds are maintained in the 2035 Do-Something scenarios. This shows that the Do-Something network has a significant benefit for average bus speeds. The PM peak period reflects a similar trend as in the AM peak period.

Average Speed for Buses (kph)	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM
Includes LAP Flows	NO	NO	NO	YES	YES	YES
AM Peak Period	27.7	27	46.9	25.9	46.4	42.8
PM Peak Period	33	32	46.2	28.6	33.9	41.4

Table 9.4: LAM Bus Average Speed (kph)

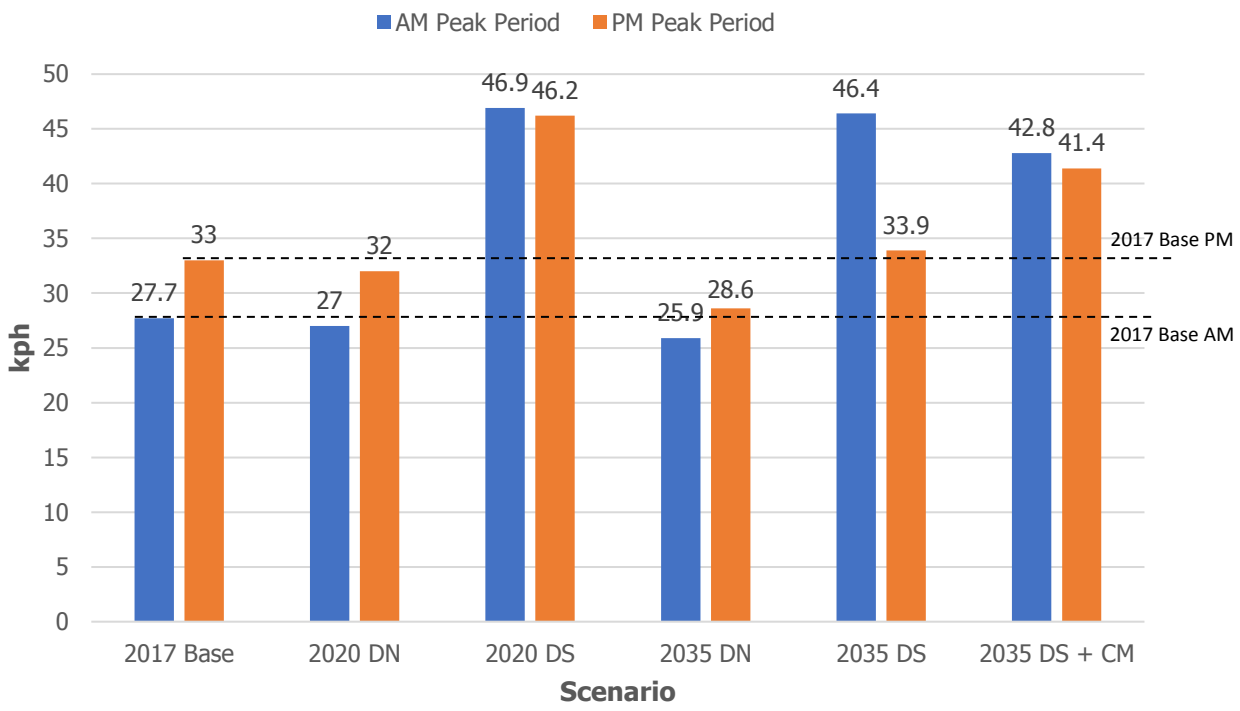


Figure 9.4: Average Speed for Bus (kph)

9.3.4 While comparing the average speeds for Buses, this assessment shows the significant benefit from the introduction to the GDRS and its provision for the Bus Gates. The general trend is that average speed increases with each progressive scenario in the AM peak period especially for with the introduction of the GDRS. The exception being the 2035 Do Something scenario where average speeds decrease with the greater demand on the road network from a fully implemented LAP lands. But this changes with the implementation of the Complementary measures. For the PM peak period this is a similar case as in the AM peak period.

9.4 PREDICTED TRAFFIC FLOWS

Traffic Flows for Opening Year (2020)

9.4.1 Forecasted traffic volumes are shown in **Table 9.5** for the Do-Nothing and Do-Something Opening Year (2020) scenarios. The traffic flows in each of these scenarios are also illustrated graphically in **Figure 9.6** and **Figure 9.7** respectively. For comparison purposes the modelled AADT's for 2017 are also shown graphically in **Figure 9.5**. It should be noted that locations B (for Base and 2020 Do-Nothing)

and N are directly supplied from external trip forecasted and provided by the ERM to the LAM. These strategic flows were based on the National Demand Forecasting Model and disaggregated and processed in the ERM as mentioned in **Section 4**. These forecasted strategic flows provide planning and industry best statistical probability and numbers in traffic levels and travel distribution prediction and provides a greater level of conservationism in terms of predicting traffic flow and therefore the impact of the proposed scheme.

ID	Location	2017 Base AADT	2020 Do-Nothing AADT	2020 Do-Something AADT	% Diff 2020 DN vs 2020 DS
A	R117 Enniskerry Road (North of Golden Ball junction)	8650	9050	4700	**- 48.1 %**
B	R117 Enniskerry Road (South of Kilternan Village)	6500	10500	1400	**- 86.7 %**
C	Barnaslingan Lane	350	500	500	0.0 %
D	Ballycorus Road	2200	4050	4950	+ 22.2 %
E	Glenamuck Road (East of GLDR	12300	13350	2700	**- 79.8 %**
F	Glenamuck Road (West of GLDR)	9000	10450	1900	**- 81.8 %**
G	Glenamuck District Distributor Road (West of GDDR/GDLR junction)	-	-	7250	-
H	Glenamuck District Distributor Road (East of GDDR/GDLR junction)	-	-	14000	-
I	Glenamuck District Link Road (South of GDDR/GDLR junction)	-	-	12550	-
J	Glenamuck District Link Road	-	-	10850	-
K	R117 Enniskerry Road / Glenamuck District Link Road	-	-	11900	-
L	Glenamuck District Distributor Road (Adjacent to Park Development)	-	-	13200	-
M	R117 Enniskerry Road (North of GDDR junction)	7650	9000	11950	+ 32.8 %
N	R116 Ballybetagh Road	1850	3550	3550	0.0 %
O	R117 Enniskerry Road (North of Kilternan Village)	12100	13000	4950	**- 61.9 %**
P	Glenamuck District Link Road (South of Ballycorus Road)	-	-	11900	-
Q	M50 South of Junction 15	69250	84350	86050	+ 2.0 %
R	M50 North of Junction 15	72550	88200	87450	**- 0.85 %**

* All AADT values are rounded up to the nearest 50.

Table 9.5: AADT Summary for 2020 Opening Year (Vehs)

9.4.2 In the 2020 Do-Something scenario the Glenamuck District Roads Scheme is forecast to carry between 7,250 and 14,000 AADT. The flows presented in **Table 9.5** highlights a number of impacts as a direct result of the proposed scheme. These include: -

- The proposed scheme diverts road traffic onto its network and away from less suitable and unsafe roads on the network. The proposed scheme acts as an arterial traffic corridor for the local network attracting trips from existing and committed developments;
- There is a reduction in traffic and congestion in Kiltiernan Village (reductions of 86.7% and 61.9% at location B and O respectively which represent a numerical decrease in AADT of 10,500 to 1,400 at location B and 13,000 to 4,950 at location O) and R117 Enniskerry Road (reduces by 48.1% at location A which represent a numerical decrease in AADT of 9,050 to 4,700) where the scheme directs and bypasses traffic from this area;
- Traffic on the existing eastern section of the Glenamuck Road is reduced and congestion is decreased due in part to the proposed scheme and the Bus Gate (this represents a reduction 79.8% or in numeric terms, AADT decreases from 13,350 to 2,700). Similarly, on the southern section of the Glenamuck Road near the Golden Ball junction there is a reduction in traffic and congestion from traffic being redirected to the proposed scheme (which represents a reduction of 81.8% or in numeric terms, AADT decreases from 10,450 to 1,900);
- Traffic on the R116 Ballycorus Road increases before the introduction of the proposed scheme from additional traffic from new development zones such as Cherrywood, Rathmichael and Old Conna from 2017 to the 2020 Do-Nothing scenario (an increase of 84.1% or in numeric terms an increase in AADT of 2,200 to 4,050). With the implementation of the proposed scheme this increases by a further +22.2% to an AADT of 4,950 from scheme attracting additional trips. However, the Ballycorus Road has been earmarked in the County Development Plan as a long-term road proposal to be improved to cater for strategic demand;
- With large reductions in traffic volumes in Kiltiernan Village, on Glenamuck Road, the bypassed section of the R117 Enniskerry Road would lead to a safer environment for pedestrians and cyclists along these

corridors. The decrease in road traffic is expected to make a more holistic environment for active modes of travel;

- Regarding traffic on the M50, AADT south of Junction 15 of the motorway increases by only 2% in the Do-Something scenario compared to the Do-Nothing scenario. However, north of Junction 15 traffic decreases by 0.85% between the two scenarios; and
- The scheme attracts additional and diverted trips from south of the scheme in County Wicklow and from Stepaside from time savings for motorists using the scheme.

9.4.3 In summary the Glenamuck District Roads Scheme reduces the level of traffic within the Local Area Plan environ for Kilternan-Glenamuck by diverting road traffic onto the proposed scheme's network and enabling traffic to bypass less suitable and unsafe roads on the LAP environ road network. The Kiltiernan Village Centre, Glenamuck Road and the bypassed section of the R117 Enniskerry Road benefit the most from the scheme. The proposed scheme acts as collector road for the local network attracting trips from existing and committed developments. Traffic on the Ballycorus Road is expected to grow from the 2017 Base to the 2020 Do-Nothing scenarios primarily contributed by trips from large developments near the road corridor and with the introduction of GDRS a further increase in traffic is expected, by +22.2% from the 2020 Do-Nothing scenario. The scheme attracts additional traffic from further origin points due to the time-saving benefit of the scheme. Finally, it has a marginal to slight impact on the M50 and the nearby Junction 15 in terms of traffic.

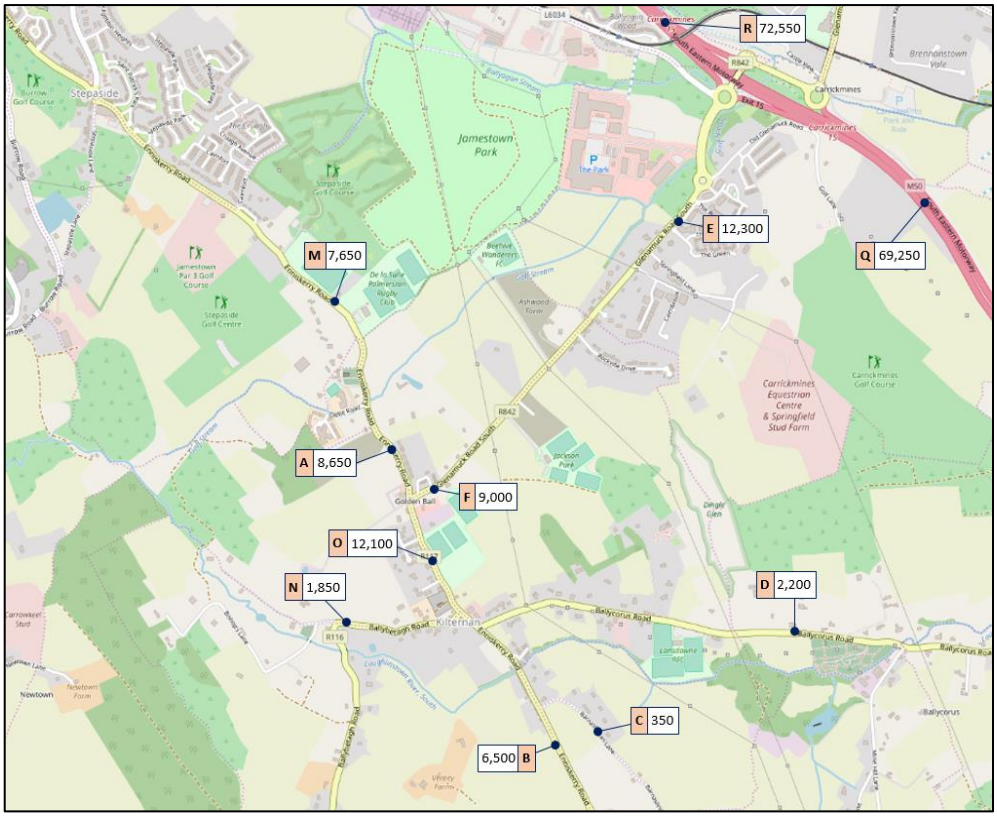


Figure 9.5: 2017 Base AADT

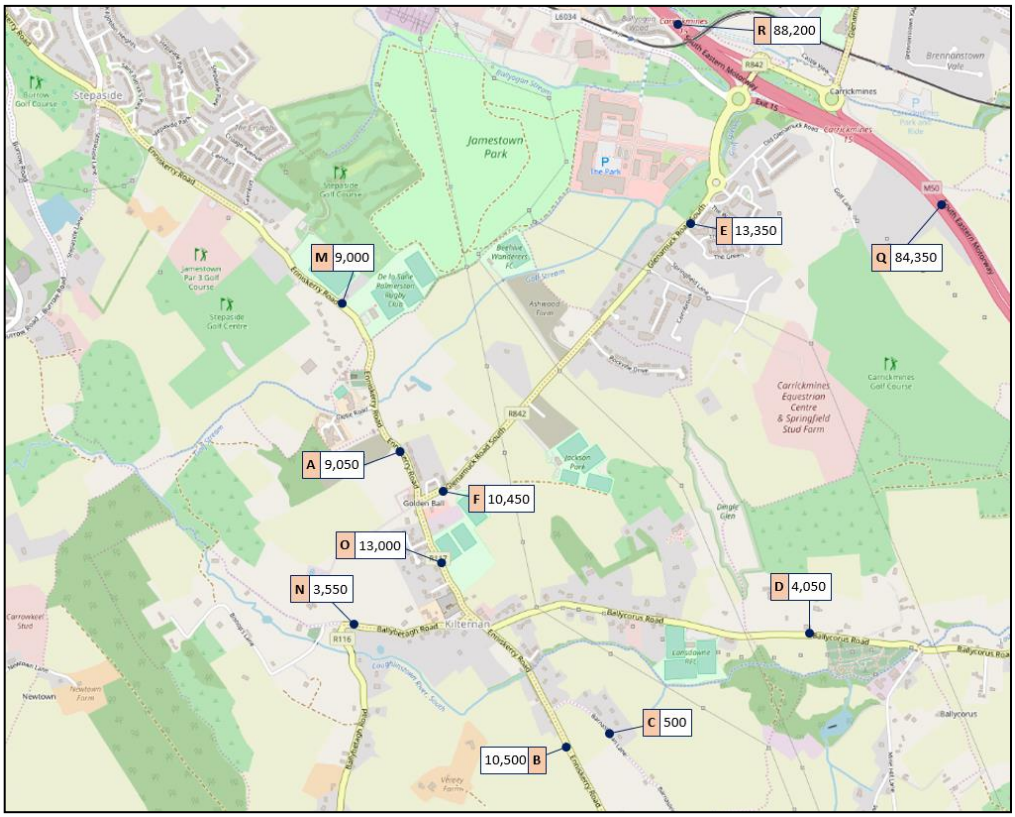


Figure 9.6: 2020 Do-Nothing AADT

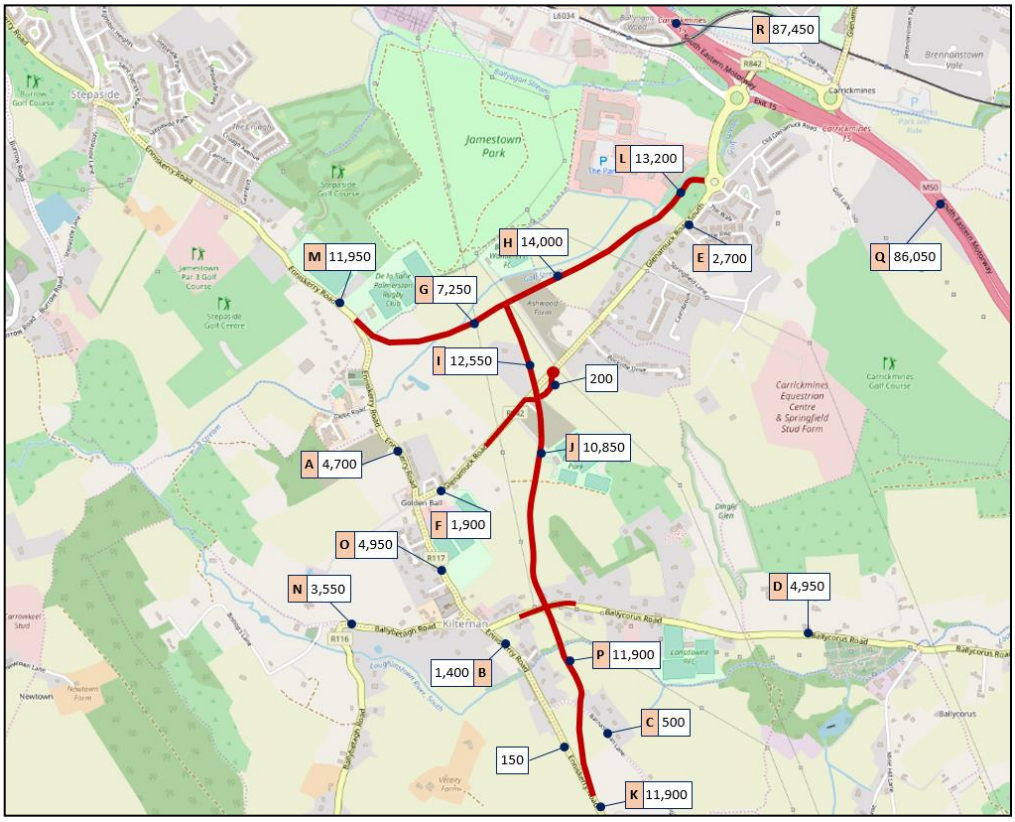


Figure 9.7: 2020 Do-Something AADT

Design Horizon Year AADT (2035)

9.4.4 Forecasted traffic volumes are shown in **Table 9.6** for the Do-Nothing and Do-Something Horizon Year (2035) scenarios. The traffic flows in each of these scenarios are also illustrated graphically in **Figure 9.8** and **Figure 9.9** respectively. Additionally, the modelled forecasted AADT's for 2035 Do-Something with Complementary Measures are also shown graphically in **Figure 9.10** and included in **Table 9.6**.

ID	Location	2035 Do-Nothing AADT	2035 Do-Something AADT	% Diff 2035 DN vs. 2035 DS	2035 Do-Something + CM AADT	% Diff 2035 DN vs 2035 DS + CM
A	R117 Enniskerry Road (North of Golden Ball junction)	14600	5800	**- 60.3 %**	5950	**- 59.2 %**
B	R117 Enniskerry Road (South of Kilternan Village)	16900	2050	**- 87.9 %**	2050	**- 87.9 %**

ID	Location	2035 Do-Nothing AADT	2035 Do-Something AADT	% Diff 2035 DN vs. 2035 DS	2035 Do-Something + CM AADT	% Diff 2035 DN vs 2035 DS + CM
C	Barnaslingan Lane	800	800	0.0 %	800	0.0 %
D	Ballycorus Road	7100	11600	+ 63.4 %	11050	+ 55.6 %
E	Glenamuck Road (East of GLDR)	17800	5000	**- 71.9 %**	5050	**- 71.6 %**
F	Glenamuck Road (West of GLDR)	13900	5750	**- 58.6 %**	5650	**- 59.4 %**
G	Glenamuck District Distributor Road (West of GDDR/GDLR junction)	-	14250	-	14650	-
H	Glenamuck District Distributor Road (East of GDDR/GDLR junction)	-	26450	-	31750	-
I	Glenamuck District Link Road (South of GDDR/GDLR junction)	-	21600	-	20000	-
J	Glenamuck District Link Road	-	20450	-	20450	-
K	R117 Enniskerry Road / Glenamuck District Link Road	-	18450	-	19050	-
L	Glenamuck District Distributor Road (Adjacent to Park Development)	-	26600	-	18400	-
M	R117 Enniskerry Road (North of GDDR junction)	14500	16250	+ 12.1 %	13750	**- 5.2 %**
N	R116 Ballybetagh Road	6200	6250	+ 0.8 %	6100	**- 1.6 %**
O	R117 Enniskerry Road (North of Kilternan Village)	20800	6200	**- 70.2 %**	6150	**- 70.4 %**
P	Glenamuck District Link Road (South of Ballycorus Road)	-	16800	-	17600	-
Q	M50 South of Junction 15	49650	49600	**- 0.1 %**	46300	**- 6.7 %**
R	M50 North of Junction 15	39350	39700	+ 0.9 %	39000	**- 0.9 %**

* All AADT values are rounded up to the nearest 50.

Table 9.6: AADT Summary for 2035 Design Horizon Year (Vehs)

9.4.5 In the 2035 Do-Nothing scenario, the R117 Enniskerry Road is forecast to have an AADT of up to 20,800 vehicles per day. The highest AADT occurs in Kilternan's Village Centre. The Glenamuck Road is forecast to have an AADT flow from 13,900 to 17,800 vehicles per day. Similarly, the R116 is expected to have an AADT flow from 6,200 to 7,100 vehicles per day.

9.4.6 In the 2035 Do-Something scenario however, the Glenamuck District Roads Scheme is forecasted to carry between 14,250 and 26,600 AADT (the highest being on the eastern section of the GDDR). Traffic within the LAP lands of Kilternan-Glenamuck are forecasted to maintain low levels of AADT compared to the flows on the proposed scheme with increases included from a fully developed LAP lands expected. But, these AADT flows are the same or lower than the 2017 base AADT flows.

9.4.7 The flows presented in **Table 9.6** highlights a number of impacts as a direct result of the proposed scheme in the future design year of 2035. These include: -

- The proposed scheme diverts road traffic onto its network and away from less suitable and unsafe roads on the network. The proposed scheme acts as an arterial traffic corridor for the local network attracting trips from existing, committed developments and the fully development LAP lands;
- There is a significant reduction in traffic and congestion in Kiltiernan Village (reductions of 87.9% and 70.2% at location B and O respectively which represent a numerical decrease in AADT of 16,900 to 2,050 at location B and 20,800 to 6,200 at location O) and R117 Enniskerry Road (reduces by 60.3% at location A which represent a numerical decrease in AADT of 14,600 to 5,800) where the scheme directs and bypasses traffic from this area;
- Traffic on the existing eastern section of the Glenamuck Road is reduced and congestion is decreased due in part to the proposed scheme and the Bus Gate (this represents a reduction 71.9% or in numeric terms, AADT decreases from 17,800 to 5,000). Similarly, on the western section of the Glenamuck Road near the Golden Ball junction there is a reduction in traffic and congestion from traffic being redirected to the proposed scheme (which represents a reduction of 58.6% or in numeric terms, AADT decreases from 13,900 to 5,750);
- With large reductions in traffic volumes in Kiltiernan Village, on Glenamuck Road, the bypassed section of the R117 Enniskerry Road would lead to a safer environment for pedestrians and cyclists along these corridors. The decrease in road traffic is expected to make a more holistic environment for active modes of travel;
- Background traffic on the R116 Ballycorus Road is expected to increase from 2020 and again before the introduction of the proposed scheme in

2035. Additional traffic from new development zones such as Cherrywood, Rathmichael and Old Conna contribute to this expected growth (in AADT terms 4,050 in the 2020 Do-Nothing scenario to 7,100 in the 2035 Do-Nothing scenario). With the implementation of the proposed scheme, AADT increases further with time saving attraction, increasing to 11,050 vehicles per day. However, the Ballycorus Road has been earmarked in the County Development Plan as a long-term road proposal to be improved to cater for strategic demand on this corridor after the implementation of the GDRS;

- Regarding traffic on the M50, AADT south of Junction 15 of the motorway decreases slightly by only 0.1% in the Do-Something scenario compared to the 2035 Do-Nothing scenario. However, north of Junction 15 traffic increases by 0.9% between the two scenarios; and
- The scheme attracts additional trips from surrounding environs like Stepaside, Rathmichael, Cherrywood, Enniskerry and additional/diverted trips from County Wicklow from time savings for motorists using the scheme.

9.4.8 As a comparison the 2035 Do-Something with the complementary measures that are outside the remit of the GDRS but are assumed as being implemented after the GRDS and before 2035 are forecasted to carry between 14,650 and 31,750 AADT (the highest being on the eastern section of the GDDR to the junction with the proposed Park Development road infrastructure). The 2035 Do-Something with complementary measures shows mostly slight improvements to AADT in the LAP local road network however, reductions in traffic levels occur in the R116 Ballycorus Road (now +55.6% from +63.4% difference to Do-Nothing with an AADT of 11,050 vehicles per day) and on the M50 with AADT south of Junction 15 of the motorway decreasing by 6.65% (AADT decreases from 49,600 to 46,300 vehicles per day) compared to the other Do-Something scenario and similarly, north of Junction 15 traffic decreases by 1.80% (AADT decreases from 39,700 to 39,000 vehicles per day) between the two Do-Something scenarios.

9.4.9 In summary the Glenamuck District Roads Scheme reduces the level of traffic within the Local Area Plan environ for Kilternan-Glenamuck by diverting road traffic onto the proposed scheme's network and enabling traffic to bypass less suitable and unsafe roads on the LAP environ road network. The Kiltiernan Village Centre, Glenamuck Road and the bypassed section of the R117 Enniskerry Road benefit the

most from the scheme. AADT traffic figures do increase compared to the 2020 Do Something scenario due to a fully developed LAP lands being assumed. But, these AADT flows are the same or lower than the 2017 base AADT flows. The proposed scheme acts as a link street for the local network attracting trips from existing and committed developments and the fully developed LAP lands. The scheme attracts additional traffic from further origin points due to the time-saving benefit of the scheme. Traffic on the Ballycorus Road is expected to grow from the 2017 Base to the 2035 Do-Nothing scenarios primarily contributed by trips from large developments near the road corridor and with the introduction of GDRS a further increase in traffic is expected, to an AADT of 11,600 in the 2035 Do-Something scenario and comparatively, an AADT of 11,050 in the 2035 Do-Something with Complementary Measures. However, the Ballycorus Road has been earmarked in the County Development Plan as a long-term road proposal to be improved to cater for strategic demand on this corridor after the implementation of the GDRS. In regard to traffic on the M50 there is a marginal to slight impact on the M50 and the nearby Junction 15. Comparing the two Do-Something scenarios (one being with the complementary measures that are outside the remit of the GDRS but are assumed as being implemented after the GRDS and before 2035) shows mostly slight improvements to AADT in the LAP local road network however, reductions in traffic levels occurring on the R116 Ballycorus Road and the M50.

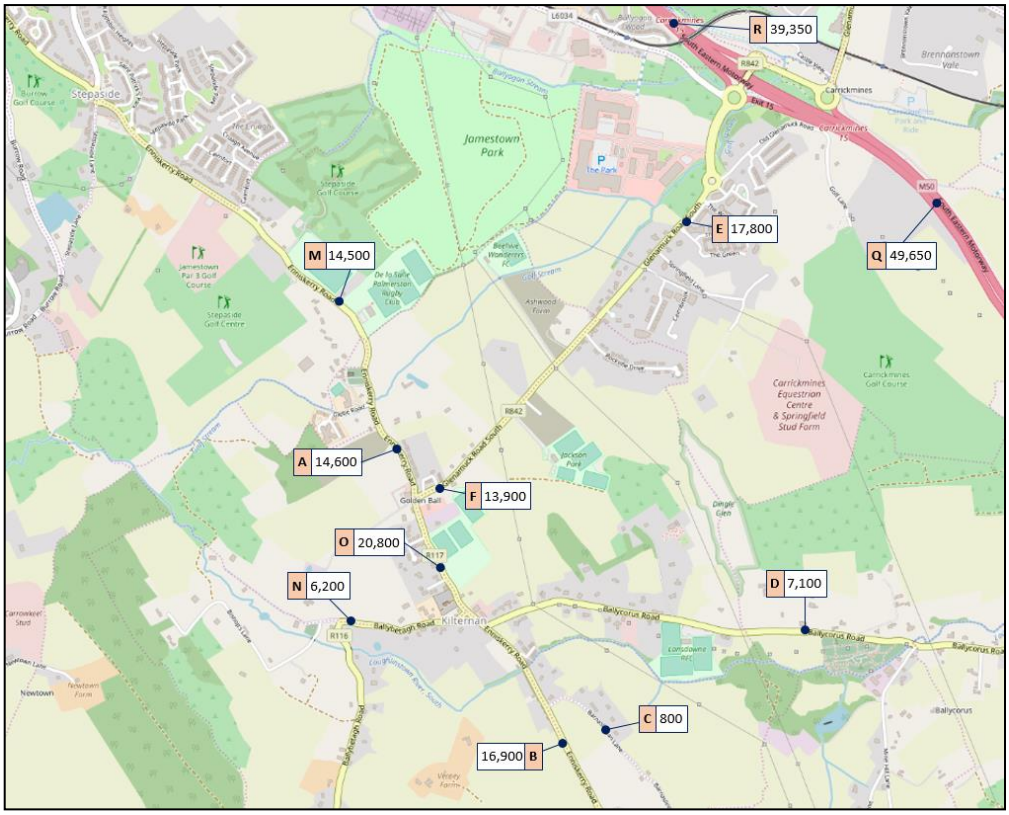


Figure 9.8: 2035 Do-Nothing AADT

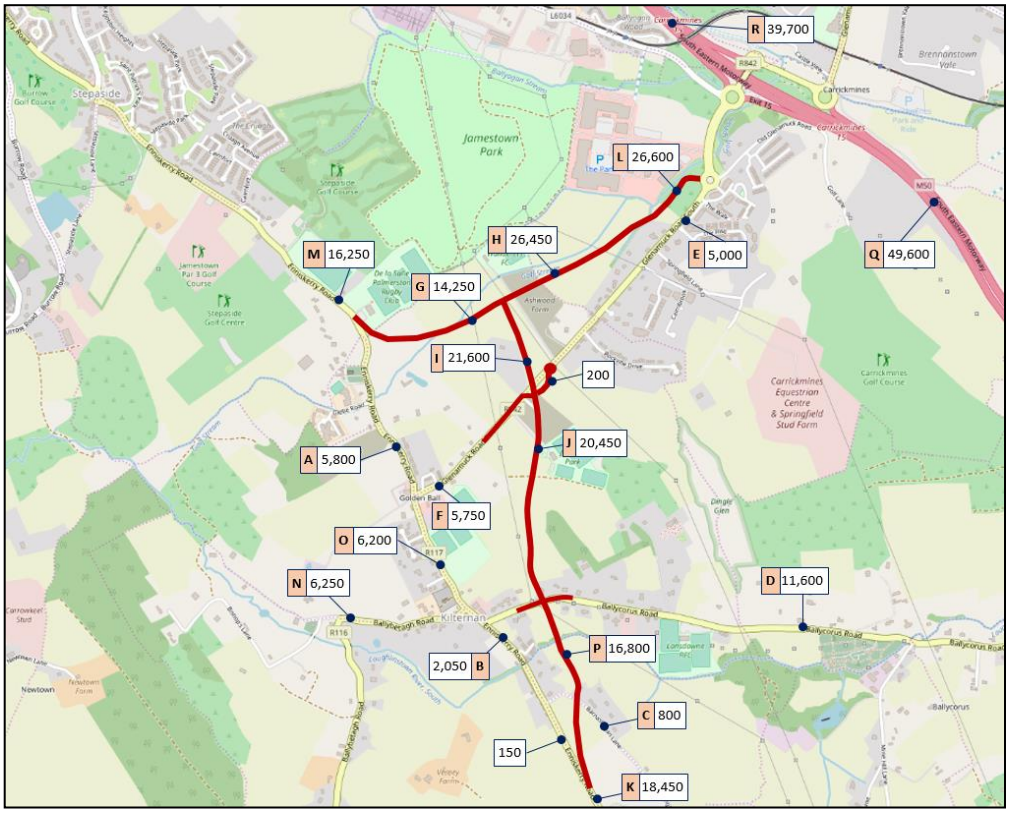


Figure 9.9: 2035 Do-Something AADT

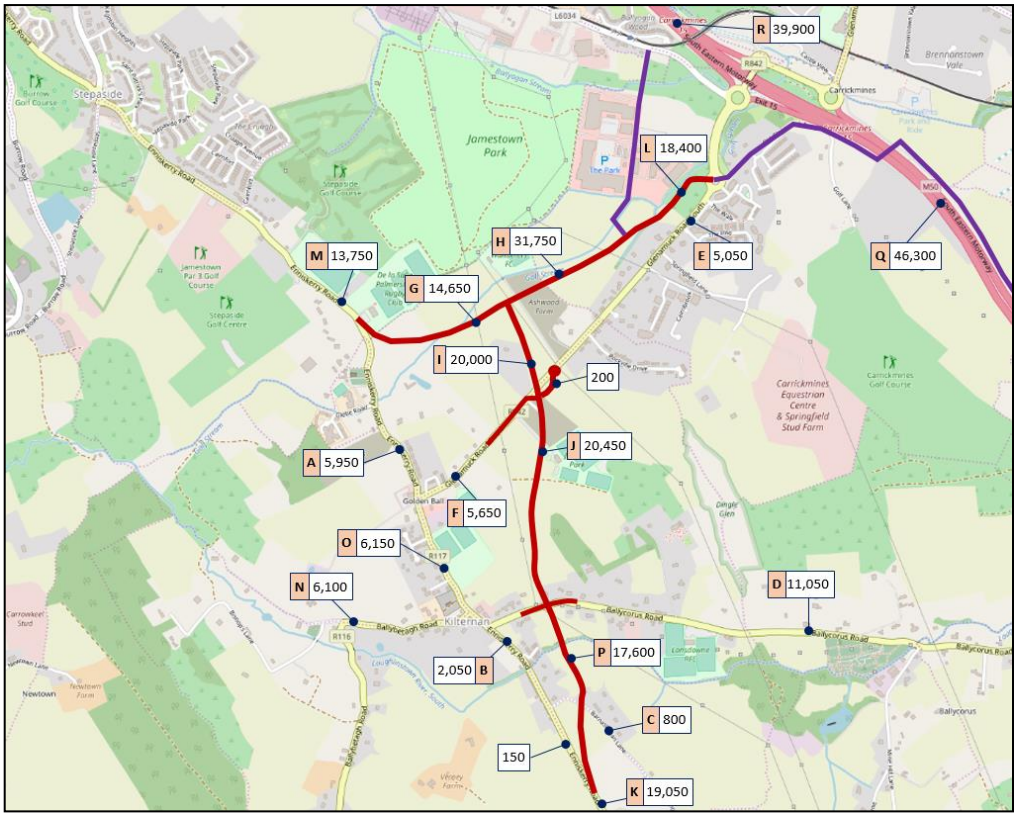


Figure 9.10: 2035 Do-Something with Complementary Measures AADT

9.5 EXTRACTED FLOWS FOR TRANSYT ANALYSIS

9.5.1 As mentioned, the LAM was utilised to extract forecasted traffic flows along the GDRS to assist in the design and future operational performance of key junctions on the GDRS through TRANSYT analyses.

9.5.2 **Appendix D** provides more detail on the local traffic flows forecasted and extracted for the TRANSYT analyses from the LAM scenarios tested in both the AM and PM peak periods. This is an iterative process and is being used to inform the geometric design of the roads and junctions.

9.5.3 Results from the TRANSYT analyses are provided in **Section 10** of this Traffic Modelling Report.

9.6 BUS GATES - SENSITIVITY TEST

9.6.1 A sensitivity assessment was undertaken to investigate the overall benefits of the Bus gates as part of the GDRS. The primary finding from this sensitivity test was that overall bus speeds decrease significantly in scenarios where the bus gates are

not included compared to scenarios which have implemented the two bus gates. **Table 9.7** summarises the results from the sensitivity test and **Figure 9.11** illustrates this graphically.

Average Speed for Buses (kph)	2017 Base	2020 DN	2020 DS	2035 DN	2035 DS	2035 DS + CM	2020 DS	2035 DS	2035 DS + CM
Includes LAP Flows	NO	NO	NO	YES	YES	YES	NO	YES	YES
AM Peak Period (With Bus Gate)	27.7	27	46.9	25.9	46.4	42.8	-	-	-
PM Peak Period (With Bus Gate)	33	32	46.2	28.6	33.9	41.4	-	-	-
AM Peak Period (Without Bus Gate)	-	-	-	-	-	-	38.9	38.6	38.9
PM Peak Period (Without Bus Gate)	-	-	-	-	-	-	23.1	20.5	35.7

Table 9.7: LAM Bus Average Speed (kph) with No Bus Gates Sensitivity Test

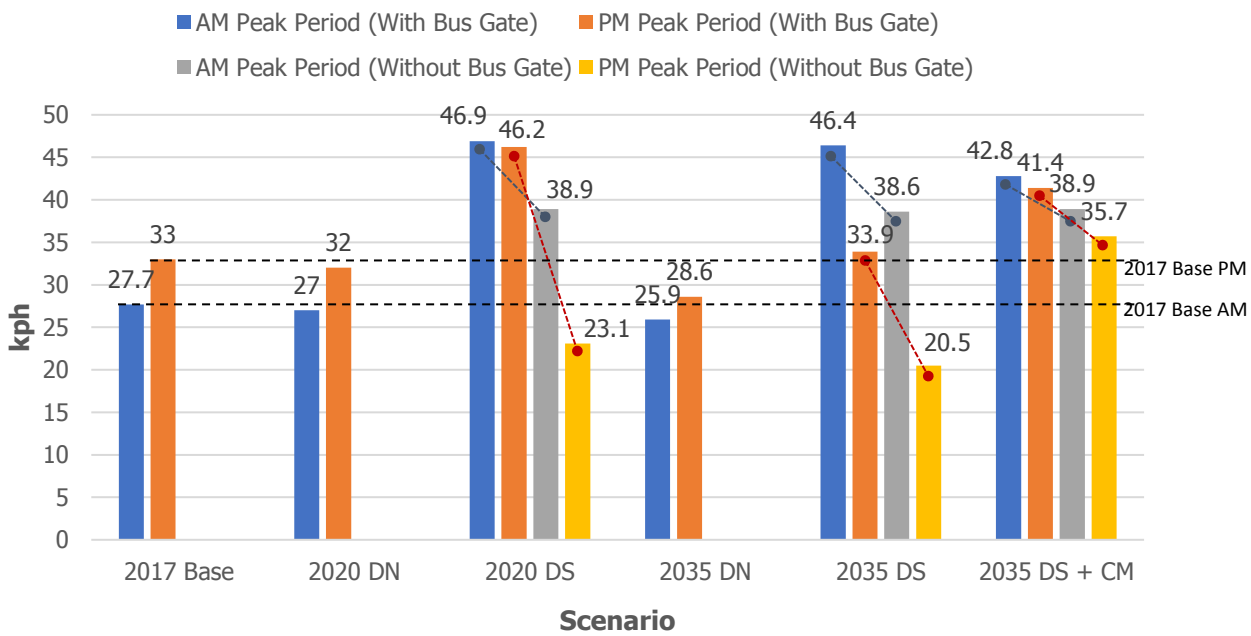


Figure 9.11: Average Speed for Buses (kph) with No Bus Gates Sensitivity Test

9.6.2 In terms of AADT, the eastern section of Glenamuck Road without the bus gate, AADT figures are forecasted to be in the range of 10,900-12,950 vehicles per day in the 2035 Do-Something. The highest being on the end section connecting with the roundabout which compares to an AADT figure of 5,000 vehicles per day with scenarios with the bus gate in the same model year. This represents a difference of 159% and reverts back to traffic levels in the 2017 base conditions. These AADT figures for the scenario without the bus gate are unsuitable and unsustainable for this type of road.

10.0 TRANSYT ANALYSIS

10.1 OVERVIEW

10.1.1 Following the extraction of forecasted traffic flows along the GDRS from the Local Area Model (LAM) a number of key junctions on the scheme were assessed through TRANSYT to assist in the design, refinement and future operational performance of these key junctions on the GDRS. This section outlines and summarises these results from TRANSYT.

10.1.2 The four key junctions along the GDRS that were assessed were as follows and are illustrated in **Figure 10.1**: -

- Junction 1 - R117 Enniskerry Road / GDDR
- Junction 2 - GDDR / GDLR
- Junction 3 - GDLR / Glenamuck Road
- Junction 4 - GDLR / R116 Ballycorus Road

10.1.3 When considering signalised junctions, a Degree of Saturation (DoS) of greater than 90% (0.90) would indicate a junction to be approaching capacity, as operation above this DoS value is poor and deteriorates quickly.

10.1.4 TRANSYT models of the GDRS junctions were analysed for the following scenarios and years (in both the AM and PM peak hours):

- **2020 Do-Something** (Opening Year)
- **2035 Do-Something** (Future Horizon Year; Opening Year + 15 Years)
- **2035 Do-Something & Complementary Measures** (Future Horizon Year; Opening Year + 15 Years)

10.1.5 Note: PCU = Passenger Car Units. Passenger car units allow for difference in the amount of interference to other traffic according to the type of vehicle. PCUs are used to represent the traffic flow in TRANSYT analyses. For example, one Car = 1 pcu, an HGV = 2.3 pcus, 1 pcu = 5.5m – 6.0m in length.

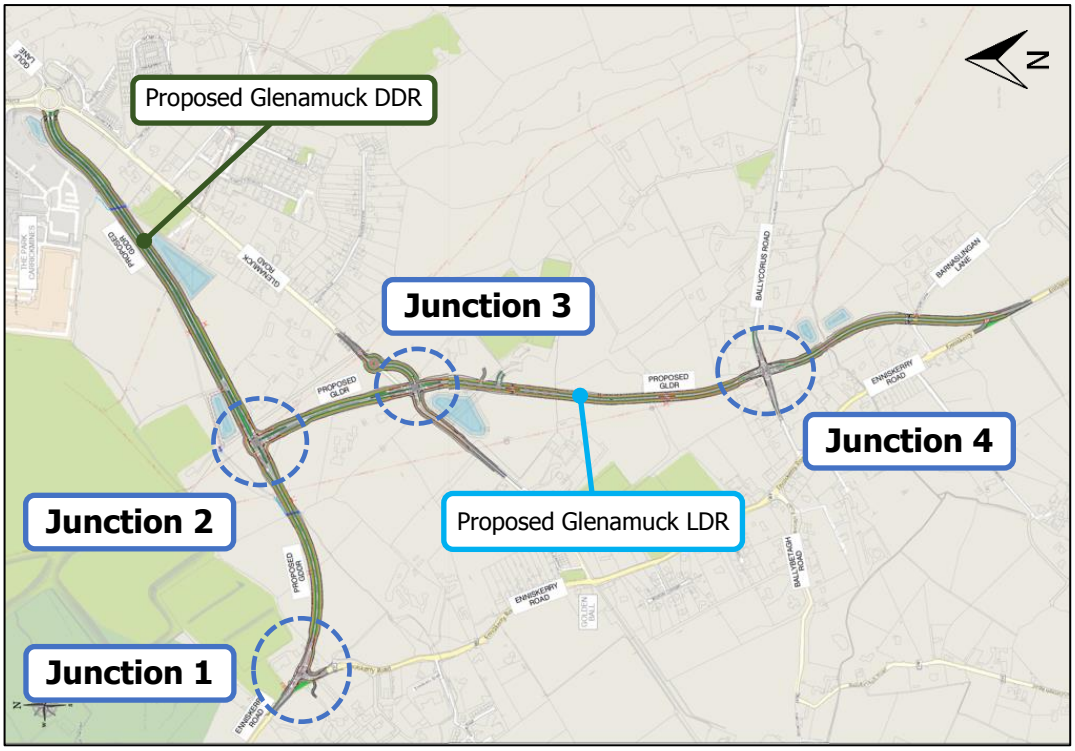


Figure 10.1: Key GDRS Junctions that were assessed in TRANSYT Analysis

10.2 JUNCTION 1 – R117 ENNISKERRY ROAD / GDDR

10.2.1 The proposed R117 Enniskerry Road / GDDR is planned to be a three-arm signalised junction to connect the R117 Enniskerry Road with the GDDR which forms part of the GDRS. The modelled junction layout is illustrated in **Figure 1** in **Appendix F**.

10.2.2 **Table 10.1** summarises the overall TRANSYT results from the analysis undertaken where highest percentage of DoS on one arm was recorded and a combined total delay for all arms in each peak period.

(Year) Scenario	Time Period	Highest DoS (%)	Total Delay (pcu-hr/hr)
2020 Do-Something	AM	36	3.92
	PM	46	7.80
2035 Do-Something	AM	45	6.74
	PM	69	11.94
2035 Do-Something with Complementary Measures	AM	37	6.60
	PM	60	9.89

Table 10.1: TRANSYT Results for Capacity Analysis of R117 Enniskerry Road / GDDR Junction

10.2.3 TRANSYT results for the capacity analysis at this junction found that the junction will operate within capacity in all scenarios with low levels of total delay during peak period times. The highest recorded DoS in any AM peak period was 45% in the 2035 Do-Something scenario occurring on the southern arm of the junction (the R117 Enniskerry Road) with a corresponding total delay at the junction of 6.74 pcu hr/hr. Similarly, the highest recorded DoS in any PM peak period was 69% in the 2035 Do-Something scenario occurring at the eastern arm of the junction (the GDDR) with a corresponding total delay at the junction of 11.94 pcu hr/hr. A copy of the complete TRANSYT output file can be found in **Appendix C**.

10.3 JUNCTION 2 – GDDR / GDLR

10.3.1 The proposed GDDR / GDLR is planned to be a three-arm signalised junction to connect the GDDR (east and west arms) with the GDLR (south arm) which all forms part of the GDRS. The modelled junction layout is illustrated in **Figure 2** in **Appendix F**.

10.3.2 **Table 10.2** summarises the overall TRANSYT results from the analysis undertaken where highest percentage of DoS on one arm was recorded and a combined total delay for all arms in each peak period.

(Year) Scenario	Time Period	Highest DoS (%)	Total Delay (pcu-hr/hr)
2020 Do-Something	AM	35	10.38
	PM	37	8.64
2035 Do-Something	AM	71	24.96
	PM	81	23.86
2035 Do-Something with Complementary Measures	AM	69	23.67
	PM	86	26.83

Table 10.2: TRANSYT Results for Capacity Analysis of GDDR / GDLR Junction

10.3.3 TRANSYT results for the capacity analysis at this junction found that the junction will operate within capacity in all scenarios with light levels of total delay during peak period times. The highest recorded DoS in any AM peak period was 71% in the 2035 Do-Something scenario occurring at both the western arm (the GDDR) and southern arm (the GDLR) of the junction with a corresponding total delay at the junction of 24.96 pcu hr/hr. Similarly, the highest recorded DoS in any PM peak period was 81% in the 2035 Do-Something with Complementary Measures scenario occurring on the eastern arm of the junction (the GDDR) with a corresponding total delay at the junction of 26.83 pcu hr/hr. A copy of the complete TRANSYT output file can be found in **Appendix C**.

10.4 JUNCTION 3 – GDLR / GLENAMUCK ROAD

10.4.1 The proposed GDLR / Glenamuck Road is planned to be a four-arm signalised junction to connect the Glenamuck Road (east and west arms; the east arm being a bus gate) with the GDLR (north and south arms) which all forms part of the GDRS. The modelled junction layout is illustrated in **Figure 3** in **Appendix F**.

10.4.2 **Table 10.3** summarises the overall TRANSYT results from the analysis undertaken where highest percentage of DoS on one arm was recorded and a combined total delay for all arms in each peak period.

(Year) Scenario	Time Period	Highest DoS (%)	Total Delay (pcu-hr/hr)
2020 Do-Something	AM	33	6.85
	PM	33	5.91
2035 Do-Something	AM	54	12.81
	PM	68	19.53
2035 Do-Something with Complementary Measures	AM	71	17.56
	PM	88	25.18

Table 10.3: TRANSYT Results for Capacity Analysis of GDLR / Glenamuck Road Junction

10.4.3 TRANSYT results for the capacity analysis at this junction found that the junction will operate within capacity in all scenarios with light to moderate levels of total delay during peak period times. The highest recorded DoS in any AM peak period was 71% in the 2035 Do-Something with Complementary Measures scenario occurring on the southern arm of the junction (the GDLR) with a corresponding total delay at the junction of 17.56 pcu hr/hr. Similarly, the highest recorded DoS in any PM peak period was 88% in the 2035 Do-Something with Complementary Measures scenario occurring on the northern arm of the junction (the GDLR) with a corresponding total delay at the junction of 25.18 pcu hr/hr. A copy of the complete TRANSYT output file can be found in **Appendix C**.

10.5 JUNCTION 4 – GDLR / R116 BALLYCORUS ROAD

10.5.1 The proposed GDLR / R116 Ballycorus Road is planned to be a four-arm signalised junction to connect the existing R116 Ballycorus Road (east and west arms) with the GDLR (north and south arms) which forms part of the GDRS. The modelled junction layout is illustrated in **Figure 4** in **Appendix F**.

10.5.2 **Table 10.4** summarises the overall TRANSYT results from the analysis undertaken where highest percentage of DoS on one arm was recorded and a combined total delay for all arms in each peak period.

(Year) Scenario	Time Period	Highest DoS (%)	Total Delay (pcu-hr/hr)
2020 Do-Something	AM	59	11.56
	PM	43	8.72
2035 Do-Something	AM	74	22.20
	PM	83	27.76
2035 Do-Something with Complementary Measures	AM	76	25.40
	PM	85	30.35

Table 10.4: TRANSYT Results for Capacity Analysis of GDLR / R116 Ballycorus Road Junction

10.5.3 TRANSYT results for the capacity analysis at this junction found that the junction will operate within capacity in all scenarios with moderate levels of total delay during peak period times. The highest recorded DoS in any AM peak period was 76% in the 2035 Do-Something with Complementary Measures scenario occurring on the southern arm of the junction (the GDLR) with a corresponding total delay at the junction of 25.40 pcu hr/hr. Similarly, the highest recorded DoS in any PM peak period was 85% in the 2035 Do-Something with Complementary Measures scenario occurring on the northern arm of the junction (the GDLR) with a corresponding total delay at the junction of 30.35 pcu hr/hr. A copy of the complete TRANSYT output file can be found in **Appendix C**.

11.0 CONCLUSION

11.1.1 This Traffic Modelling Report (TMR) outlined the three-stage (macrosimulation, microsimulation and junction modelling) transport modelling approach and methodology undertaken by DBFL Consulting Engineers on behalf of Dun Laoghaire-Rathdown County Council (DLRCC) as part of the Glenamuck District Roads Scheme. Further, the development process, results and analysis are summarised within the report.

11.1.2 This modelling approach also included the refinement, calibration/validation and improved traffic forecasting process for an existing strategic local area traffic model of Glenamuck Local Area Plan from 2013. This local area traffic model assisted in the microsimulation stage of the transport modelling approach.

11.1.3 This transport modelling approach was used to test the impacts of the proposed GDRS scheme, future traffic management proposals, highway network interventions and forecast traffic demand flows through proposed junctions to inform designs for the detailed design stage of the project.

11.1.4 The calibration and validation of the LAM base model followed guidance set out by the 'Project Appraisal Guidelines for National Roads Unit 5.1 – The Construction of Transport Models'. The calibration process was carried out on both the network and the base matrix. The following calibration checks were undertaken on the LAM base model:

- Turning proportions at junctions; and
- Flows on individual links.

11.1.5 The following validation checks were undertaken on the LAM base model:

- Journey times along critical routes.

11.1.6 A total of 50 links flows were used in the calibration process. A comparison of modelled and observed flows demonstrated that the AM and PM Peak period models match the flow criteria. The results therefore confirm that the models have been calibrated to a standard compliant with the PAG criteria in all-time periods. Similarly, the both R-square analyses shows that R2 is close to 1 which corresponds to only minor differences between the modelled and observed flows used for the calibration of the base AM and PM models.

11.1.7 As part of the validation process, the modelled journey times were compared against the 20 surveyed journey times to ensure the model gave a reasonable representation of existing conditions. All models satisfy the PAG requirement that

85% of all modelled journey times are within 15% of observed data or within 1 minute if higher than 15%. As such, the base year models were considered validated to the requirements of PAG Unit 5.2: Construction of Transport Models in terms of journey times.

11.1.8 In terms of Model convergence, the AM Peak and PM Peak models reached a satisfactory level of convergence as set out by PAG guidance.

11.1.9 A flow extraction process was undertaken. Firstly, as part of the regional model cordon process, the resulting cordon flows at 20 locations along the boundary extents established appropriate extracted Base Year flows and future year growths for external zones for the Local Area Model (LAM). This report summarises flow extraction from the regional model at each of the cordon location to supply the external zones in the LAM. Similarly, the regional model was used for a strategic impact assessment for both motorway flows and queuing on the following junctions on the M50 : -

- Junction 13 (Sandyford, Dundrum Interchange);
- Junction 14 (Stillorgan, Dun Laoghaire Interchange);
- Junction 15 (Kilternan, Leopardstown Interchange); and
- Junction 16 (Loughlinstown, Cherrywood Interchange).

11.1.10 A similar approach of traffic flow extraction was undertaken for carrying out TRANSYT analyses is to extract forecasted traffic flows along the GDRS from the Local Area Model to assist in the design, refinement and future operational performance of key junctions on the GDRS.

11.1.11 A range of scenario tests were performed using the LAM to look at network performance of the GDRS. Network results for each of the scenarios tested in the LAM were compared. This LAM analysis was developed based on the impacts on the network performance parameters:

- Total Network Travel Time (hrs) for all vehicles;
- Total Network Vehicle Kilometres (hrs) for all vehicles; and
- Total Delays (hrs).

11.1.12 Comparing the AM peak periods in each of the scenarios the trend generally describes that the GDRS improves traffic conditions as there is a reduction in delay in the 2020 and 2035 opening and horizon years and with the complementary measures there is further benefits with greater demand following the development of the LAP lands (with up to 3,000 residential units) and committed developments. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios

in 2035, there is a significant reduction in delay across the network, highlighting the benefits of the proposed GDRS and that the existing road network as it stands is unsustainable for catering traffic in the future horizon year of 2035.

11.1.13 Comparing the PM peak periods in each of the scenarios the trend generally again showed that the GDRS improves traffic conditions as there is a reduction in delay in the 2020 and 2035 opening and horizon years comparing the Do-Nothing and Do-Something scenarios. The complementary measures show further improvements with greater demand following the development of the LAP lands (with up to 3,000 residential units) and committed developments compared to the Do-Something scenarios. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035, there is a significant reduction in delay across the network, highlighting the benefits of the proposed GDRS and that the existing road network as it stands is unsustainable for catering traffic in the future horizon year of 2035.

11.1.14 Comparing the average speeds for general traffic, the overall trend is that average speed increases in the AM peak period in the Do-Something scenarios as opposed to a downward trend in the Do-Nothing scenarios. There is a slight decrease between the 2017 base and 2020 Do Nothing, this is correlating to a slight increase in background traffic. Comparing the 2020 and 2035 Do Something there is a noticeable decrease in average speed, this is correlating to an increase in background traffic over a 15-year period, however with the introduction of the complementary measures outside the remit of the proposed GDRS, average speed is improved. Contrasting the 2035 Do-Nothing scenario results with the Do-Something scenarios in 2035 and the 2017 Base, there is a significant reduction in average speed across the network, however with the introduction of the proposed GDRS average speed improves. This shows that the existing network as it stands is not efficiently catering traffic in the future horizon year of 2035. The PM peak period reflects a similar trend as in the AM peak period.

11.1.15 Comparing the average speeds for buses, the overall trend is that average speed increases in the AM peak period in all Do-Something scenarios as opposed to a downward trend in the Do-Nothing scenarios. There is a slight decrease between the 2017 base and 2020 Do Nothing, which correlates to a slight increase in background traffic and the delay paralleled with this increase in traffic. This continues to the 2035 Do-Nothing scenario. However, with the introduction of the GDRS, the general trend is that average speed increases with each progressive scenario in the AM peak period. The exception being the 2035 Do Something

scenario where average speeds decrease. But this changes slightly with the implementation of the complementary measures, however the introduction of the signalised junction at the Glenamuck Road / GDDR, does allocate the greatest amount of time to links with bus lanes. For the PM peak period this is a similar case as in the AM peak period.

11.1.16 When assessing forecasted traffic flows in the LAM for the opening year of 2020, it was found that the Glenamuck District Roads Scheme reduces the level of traffic within the Local Area Plan environ for Kilternan-Glenamuck by diverting road traffic onto the proposed scheme's network and enabling traffic to bypass less suitable and unsafe roads on the LAP environ road network. The Kiltiernan Village Centre, Glenamuck Road and the bypassed section of the R117 Enniskerry Road benefit the most from the scheme. The proposed scheme acts as collector road for the local network attracting trips from existing and committed developments. Traffic on the Ballycorus Road is expected to grow from the 2017 Base to the 2020 Do-Nothing scenarios primarily contributed by trips from large developments near the road corridor and with the introduction of GDRS a further increase in traffic is expected, by +22.2% from the 2020 Do-Nothing scenario. The scheme attracts additional traffic from further origin points due to the time-saving benefit of the scheme. The scheme has a marginal to slight impact on the M50 and the nearby Junction 15 in terms of traffic.

11.1.17 When assessing forecasted traffic flows in the LAM for the future horizon year of 2035, it was found that again the Glenamuck District Roads Scheme reduces the level of traffic within the Local Area Plan environ for Kilternan-Glenamuck by diverting road traffic onto the proposed scheme's network and enabling traffic to bypass less suitable and unsafe roads on the LAP environ road network. The Kiltiernan Village Centre, Glenamuck Road and the bypassed section of the R117 Enniskerry Road benefit the most from the scheme. AADT traffic figures do increase compared to the 2020 Do Something scenario due to a fully developed LAP lands being assumed. But, these AADT flows are the same or lower than the 2017 base AADT flows. The proposed scheme acts as a link street for the local network attracting trips from existing and committed developments and the fully developed LAP lands. The scheme attracts additional traffic from further origin points due to the time-saving benefit of the scheme. Traffic on the Ballycorus Road is expected to grow from the 2017 Base to the 2035 Do-Nothing scenarios primarily contributed by trips from large developments near the road corridor and with the introduction

of GDRS a further increase in traffic is expected, to an AADT of 11,600 in the 2035 Do-Something scenario and comparatively, an AADT of 11,050 in the 2035 Do-Something with Complementary Measures. However, the Ballycorus Road has been earmarked in the County Development Plan as a long-term road proposal to be improved to cater for strategic demand on this corridor after the implementation of the GDRS. In regard to traffic on the M50 there is a marginal to slight impact on the M50 and the nearby Junction 15. Comparing the two Do-Something scenarios (one being with the complementary measures that are outside the remit of the GDRS but are assumed as being implemented after the GRDS and before 2035) shows mostly slight improvements to AADT in the LAP local road network however, reductions in traffic levels occurring on the R116 Ballycorus Road and the M50.

11.1.18 Following the extraction of forecasted traffic flows along the GDRS from the LAM a number of key junctions on the scheme were assessed through TRANSYT to assist in the design, refinement and future operational performance of these key junctions on the GDRS. Capacity and operational analyses at each of the junctions for each scenario found that all the junctions on the GDRS would operate within capacity.

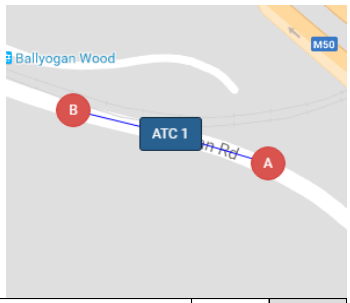
APPENDICES

APPENDIX A

Baseline Traffic Surveys Data

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 06/11/17
Location : Ballyogan Road



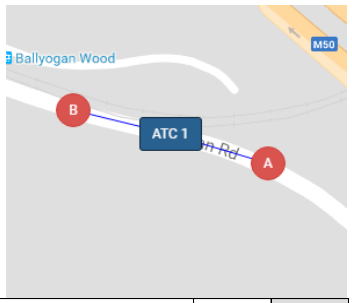
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	3	1	1	0	0	5	5.5	1	0	0	0	0	1	1
00:15	1	1	0	0	0	2	2	7	0	0	0	0	7	7
00:30	2	1	0	0	0	3	3	1	0	1	0	0	2	2.5
00:45	2	1	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	8	4	1	0	0	13	13.5	12	0	1	0	0	13	13.5
01:00	4	0	0	0	0	4	4	2	0	0	0	0	2	2
01:15	1	1	0	0	0	2	2	0	0	0	0	0	0	0
01:30	0	1	0	0	0	1	1	1	0	0	0	0	1	1
01:45	1	1	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	6	3	0	0	0	9	9	3	0	0	0	0	3	3
02:00	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0
02:15	2	0	0	0	0	2	2	0	0	1	0	0	1	1.5
02:30	1	2	0	0	0	3	3	3	0	0	0	0	3	3
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	2	1	0	0	8	8.5	3	0	1	0	0	4	4.5
03:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:15	2	0	1	0	0	3	3.5	1	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	2	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	3	2	1	0	0	6	6.5	4	0	0	0	0	4	4
04:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	2	1	0	0	0	3	3
04:30	0	0	2	0	0	2	3	2	0	1	0	0	3	3.5
04:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	2	0	2	0	0	4	5	7	1	1	0	0	9	9.5
05:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
05:15	2	0	1	0	0	3	3.5	2	0	0	0	0	2	2
05:30	13	0	1	0	0	14	14.5	7	0	1	0	0	8	8.5
05:45	7	0	0	0	0	7	7	7	2	0	0	0	9	9
H/TOT	24	0	2	0	0	26	27	16	2	1	0	0	19	19.5
06:00	14	1	0	0	0	15	15	10	2	1	0	0	13	13.5
06:15	18	2	1	0	0	21	21.5	11	2	1	0	0	14	14.5
06:30	17	0	1	0	0	18	18.5	12	2	1	0	0	15	15.5
06:45	21	4	2	0	0	27	28	25	0	1	0	0	26	26.5
H/TOT	70	7	4	0	0	81	83	58	6	4	0	0	68	70
07:00	26	5	3	1	0	35	37.8	20	4	4	1	0	29	32.3
07:15	37	8	3	0	0	48	49.5	45	9	3	0	0	57	58.5
07:30	62	10	4	1	0	77	80.3	63	8	2	0	0	73	74
07:45	65	7	5	0	0	77	79.5	89	4	12	0	0	105	111
H/TOT	190	30	15	2	0	237	247.1	217	25	21	1	0	264	275.8

08:00	84	13	6	1	1	105	110.3	118	12	2	0	0	132	133
08:15	128	11	4	0	1	144	147	108	9	8	1	2	128	135.3
08:30	100	8	5	1	0	114	117.8	130	4	4	4	1	143	151.2
08:45	110	8	6	0	0	124	127	103	1	2	1	1	108	111.3
H/TOT	422	40	21	2	2	487	502.1	459	26	16	6	4	511	530.8
09:00	102	15	6	1	0	124	128.3	88	8	4	0	0	100	102
09:15	68	11	6	0	0	85	88	88	8	5	2	0	103	108.1
09:30	70	10	7	0	0	87	90.5	47	7	1	0	0	55	55.5
09:45	78	6	3	1	0	88	90.8	69	1	8	0	0	78	82
H/TOT	318	42	22	2	0	384	397.6	292	24	18	2	0	336	347.6
10:00	55	5	6	1	0	67	71.3	65	9	2	0	0	76	77
10:15	58	6	4	2	0	70	74.6	68	9	5	0	0	82	84.5
10:30	56	11	2	1	0	70	72.3	46	10	6	3	1	66	73.9
10:45	61	13	5	0	0	79	81.5	64	8	3	0	1	76	78.5
H/TOT	230	35	17	4	0	286	299.7	243	36	16	3	2	300	313.9
11:00	56	8	1	0	1	66	67.5	64	8	5	0	1	78	81.5
11:15	63	5	8	1	0	77	82.3	53	6	5	0	0	64	66.5
11:30	57	11	3	2	2	75	81.1	62	6	4	0	1	73	76
11:45	80	14	2	1	1	98	101.3	78	8	2	0	0	88	89
H/TOT	256	38	14	4	4	316	332.2	257	28	16	0	2	303	313
12:00	57	8	4	1	0	70	73.3	83	8	4	0	1	96	99
12:15	76	11	7	0	1	95	99.5	75	8	5	0	0	88	90.5
12:30	99	6	4	0	0	109	111	103	7	5	1	0	116	119.8
12:45	112	17	5	0	0	134	136.5	91	10	2	1	1	105	108.3
H/TOT	344	42	20	1	1	408	420.3	352	33	16	2	2	405	417.6
13:00	109	8	2	0	0	119	120	94	10	3	0	0	107	108.5
13:15	79	8	7	0	0	94	97.5	102	12	10	0	0	124	129
13:30	83	13	6	0	0	102	105	87	6	2	1	0	96	98.3
13:45	98	13	10	0	0	121	126	76	17	5	1	0	99	102.8
H/TOT	369	42	25	0	0	436	448.5	359	45	20	2	0	426	438.6
14:00	103	10	3	0	0	116	117.5	87	10	3	0	0	100	101.5
14:15	97	9	4	0	0	110	112	119	10	7	0	0	136	139.5
14:30	88	9	2	0	0	99	100	103	5	3	0	0	111	112.5
14:45	107	11	5	0	0	123	125.5	90	8	5	0	0	103	105.5
H/TOT	395	39	14	0	0	448	455	399	33	18	0	0	450	459
15:00	87	8	7	0	0	102	105.5	88	5	2	0	0	95	96
15:15	96	12	6	0	0	114	117	71	6	6	0	0	83	86
15:30	78	15	5	0	0	98	100.5	93	8	5	1	0	107	110.8
15:45	91	14	3	1	0	109	111.8	77	7	4	0	0	88	90
H/TOT	352	49	21	1	0	423	434.8	329	26	17	1	0	373	382.8
16:00	82	12	1	0	0	95	95.5	84	8	5	0	0	97	99.5
16:15	94	13	5	0	0	112	114.5	88	9	3	0	0	100	101.5
16:30	99	11	5	1	0	116	119.8	71	10	1	0	0	82	82.5
16:45	90	12	5	0	0	107	109.5	96	7	4	2	0	109	113.6
H/TOT	365	48	16	1	0	430	439.3	339	34	13	2	0	388	397.1
17:00	110	8	2	0	0	120	121	95	10	2	0	1	108	110
17:15	110	12	3	0	0	125	126.5	93	10	0	0	0	103	103
17:30	119	11	2	1	0	133	135.3	80	4	3	0	0	87	88.5
17:45	115	8	2	0	0	125	126	99	7	1	0	0	107	107.5
H/TOT	454	39	9	1	0	503	508.8	367	31	6	0	1	405	409

18:00	109	5	2	0	0	116	117	95	5	4	0	0	104	106
18:15	82	6	3	0	0	91	92.5	97	6	3	0	0	106	107.5
18:30	71	2	1	0	0	74	74.5	88	2	2	0	0	92	93
18:45	68	10	2	0	0	80	81	76	9	2	0	0	87	88
H/TOT	330	23	8	0	0	361	365	356	22	11	0	0	389	394.5
19:00	66	8	2	0	0	76	77	64	7	0	0	0	71	71
19:15	49	3	4	0	0	56	58	42	4	3	0	0	49	50.5
19:30	53	7	1	0	0	61	61.5	61	4	1	0	0	66	66.5
19:45	49	6	0	0	0	55	55	56	5	1	0	0	62	62.5
H/TOT	217	24	7	0	0	248	251.5	223	20	5	0	0	248	250.5
20:00	58	5	1	0	0	64	64.5	37	3	1	0	0	41	41.5
20:15	42	3	1	0	0	46	46.5	33	3	0	0	0	36	36
20:30	33	6	1	0	0	40	40.5	36	0	1	0	0	37	37.5
20:45	43	2	2	0	0	47	48	28	0	1	0	0	29	29.5
H/TOT	176	16	5	0	0	197	199.5	134	6	3	0	0	143	144.5
21:00	41	3	1	0	0	45	45.5	34	1	1	0	0	36	36.5
21:15	40	5	2	0	0	47	48	35	3	2	0	0	40	41
21:30	21	6	1	0	0	28	28.5	17	2	1	0	0	20	20.5
21:45	30	5	0	0	0	35	35	13	1	1	0	0	15	15.5
H/TOT	132	19	4	0	0	155	157	99	7	5	0	0	111	113.5
22:00	23	0	2	0	0	25	26	23	3	1	0	0	27	27.5
22:15	15	2	1	0	0	18	18.5	10	2	2	0	0	14	15
22:30	13	1	2	0	0	16	17	13	1	2	0	0	16	17
22:45	11	0	3	0	0	14	15.5	12	1	2	0	0	15	16
H/TOT	62	3	8	0	0	73	77	58	7	7	0	0	72	75.5
23:00	13	1	0	0	0	14	14	16	1	0	0	0	17	17
23:15	14	0	1	0	0	15	15.5	11	0	1	0	0	12	12.5
23:30	6	1	1	0	0	8	8.5	11	0	1	0	0	12	12.5
23:45	5	2	2	0	0	9	10	7	0	1	0	0	8	8.5
H/TOT	38	4	4	0	0	46	48	45	1	3	0	0	49	50.5
24 TOT	4768	551	241	18	7	5585	5736	4631	413	219	19	11	5293	5438

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 07/11/17
Location : Ballyogan Road



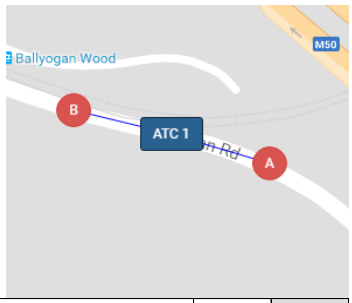
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	4	1	0	0	0	5	5	5	0	1	0	0	6	6.5
00:15	8	0	0	0	0	8	8	2	1	1	0	0	4	4.5
00:30	2	1	0	0	0	3	3	4	0	0	0	0	4	4
00:45	2	0	1	0	0	3	3.5	2	0	0	0	0	2	2
H/TOT	16	2	1	0	0	19	19.5	13	1	2	0	0	16	17
01:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
01:15	2	0	0	0	0	2	2	2	2	0	0	0	4	4
01:30	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0
01:45	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	4	1	1	0	0	6	6.5	2	2	0	0	0	4	4
02:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
02:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	1	0	0	0	0	1	1
03:00	3	0	0	0	0	3	3	2	0	0	0	0	2	2
03:15	0	2	1	1	0	4	5.8	0	0	1	0	0	1	1.5
03:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3
03:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	5	2	1	1	0	9	10.8	6	0	1	0	0	7	7.5
04:00	0	1	0	0	0	1	1	0	0	2	0	0	2	3
04:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
04:45	4	0	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	6	1	0	0	0	7	7	5	0	2	0	0	7	8
05:00	1	1	1	0	0	3	3.5	2	1	1	0	0	4	4.5
05:15	4	0	0	0	0	4	4	2	0	0	0	0	2	2
05:30	10	0	1	0	0	11	11.5	6	0	0	0	0	6	6
05:45	8	0	1	0	0	9	9.5	3	1	2	0	0	6	7
H/TOT	23	1	3	0	0	27	28.5	13	2	3	0	0	18	19.5
06:00	7	1	0	0	0	8	8	8	0	0	0	0	8	8
06:15	21	1	2	0	0	24	25	11	3	1	0	0	15	15.5
06:30	15	2	0	0	0	17	17	17	2	1	0	0	20	20.5
06:45	26	4	1	0	0	31	31.5	19	3	1	0	0	23	23.5
H/TOT	69	8	3	0	0	80	81.5	55	8	3	0	0	66	67.5
07:00	25	5	2	0	0	32	33	25	3	3	0	0	31	32.5
07:15	44	5	6	0	0	55	58	29	6	1	0	0	36	36.5
07:30	57	6	6	1	0	70	74.3	72	6	3	0	0	81	82.5
07:45	91	10	8	0	0	109	113	106	6	8	1	0	121	126.3
H/TOT	217	26	22	1	0	266	278.3	232	21	15	1	0	269	277.8

08:00	87	5	5	1	1	99	103.8	107	12	3	0	0	122	123.5
08:15	140	15	5	1	0	161	164.8	118	8	10	1	0	137	143.3
08:30	116	10	2	0	0	128	129	116	14	6	2	0	138	143.6
08:45	102	11	3	1	0	117	119.8	119	5	8	2	0	134	140.6
H/TOT	445	41	15	3	1	505	517.4	460	39	27	5	0	531	551
09:00	103	16	6	0	0	125	128	80	11	7	0	0	98	101.5
09:15	83	17	7	0	0	107	110.5	82	6	3	2	0	93	97.1
09:30	71	12	6	0	0	89	92	68	9	3	0	0	80	81.5
09:45	79	8	2	0	0	89	90	61	7	5	0	0	73	75.5
H/TOT	336	53	21	0	0	410	420.5	291	33	18	2	0	344	355.6
10:00	64	6	4	0	0	74	76	61	11	7	0	0	79	82.5
10:15	45	12	6	0	0	63	66	50	9	4	1	0	64	67.3
10:30	69	17	8	0	0	94	98	59	8	4	0	0	71	73
10:45	65	4	5	0	0	74	76.5	64	6	9	0	0	79	83.5
H/TOT	243	39	23	0	0	305	316.5	234	34	24	1	0	293	306.3
11:00	70	4	4	0	0	78	80	81	6	7	0	0	94	97.5
11:15	67	13	5	0	0	85	87.5	68	8	7	0	0	83	86.5
11:30	58	10	4	0	0	72	74	74	8	4	0	0	86	88
11:45	77	13	7	1	0	98	102.8	61	9	6	1	0	77	81.3
H/TOT	272	40	20	1	0	333	344.3	284	31	24	1	0	340	353.3
12:00	64	8	2	1	0	75	77.3	83	8	5	0	0	96	98.5
12:15	90	18	4	0	0	112	114	69	8	6	0	0	83	86
12:30	94	10	8	0	0	112	116	71	8	5	0	1	85	88.5
12:45	101	7	8	0	0	116	120	88	2	7	1	0	98	102.8
H/TOT	349	43	22	1	0	415	427.3	311	26	23	1	1	362	375.8
13:00	105	11	8	0	1	125	130	85	6	3	0	0	94	95.5
13:15	61	7	5	0	0	73	75.5	103	11	2	1	0	117	119.3
13:30	79	9	5	0	0	93	95.5	78	13	9	0	0	100	104.5
13:45	84	5	5	0	1	95	98.5	93	10	8	1	0	112	117.3
H/TOT	329	32	23	0	2	386	399.5	359	40	22	2	0	423	436.6
14:00	92	6	5	3	0	106	112.4	77	5	4	0	0	86	88
14:15	76	4	4	0	0	84	86	120	8	4	1	1	134	138.3
14:30	89	11	4	0	0	104	106	87	5	8	0	0	100	104
14:45	75	16	8	0	0	99	103	82	6	3	0	0	91	92.5
H/TOT	332	37	21	3	0	393	407.4	366	24	19	1	1	411	422.8
15:00	75	10	4	0	0	89	91	82	9	4	1	0	96	99.3
15:15	68	6	9	1	1	85	91.8	92	8	2	0	0	102	103
15:30	90	6	4	0	0	100	102	85	11	3	0	0	99	100.5
15:45	83	13	7	0	0	103	106.5	85	4	2	0	0	91	92
H/TOT	316	35	24	1	1	377	391.3	344	32	11	1	0	388	394.8
16:00	91	8	6	0	0	105	108	93	8	5	0	0	106	108.5
16:15	105	7	3	0	0	115	116.5	71	9	4	0	0	84	86
16:30	104	10	2	0	0	116	117	97	10	1	3	0	111	115.4
16:45	110	12	6	0	0	128	131	93	3	5	0	0	101	103.5
H/TOT	410	37	17	0	0	464	472.5	354	30	15	3	0	402	413.4
17:00	118	17	1	0	0	136	136.5	105	8	5	0	0	118	120.5
17:15	141	26	4	0	0	171	173	78	6	0	0	0	84	84
17:30	144	12	2	0	0	158	159	96	5	2	2	0	105	108.6
17:45	121	14	3	0	0	138	139.5	85	8	3	0	0	96	97.5
H/TOT	524	69	10	0	0	603	608	364	27	10	2	0	403	410.6

18:00	76	10	1	0	0	87	87.5	102	5	2	1	0	110	112.3
18:15	83	5	3	0	0	91	92.5	101	7	0	0	0	108	108
18:30	90	7	2	0	0	99	100	80	6	6	0	0	92	95
18:45	64	7	2	0	0	73	74	90	5	3	0	0	98	99.5
H/TOT	313	29	8	0	0	350	354	373	23	11	1	0	408	414.8
19:00	88	6	2	0	0	96	97	64	9	3	0	0	76	77.5
19:15	69	9	3	0	0	81	82.5	72	5	3	1	0	81	83.8
19:30	46	5	2	0	0	53	54	45	5	0	0	0	50	50
19:45	48	4	1	0	0	53	53.5	47	3	2	0	0	52	53
H/TOT	251	24	8	0	0	283	287	228	22	8	1	0	259	264.3
20:00	48	5	3	0	0	56	57.5	64	3	3	0	0	70	71.5
20:15	45	2	3	0	0	50	51.5	41	7	0	0	0	48	48
20:30	31	2	0	0	0	33	33	22	0	2	0	0	24	25
20:45	52	3	1	0	0	56	56.5	35	3	1	0	0	39	39.5
H/TOT	176	12	7	0	0	195	198.5	162	13	6	0	0	181	184
21:00	34	1	3	0	0	38	39.5	31	3	0	0	0	34	34
21:15	31	6	0	0	0	37	37	45	1	2	0	0	48	49
21:30	28	1	1	0	0	30	30.5	31	2	1	0	0	34	34.5
21:45	33	1	1	0	0	35	35.5	21	1	1	0	0	23	23.5
H/TOT	126	9	5	0	0	140	142.5	128	7	4	0	0	139	141
22:00	24	3	0	0	0	27	27	23	0	0	0	0	23	23
22:15	24	1	2	0	0	27	28	13	2	1	0	0	16	16.5
22:30	17	2	1	0	0	20	20.5	13	0	1	0	0	14	14.5
22:45	16	0	2	0	0	18	19	11	1	1	0	0	13	13.5
H/TOT	81	6	5	0	0	92	94.5	60	3	3	0	0	66	67.5
23:00	10	0	1	0	0	11	11.5	9	0	1	0	0	10	10.5
23:15	5	1	0	0	0	6	6	7	0	0	0	0	7	7
23:30	16	1	0	0	0	17	17	11	0	1	0	0	12	12.5
23:45	2	0	1	0	0	3	3.5	6	0	1	0	0	7	7.5
H/TOT	33	2	2	0	0	37	38	33	0	3	0	0	36	37.5
24 TOT	4878	549	262	11	4	5704	5853	4678	418	254	22	2	5374	5532

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 08/11/17
Location : Ballyogan Road



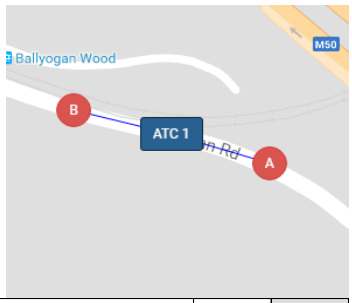
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	6	0	1	0	0	7	7.5	8	0	0	0	0	8	8
00:15	5	0	0	0	0	5	5	3	0	1	0	0	4	4.5
00:30	3	1	0	0	0	4	4	3	0	0	0	0	3	3
00:45	1	0	1	0	0	2	2.5	2	0	0	0	0	2	2
H/TOT	15	1	2	0	0	18	19	16	0	1	0	0	17	17.5
01:00	4	2	0	0	0	6	6	4	0	1	0	0	5	5.5
01:15	8	0	0	0	0	8	8	2	0	1	0	0	3	3.5
01:30	0	0	1	0	0	1	1.5	3	0	0	0	0	3	3
01:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	14	2	1	0	0	17	17.5	10	0	2	0	0	12	13
02:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
02:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3
02:30	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
02:45	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	4	4	5	0	1	0	0	6	6.5
03:00	1	0	0	0	0	1	1	1	0	1	0	0	2	2.5
03:15	1	0	1	0	0	2	2.5	1	1	0	0	0	2	2
03:30	1	2	2	0	0	5	6	3	0	0	0	0	3	3
03:45	2	0	1	0	0	3	3.5	3	1	0	0	0	4	4
H/TOT	5	2	4	0	0	11	13	8	2	1	0	0	11	11.5
04:00	2	0	0	0	0	2	2	2	0	1	0	0	3	3.5
04:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2
04:30	0	1	0	0	0	1	1	2	0	1	0	0	3	3.5
04:45	0	0	0	0	0	0	0	3	0	1	0	0	4	4.5
H/TOT	4	1	0	0	0	5	5	9	0	3	0	0	12	13.5
05:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:15	6	0	0	0	0	6	6	1	0	0	0	0	1	1
05:30	11	1	1	0	0	13	13.5	3	0	2	0	0	5	6
05:45	8	1	1	0	0	10	10.5	9	0	1	0	0	10	10.5
H/TOT	26	2	2	0	0	30	31	14	0	3	0	0	17	18.5
06:00	11	0	0	0	0	11	11	7	0	0	0	0	7	7
06:15	13	1	1	0	0	15	15.5	12	0	1	0	0	13	13.5
06:30	21	4	1	1	0	27	28.8	25	1	0	0	0	26	26
06:45	21	2	2	0	0	25	26	25	3	1	0	0	29	29.5
H/TOT	66	7	4	1	0	78	81.3	69	4	2	0	0	75	76
07:00	28	6	5	0	0	39	41.5	23	7	2	0	0	32	33
07:15	39	7	4	0	0	50	52	38	4	2	0	0	44	45
07:30	52	9	5	3	0	69	75.4	75	9	5	0	0	89	91.5
07:45	76	6	9	1	1	93	99.8	93	8	8	0	0	109	113
H/TOT	195	28	23	4	1	251	268.7	229	28	17	0	0	274	282.5

08:00	68	8	3	0	1	80	82.5	112	6	4	2	0	124	128.6
08:15	135	20	8	0	0	163	167	119	12	13	0	0	144	150.5
08:30	93	7	3	0	0	103	104.5	122	6	3	0	0	131	132.5
08:45	86	7	3	1	0	97	99.8	97	5	5	0	0	107	109.5
H/TOT	382	42	17	1	1	443	453.8	450	29	25	2	0	506	521.1
09:00	91	17	6	0	1	115	119	97	11	7	1	0	116	120.8
09:15	96	11	8	0	0	115	119	81	5	2	0	0	88	89
09:30	60	10	4	2	0	76	80.6	67	3	3	0	0	73	74.5
09:45	79	13	3	1	0	96	98.8	72	12	5	0	1	90	93.5
H/TOT	326	51	21	3	1	402	417.4	317	31	17	1	1	367	377.8
10:00	48	2	1	0	0	51	51.5	56	11	3	1	0	71	73.8
10:15	47	8	5	3	0	63	69.4	69	10	4	0	0	83	85
10:30	59	8	1	0	1	69	70.5	62	8	7	1	0	78	82.8
10:45	50	7	2	0	0	59	60	64	0	4	0	0	68	70
H/TOT	204	25	9	3	1	242	251.4	251	29	18	2	0	300	311.6
11:00	59	11	8	1	2	81	88.3	53	7	3	1	0	64	66.8
11:15	83	5	8	0	0	96	100	82	5	10	0	1	98	104
11:30	74	5	1	0	0	80	80.5	76	5	2	1	0	84	86.3
11:45	79	6	2	0	0	87	88	85	4	4	0	0	93	95
H/TOT	295	27	19	1	2	344	356.8	296	21	19	2	1	339	352.1
12:00	85	12	5	0	1	103	106.5	71	2	3	0	0	76	77.5
12:15	84	13	7	2	0	106	112.1	84	8	7	1	0	100	104.8
12:30	101	11	6	0	0	118	121	76	10	1	0	0	87	87.5
12:45	110	11	5	0	0	126	128.5	82	10	2	0	0	94	95
H/TOT	380	47	23	2	1	453	468.1	313	30	13	1	0	357	364.8
13:00	99	10	3	0	1	113	115.5	93	6	4	0	0	103	105
13:15	104	11	8	0	0	123	127	123	13	5	0	0	141	143.5
13:30	88	19	4	1	0	112	115.3	88	9	5	0	0	102	104.5
13:45	91	6	9	0	0	106	110.5	99	9	6	0	0	114	117
H/TOT	382	46	24	1	1	454	468.3	403	37	20	0	0	460	470
14:00	90	12	4	2	0	108	112.6	82	6	6	3	0	97	103.9
14:15	114	8	6	0	0	128	131	114	13	6	1	0	134	138.3
14:30	91	6	2	0	1	100	102	82	6	2	0	0	90	91
14:45	126	10	5	1	0	142	145.8	84	6	5	2	1	98	104.1
H/TOT	421	36	17	3	1	478	491.4	362	31	19	6	1	419	437.3
15:00	86	14	7	2	0	109	115.1	87	7	3	0	0	97	98.5
15:15	93	10	6	0	0	109	112	90	5	6	0	1	102	106
15:30	93	14	6	3	0	116	122.9	83	10	6	1	1	101	106.3
15:45	79	7	5	1	0	92	95.8	96	14	7	0	0	117	120.5
H/TOT	351	45	24	6	0	426	445.8	356	36	22	1	2	417	431.3
16:00	95	10	4	0	0	109	111	110	7	3	1	0	121	123.8
16:15	130	14	6	0	0	150	153	71	11	0	0	0	82	82
16:30	170	22	3	0	0	195	196.5	91	9	1	6	0	107	115.3
16:45	123	20	7	1	0	151	155.8	115	10	2	0	0	127	128
H/TOT	518	66	20	1	0	605	616.3	387	37	6	7	0	437	449.1
17:00	97	7	0	0	0	104	104	90	10	2	0	0	102	103
17:15	125	12	5	0	0	142	144.5	71	5	1	1	0	78	79.8
17:30	133	5	1	0	0	139	139.5	92	3	5	0	0	100	102.5
17:45	150	14	2	0	0	166	167	95	5	0	0	0	100	100
H/TOT	505	38	8	0	0	551	555	348	23	8	1	0	380	385.3

18:00	107	9	2	0	0	118	119	97	7	0	0	0	104	104
18:15	101	12	3	0	0	116	117.5	106	2	2	0	0	110	111
18:30	76	7	3	0	0	86	87.5	111	7	2	1	0	121	123.3
18:45	98	8	4	0	0	110	112	103	4	1	0	0	108	108.5
H/TOT	382	36	12	0	0	430	436	417	20	5	1	0	443	446.8
19:00	75	13	2	0	0	90	91	91	11	1	0	0	103	103.5
19:15	48	8	3	0	0	59	60.5	60	10	3	0	0	73	74.5
19:30	69	7	1	0	0	77	77.5	62	5	0	0	0	67	67
19:45	73	7	1	0	0	81	81.5	55	4	2	0	0	61	62
H/TOT	265	35	7	0	0	307	310.5	268	30	6	0	0	304	307
20:00	65	7	1	0	0	73	73.5	78	6	1	0	0	85	85.5
20:15	50	10	1	0	0	61	61.5	50	5	1	0	0	56	56.5
20:30	38	3	0	0	0	41	41	32	1	2	0	0	35	36
20:45	39	4	1	0	0	44	44.5	44	1	2	0	0	47	48
H/TOT	192	24	3	0	0	219	220.5	204	13	6	0	0	223	226
21:00	37	5	1	0	0	43	43.5	38	3	0	0	0	41	41
21:15	42	2	0	0	0	44	44	35	4	0	0	0	39	39
21:30	42	1	1	0	0	44	44.5	27	3	2	0	0	32	33
21:45	43	1	1	0	0	45	45.5	26	3	0	0	0	29	29
H/TOT	164	9	3	0	0	176	177.5	126	13	2	0	0	141	142
22:00	34	2	0	0	0	36	36	15	0	1	0	0	16	16.5
22:15	21	0	2	0	0	23	24	8	0	1	0	0	9	9.5
22:30	13	1	1	0	0	15	15.5	18	0	1	0	0	19	19.5
22:45	15	1	2	0	0	18	19	15	0	1	0	0	16	16.5
H/TOT	83	4	5	0	0	92	94.5	56	0	4	0	0	60	62
23:00	6	1	1	0	0	8	8.5	12	1	0	0	0	13	13
23:15	11	0	0	0	0	11	11	13	0	1	0	0	14	14.5
23:30	11	1	0	0	0	12	12	8	1	1	0	0	10	10.5
23:45	3	1	1	0	0	5	5.5	9	1	1	0	0	11	11.5
H/TOT	31	3	2	0	0	36	37	42	3	3	0	0	48	49.5
24 TOT	5209	578	250	26	9	6072	6240	4956	417	223	24	5	5625	5773

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 09/11/17
Location : Ballyogan Road



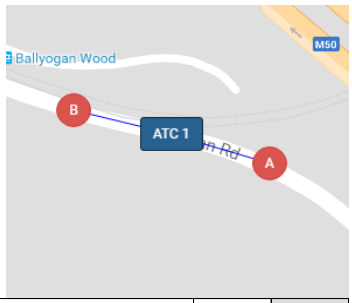
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	4	2	0	0	0	6	6	6	0	0	0	0	6	6
00:15	3	1	1	0	0	5	5.5	1	1	0	0	0	2	2
00:30	6	0	0	0	0	6	6	6	0	1	0	0	7	7.5
00:45	2	0	2	0	0	4	5	7	0	1	0	0	8	8.5
H/TOT	15	3	3	0	0	21	22.5	20	1	2	0	0	23	24
01:00	4	0	0	0	0	4	4	3	0	0	0	0	3	3
01:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3
01:30	3	0	0	0	0	3	3	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	8	0	0	0	0	8	8	8	1	0	0	0	9	9
02:00	2	1	0	0	0	3	3	1	0	0	0	0	1	1
02:15	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
02:30	2	0	0	0	0	2	2	3	0	0	0	0	3	3
02:45	0	0	1	0	0	1	1.5	1	0	0	0	0	1	1
H/TOT	5	1	1	0	0	7	7.5	5	0	1	0	0	6	6.5
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
03:30	0	0	1	0	0	1	1.5	2	0	0	0	0	2	2
03:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	1	0	0	1	1.5	6	0	0	0	0	6	6
04:00	1	0	1	0	0	2	2.5	1	0	0	0	0	1	1
04:15	2	1	0	0	0	3	3	2	0	2	0	0	4	5
04:30	0	0	0	0	0	0	0	1	2	1	0	0	4	4.5
04:45	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
H/TOT	3	1	1	0	0	5	5.5	5	2	4	0	0	11	13
05:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:15	3	0	0	0	0	3	3	0	0	0	0	0	0	0
05:30	10	0	0	0	0	10	10	4	0	0	0	0	4	4
05:45	7	2	1	0	0	10	10.5	4	0	1	0	0	5	5.5
H/TOT	20	2	1	0	0	23	23.5	10	0	1	0	0	11	11.5
06:00	11	2	0	0	0	13	13	14	2	1	0	0	17	17.5
06:15	13	0	1	0	0	14	14.5	13	0	1	0	0	14	14.5
06:30	18	1	1	0	0	20	20.5	15	5	0	0	0	20	20
06:45	25	6	1	0	0	32	32.5	15	2	1	0	0	18	18.5
H/TOT	67	9	3	0	0	79	80.5	57	9	3	0	0	69	70.5
07:00	30	3	2	0	0	35	36	36	4	4	0	0	44	46
07:15	40	7	2	1	0	50	52.3	34	4	3	0	0	41	42.5
07:30	49	8	7	1	0	65	69.8	61	7	2	0	0	70	71
07:45	83	11	6	0	0	100	103	102	11	7	2	1	123	130.1
H/TOT	202	29	17	2	0	250	261.1	233	26	16	2	1	278	289.6

08:00	87	13	2	1	0	103	105.3	111	8	5	0	0	124	126.5
08:15	130	14	2	2	0	148	151.6	120	14	9	1	0	144	149.8
08:30	106	4	3	0	0	113	114.5	108	12	4	0	3	127	132
08:45	100	14	3	2	0	119	123.1	78	4	2	0	2	86	89
H/TOT	423	45	10	5	0	483	494.5	417	38	20	1	5	481	497.3
09:00	116	15	7	1	0	139	143.8	93	7	7	0	0	107	110.5
09:15	91	13	10	1	0	115	121.3	84	8	4	0	0	96	98
09:30	75	11	8	0	0	94	98	53	4	4	2	0	63	67.6
09:45	65	9	3	0	0	77	78.5	81	7	4	0	0	92	94
H/TOT	347	48	28	2	0	425	441.6	311	26	19	2	0	358	370.1
10:00	51	13	4	0	0	68	70	56	9	3	0	1	69	71.5
10:15	53	10	2	1	0	66	68.3	64	7	4	0	1	76	79
10:30	36	11	5	0	0	52	54.5	46	7	5	0	1	59	62.5
10:45	62	7	5	0	0	74	76.5	74	6	4	0	1	85	88
H/TOT	202	41	16	1	0	260	269.3	240	29	16	0	4	289	301
11:00	51	4	4	0	0	59	61	48	6	4	0	0	58	60
11:15	56	6	3	1	0	66	68.8	47	9	6	0	0	62	65
11:30	59	11	5	1	0	76	79.8	64	7	5	1	1	78	82.8
11:45	72	5	7	1	1	86	91.8	64	11	6	0	2	83	88
H/TOT	238	26	19	3	1	287	301.4	223	33	21	1	3	281	295.8
12:00	68	15	8	0	0	91	95	65	5	6	0	1	77	81
12:15	97	19	6	0	0	122	125	75	6	4	1	0	86	89.3
12:30	75	14	5	0	0	94	96.5	87	7	2	0	0	96	97
12:45	96	9	5	1	0	111	114.8	68	14	8	0	0	90	94
H/TOT	336	57	24	1	0	418	431.3	295	32	20	1	1	349	361.3
13:00	93	10	4	1	0	108	111.3	85	12	2	0	0	99	100
13:15	67	9	6	0	0	82	85	96	11	4	1	0	112	115.3
13:30	95	9	3	1	0	108	110.8	77	7	7	1	0	92	96.8
13:45	82	9	6	1	1	99	104.3	84	14	8	0	0	106	110
H/TOT	337	37	19	3	1	397	411.4	342	44	21	2	0	409	422.1
14:00	99	12	5	0	0	116	118.5	78	5	2	0	0	85	86
14:15	72	7	3	0	0	82	83.5	113	6	4	0	0	123	125
14:30	70	13	1	0	1	85	86.5	82	11	3	1	1	98	101.8
14:45	109	7	6	1	0	123	127.3	97	11	3	0	0	111	112.5
H/TOT	350	39	15	1	1	406	415.8	370	33	12	1	1	417	425.3
15:00	89	13	5	0	0	107	109.5	96	9	4	1	0	110	113.3
15:15	81	7	10	0	0	98	103	90	4	7	0	0	101	104.5
15:30	82	18	5	0	0	105	107.5	83	16	5	2	0	106	111.1
15:45	114	9	7	1	0	131	135.8	99	12	6	1	0	118	122.3
H/TOT	366	47	27	1	0	441	455.8	368	41	22	4	0	435	451.2
16:00	87	7	5	0	0	99	101.5	98	11	2	1	1	113	116.3
16:15	111	11	1	0	0	123	123.5	81	5	2	0	0	88	89
16:30	121	11	5	0	0	137	139.5	88	5	2	0	0	95	96
16:45	116	11	4	1	0	132	135.3	111	7	2	0	0	120	121
H/TOT	435	40	15	1	0	491	499.8	378	28	8	1	1	416	422.3
17:00	127	17	1	0	0	145	145.5	87	9	4	1	0	101	104.3
17:15	124	12	2	0	0	138	139	76	5	2	1	0	84	86.3
17:30	119	10	3	0	0	132	133.5	77	6	0	0	0	83	83
17:45	141	11	2	0	0	154	155	95	7	3	0	0	105	106.5
H/TOT	511	50	8	0	0	569	573	335	27	9	2	0	373	380.1

18:00	101	6	4	0	0	111	113	104	5	2	0	0	111	112
18:15	79	9	4	0	0	92	94	83	8	2	0	0	93	94
18:30	75	11	1	0	0	87	87.5	79	4	3	0	0	86	87.5
18:45	70	7	3	1	0	81	83.8	72	3	3	0	0	78	79.5
H/TOT	325	33	12	1	0	371	378.3	338	20	10	0	0	368	373
19:00	72	7	0	0	0	79	79	78	9	0	0	0	87	87
19:15	62	3	3	0	0	68	69.5	47	4	3	1	0	55	57.8
19:30	51	7	2	0	0	60	61	58	4	1	0	0	63	63.5
19:45	51	7	1	0	0	59	59.5	45	3	1	0	0	49	49.5
H/TOT	236	24	6	0	0	266	269	228	20	5	1	0	254	257.8
20:00	47	4	1	0	0	52	52.5	59	7	1	0	0	67	67.5
20:15	56	10	2	0	0	68	69	39	2	0	0	0	41	41
20:30	52	8	0	0	0	60	60	50	9	1	0	0	60	60.5
20:45	55	4	2	0	0	61	62	40	2	2	0	0	44	45
H/TOT	210	26	5	0	0	241	243.5	188	20	4	0	0	212	214
21:00	43	3	2	0	0	48	49	39	1	0	0	0	40	40
21:15	47	4	0	0	0	51	51	31	3	1	0	0	35	35.5
21:30	34	1	1	0	0	36	36.5	32	2	1	0	0	35	35.5
21:45	27	3	1	0	0	31	31.5	21	2	2	0	0	25	26
H/TOT	151	11	4	0	0	166	168	123	8	4	0	0	135	137
22:00	21	3	0	0	0	24	24	30	1	1	0	0	32	32.5
22:15	18	0	1	0	0	19	19.5	21	0	1	0	0	22	22.5
22:30	23	3	1	0	0	27	27.5	11	1	1	0	0	13	13.5
22:45	16	1	2	0	0	19	20	8	2	1	0	0	11	11.5
H/TOT	78	7	4	0	0	89	91	70	4	4	0	0	78	80
23:00	18	3	0	0	0	21	21	12	2	0	0	0	14	14
23:15	14	1	1	0	0	16	16.5	10	0	1	0	0	11	11.5
23:30	12	0	0	0	0	12	12	12	0	1	0	0	13	13.5
23:45	10	0	1	0	0	11	11.5	13	0	1	0	0	14	14.5
H/TOT	54	4	2	0	0	60	61	47	2	3	0	0	52	53.5
24 TOT	4919	580	241	21	3	5764	5915	4617	444	225	18	16	5320	5472

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 10/11/17
Location : Ballyogan Road



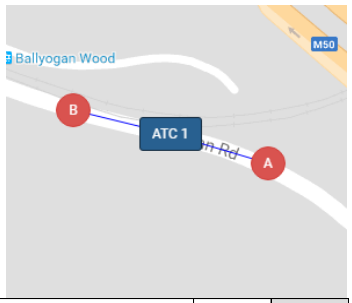
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	12	2	1	0	0	15	15.5	11	0	0	0	0	11	11
00:15	7	0	1	0	0	8	8.5	2	0	0	0	0	2	2
00:30	4	1	0	0	0	5	5	8	0	2	0	0	10	11
00:45	5	0	1	0	0	6	6.5	4	0	0	0	0	4	4
H/TOT	28	3	3	0	0	34	35.5	25	0	2	0	0	27	28
01:00	4	0	0	0	0	4	4	4	0	0	0	0	4	4
01:15	5	2	0	0	0	7	7	4	0	1	0	0	5	5.5
01:30	3	0	1	0	0	4	4.5	3	1	0	0	0	4	4
01:45	2	1	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	14	3	1	0	0	18	18.5	12	1	1	0	0	14	14.5
02:00	1	1	0	0	0	2	2	0	2	0	0	0	2	2
02:15	1	1	0	0	0	2	2	2	0	0	0	0	2	2
02:30	3	0	0	0	0	3	3	4	0	0	0	0	4	4
02:45	4	0	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	9	2	0	0	0	11	11	8	2	0	0	0	10	10
03:00	2	0	0	0	0	2	2	4	0	0	0	0	4	4
03:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
03:30	1	0	2	0	0	3	4	1	0	0	0	0	1	1
03:45	4	1	1	0	0	6	6.5	1	0	1	0	0	2	2.5
H/TOT	8	1	3	0	0	12	13.5	8	0	1	0	0	9	9.5
04:00	1	0	0	0	0	1	1	4	0	1	0	0	5	5.5
04:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2
04:30	0	0	0	0	0	0	0	3	0	2	0	0	5	6
04:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	5	0	0	0	0	5	5	10	0	3	0	0	13	14.5
05:00	1	1	0	0	0	2	2	2	0	0	0	0	2	2
05:15	5	0	0	0	0	5	5	2	0	0	0	0	2	2
05:30	11	0	1	0	0	12	12.5	4	0	0	0	0	4	4
05:45	4	1	0	0	0	5	5	5	1	2	0	0	8	9
H/TOT	21	2	1	0	0	24	24.5	13	1	2	0	0	16	17
06:00	15	0	0	0	0	15	15	11	0	0	0	0	11	11
06:15	14	1	2	0	0	17	18	14	2	1	0	0	17	17.5
06:30	21	3	1	0	0	25	25.5	21	2	0	0	0	23	23
06:45	27	3	3	0	0	33	34.5	15	3	2	1	0	21	23.3
H/TOT	77	7	6	0	0	90	93	61	7	3	1	0	72	74.8
07:00	35	6	3	1	0	45	47.8	22	5	4	0	0	31	33
07:15	41	4	4	0	0	49	51	36	4	2	1	0	43	45.3
07:30	55	13	5	0	0	73	75.5	58	6	3	0	0	67	68.5
07:45	85	11	5	2	0	103	108.1	118	9	7	1	0	135	139.8
H/TOT	216	34	17	3	0	270	282.4	234	24	16	2	0	276	286.6

08:00	73	12	0	0	1	86	87	103	7	7	1	0	118	122.8
08:15	128	8	9	1	0	146	151.8	112	16	10	2	0	140	147.6
08:30	97	5	2	0	0	104	105	137	9	5	2	1	154	160.1
08:45	86	13	4	1	0	104	107.3	96	8	1	1	0	106	107.8
H/TOT	384	38	15	2	1	440	451.1	448	40	23	6	1	518	538.3
09:00	85	19	4	0	0	108	110	93	4	3	1	0	101	103.8
09:15	89	15	8	0	0	112	116	86	8	8	1	0	103	108.3
09:30	73	10	3	0	1	87	89.5	70	8	3	0	0	81	82.5
09:45	61	10	5	0	0	76	78.5	69	6	4	0	1	80	83
H/TOT	308	54	20	0	1	383	394	318	26	18	2	1	365	377.6
10:00	68	10	6	0	0	84	87	61	4	4	0	0	69	71
10:15	57	12	7	2	0	78	84.1	64	4	10	0	0	78	83
10:30	53	4	3	0	0	60	61.5	69	12	4	1	0	86	89.3
10:45	64	7	5	0	0	76	78.5	66	7	2	0	0	75	76
H/TOT	242	33	21	2	0	298	311.1	260	27	20	1	0	308	319.3
11:00	60	6	2	0	0	68	69	51	11	4	0	0	66	68
11:15	68	10	9	0	0	87	91.5	71	4	3	0	0	78	79.5
11:30	64	9	7	0	0	80	83.5	58	9	4	1	0	72	75.3
11:45	82	12	8	0	0	102	106	77	10	6	0	0	93	96
H/TOT	274	37	26	0	0	337	350	257	34	17	1	0	309	318.8
12:00	85	14	10	1	2	112	120.3	75	9	6	2	0	92	97.6
12:15	73	14	5	1	0	93	96.8	84	13	10	0	0	107	112
12:30	102	10	5	0	0	117	119.5	72	8	5	0	0	85	87.5
12:45	95	11	7	4	0	117	125.7	73	13	7	0	1	94	98.5
H/TOT	355	49	27	6	2	439	462.3	304	43	28	2	1	378	395.6
13:00	140	18	2	0	0	160	161	92	12	4	1	0	109	112.3
13:15	74	12	6	0	0	92	95	105	7	5	2	1	120	126.1
13:30	92	9	3	0	0	104	105.5	98	10	5	0	0	113	115.5
13:45	101	5	6	1	0	113	117.3	104	5	6	0	0	115	118
H/TOT	407	44	17	1	0	469	478.8	399	34	20	3	1	457	471.9
14:00	97	12	5	0	0	114	116.5	99	4	7	1	0	111	115.8
14:15	105	8	7	0	0	120	123.5	118	10	5	1	0	134	137.8
14:30	93	13	8	1	0	115	120.3	102	6	5	0	0	113	115.5
14:45	132	12	8	0	0	152	156	101	9	8	1	0	119	124.3
H/TOT	427	45	28	1	0	501	516.3	420	29	25	3	0	477	493.4
15:00	94	16	3	0	0	113	114.5	92	7	5	0	0	104	106.5
15:15	109	11	3	0	0	123	124.5	102	6	5	0	0	113	115.5
15:30	87	11	5	0	0	103	105.5	101	6	7	0	0	114	117.5
15:45	120	14	4	1	0	139	142.3	95	14	0	1	0	110	111.3
H/TOT	410	52	15	1	0	478	486.8	390	33	17	1	0	441	450.8
16:00	150	16	5	0	1	172	175.5	95	5	4	0	0	104	106
16:15	157	11	7	0	0	175	178.5	91	8	3	0	0	102	103.5
16:30	150	12	6	2	0	170	175.6	83	4	2	0	0	89	90
16:45	133	15	2	0	0	150	151	81	8	2	1	0	92	94.3
H/TOT	590	54	20	2	1	667	680.6	350	25	11	1	0	387	393.8
17:00	129	7	5	0	0	141	143.5	91	4	3	0	0	98	99.5
17:15	109	11	0	0	0	120	120	87	4	2	0	0	93	94
17:30	106	12	3	0	0	121	122.5	87	7	1	0	0	95	95.5
17:45	118	12	1	0	0	131	131.5	100	7	4	0	0	111	113
H/TOT	462	42	9	0	0	513	517.5	365	22	10	0	0	397	402

18:00	111	9	4	0	0	124	126	88	5	1	1	0	95	96.8
18:15	90	8	4	0	0	102	104	95	3	2	0	0	100	101
18:30	84	8	3	0	0	95	96.5	84	9	2	0	0	95	96
18:45	65	4	3	0	0	72	73.5	72	7	1	0	0	80	80.5
H/TOT	350	29	14	0	0	393	400	339	24	6	1	0	370	374.3
19:00	81	4	0	0	0	85	85	62	0	0	0	0	62	62
19:15	62	7	4	0	0	73	75	65	1	1	0	0	67	67.5
19:30	54	4	0	0	0	58	58	62	1	0	0	0	63	63
19:45	60	6	2	0	0	68	69	54	3	3	0	0	60	61.5
H/TOT	257	21	6	0	0	284	287	243	5	4	0	0	252	254
20:00	55	4	1	0	0	60	60.5	47	3	2	0	0	52	53
20:15	33	4	0	0	0	37	37	40	1	0	0	0	41	41
20:30	38	4	1	0	0	43	43.5	35	1	0	0	0	36	36
20:45	36	3	1	0	0	40	40.5	32	7	1	0	0	40	40.5
H/TOT	162	15	3	0	0	180	181.5	154	12	3	0	0	169	170.5
21:00	34	5	1	0	0	40	40.5	31	1	0	0	0	32	32
21:15	45	4	2	0	0	51	52	30	2	2	0	0	34	35
21:30	29	5	2	0	0	36	37	22	2	2	0	0	26	27
21:45	27	1	1	0	0	29	29.5	17	1	0	0	0	18	18
H/TOT	135	15	6	0	0	156	159	100	6	4	0	0	110	112
22:00	24	5	0	0	0	29	29	27	4	1	0	0	32	32.5
22:15	26	0	1	0	0	27	27.5	12	0	1	0	0	13	13.5
22:30	25	0	1	0	0	26	26.5	18	0	1	0	0	19	19.5
22:45	15	1	1	0	0	17	17.5	8	0	1	0	0	9	9.5
H/TOT	90	6	3	0	0	99	100.5	65	4	4	0	0	73	75
23:00	18	0	0	0	0	18	18	19	1	0	0	0	20	20
23:15	13	1	1	0	0	15	15.5	16	1	1	0	0	18	18.5
23:30	15	1	0	0	0	16	16	11	1	0	0	0	12	12
23:45	13	0	2	0	0	15	16	6	0	1	0	0	7	7.5
H/TOT	59	2	3	0	0	64	65.5	52	3	2	0	0	57	58
24 TOT	5290	588	264	18	5	6165	6325	4835	402	240	24	4	5505	5660

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 11/11/17
Location : Ballyogan Road



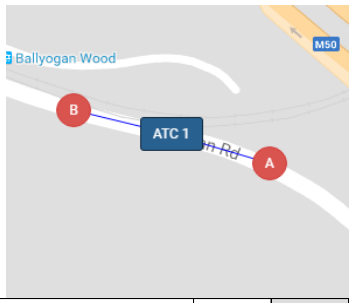
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	11	0	0	0	0	11	11	16	0	0	0	0	16	16
00:15	10	1	0	0	0	11	11	10	0	0	0	0	10	10
00:30	9	1	0	0	0	10	10	7	0	0	0	0	7	7
00:45	9	2	0	0	0	11	11	3	1	0	0	0	4	4
H/TOT	39	4	0	0	0	43	43	36	1	0	0	0	37	37
01:00	9	1	2	0	0	12	13	9	0	0	0	0	9	9
01:15	8	1	1	0	0	10	10.5	7	0	1	0	0	8	8.5
01:30	6	1	0	0	0	7	7	5	1	0	0	0	6	6
01:45	10	0	0	0	0	10	10	7	0	0	0	0	7	7
H/TOT	33	3	3	0	0	39	40.5	28	1	1	0	0	30	30.5
02:00	3	0	0	0	0	3	3	9	0	0	0	0	9	9
02:15	6	1	1	0	0	8	8.5	5	0	0	0	0	5	5
02:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3
02:45	5	1	0	0	0	6	6	1	0	0	0	0	1	1
H/TOT	15	2	1	0	0	18	18.5	18	0	0	0	0	18	18
03:00	1	0	0	0	0	1	1	5	0	0	0	0	5	5
03:15	6	0	0	0	0	6	6	2	1	0	0	0	3	3
03:30	3	0	1	0	0	4	4.5	2	1	0	0	0	3	3
03:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	12	0	1	0	0	13	13.5	12	2	0	0	0	14	14
04:00	5	0	0	0	0	5	5	6	0	0	0	0	6	6
04:15	5	0	0	0	0	5	5	3	1	0	0	0	4	4
04:30	1	0	1	0	0	2	2.5	2	0	1	0	0	3	3.5
04:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	11	0	1	0	0	12	12.5	12	1	1	0	0	14	14.5
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	4	0	0	0	0	4	4	1	0	0	0	0	1	1
05:30	2	1	0	0	0	3	3	5	0	0	0	0	5	5
05:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	7	1	0	0	0	8	8	9	0	0	0	0	9	9
06:00	4	0	0	0	0	4	4	5	0	0	0	0	5	5
06:15	1	1	1	0	0	3	3.5	3	1	0	0	0	4	4
06:30	5	0	0	0	0	5	5	4	0	0	0	0	4	4
06:45	13	0	0	0	0	13	13	8	1	1	0	0	10	10.5
H/TOT	23	1	1	0	0	25	25.5	20	2	1	0	0	23	23.5
07:00	4	2	0	0	0	6	6	9	2	2	0	0	13	14
07:15	10	2	1	0	0	13	13.5	6	3	2	0	0	11	12
07:30	8	2	4	0	0	14	16	14	2	1	0	0	17	17.5
07:45	18	1	3	0	1	23	25.5	11	0	1	0	0	12	12.5
H/TOT	40	7	8	0	1	56	61	40	7	6	0	0	53	56

08:00	15	5	1	0	0	21	21.5	20	3	2	0	0	25	26
08:15	29	3	1	0	0	33	33.5	29	5	1	0	0	35	35.5
08:30	21	6	3	1	0	31	33.8	49	1	2	0	0	52	53
08:45	52	8	2	0	0	62	63	36	5	1	0	0	42	42.5
H/TOT	117	22	7	1	0	147	151.8	134	14	6	0	0	154	157
09:00	41	6	1	1	0	49	50.8	66	0	2	0	0	68	69
09:15	46	6	2	0	0	54	55	74	5	1	0	0	80	80.5
09:30	55	5	5	0	0	65	67.5	61	7	2	2	0	72	75.6
09:45	76	6	0	1	0	83	84.3	101	7	3	0	0	111	112.5
H/TOT	218	23	8	2	0	251	257.6	302	19	8	2	0	331	337.6
10:00	58	6	3	0	0	67	68.5	69	6	3	0	0	78	79.5
10:15	71	9	2	0	0	82	83	84	4	2	0	0	90	91
10:30	64	7	2	0	0	73	74	78	7	3	0	0	88	89.5
10:45	88	14	2	2	0	106	109.6	61	4	2	0	0	67	68
H/TOT	281	36	9	2	0	328	335.1	292	21	10	0	0	323	328
11:00	84	7	1	0	0	92	92.5	102	10	3	0	0	115	116.5
11:15	91	6	2	0	0	99	100	92	8	3	0	0	103	104.5
11:30	85	5	1	0	0	91	91.5	90	8	1	0	0	99	99.5
11:45	113	15	2	0	0	130	131	90	5	2	0	0	97	98
H/TOT	373	33	6	0	0	412	415	374	31	9	0	0	414	418.5
12:00	92	9	1	0	0	102	102.5	113	11	3	1	0	128	130.8
12:15	129	10	0	0	0	139	139	110	5	1	0	0	116	116.5
12:30	108	10	5	1	0	124	127.8	116	16	1	0	0	133	133.5
12:45	120	14	2	0	0	136	137	101	13	2	0	0	116	117
H/TOT	449	43	8	1	0	501	506.3	440	45	7	1	0	493	497.8
13:00	99	7	5	0	0	111	113.5	102	16	3	0	1	122	124.5
13:15	76	11	3	0	0	90	91.5	99	11	2	0	0	112	113
13:30	95	10	0	0	0	105	105	101	6	1	1	0	109	110.8
13:45	98	9	2	0	0	109	110	93	5	1	0	0	99	99.5
H/TOT	368	37	10	0	0	415	420	395	38	7	1	1	442	447.8
14:00	86	12	1	0	0	99	99.5	87	6	3	0	0	96	97.5
14:15	95	13	2	0	0	110	111	98	4	4	0	0	106	108
14:30	91	10	1	0	0	102	102.5	89	7	4	1	0	101	104.3
14:45	102	7	2	0	0	111	112	89	4	0	1	0	94	95.3
H/TOT	374	42	6	0	0	422	425	363	21	11	2	0	397	405.1
15:00	98	5	1	0	0	104	104.5	83	10	0	1	0	94	95.3
15:15	115	6	2	0	0	123	124	93	14	1	0	0	108	108.5
15:30	97	11	1	1	0	110	111.8	92	7	1	0	0	100	100.5
15:45	89	14	2	0	0	105	106	101	3	1	0	0	105	105.5
H/TOT	399	36	6	1	0	442	446.3	369	34	3	1	0	407	409.8
16:00	111	7	3	0	0	121	122.5	90	3	1	0	0	94	94.5
16:15	119	17	4	0	0	140	142	84	6	2	1	0	93	95.3
16:30	104	8	1	0	0	113	113.5	81	8	0	0	0	89	89
16:45	89	7	0	0	0	96	96	84	2	2	0	0	88	89
H/TOT	423	39	8	0	0	470	474	339	19	5	1	0	364	367.8
17:00	84	3	1	0	0	88	88.5	62	4	1	0	0	67	67.5
17:15	91	5	2	0	0	98	99	74	7	1	0	0	82	82.5
17:30	60	6	2	0	0	68	69	66	2	1	0	0	69	69.5
17:45	74	5	0	0	0	79	79	51	5	0	0	0	56	56
H/TOT	309	19	5	0	0	333	335.5	253	18	3	0	0	274	275.5

18:00	76	8	2	0	0	86	87	61	2	1	0	0	64	64.5
18:15	71	3	1	0	0	75	75.5	55	2	1	0	0	58	58.5
18:30	57	5	0	0	0	62	62	47	3	1	0	0	51	51.5
18:45	51	2	1	0	0	54	54.5	43	1	0	0	0	44	44
H/TOT	255	18	4	0	0	277	279	206	8	3	0	0	217	218.5
19:00	46	3	1	0	0	50	50.5	55	4	2	0	0	61	62
19:15	40	1	0	0	0	41	41	42	4	0	0	0	46	46
19:30	37	4	1	0	0	42	42.5	39	2	1	0	0	42	42.5
19:45	22	2	1	0	0	25	25.5	24	0	2	0	0	26	27
H/TOT	145	10	3	0	0	158	159.5	160	10	5	0	0	175	177.5
20:00	27	5	0	0	0	32	32	30	1	1	0	1	33	34.5
20:15	25	3	1	0	0	29	29.5	18	1	0	0	0	19	19
20:30	23	0	1	0	0	24	24.5	21	1	1	0	0	23	23.5
20:45	28	2	1	0	0	31	31.5	25	1	0	0	0	26	26
H/TOT	103	10	3	0	0	116	117.5	94	4	2	0	1	101	103
21:00	30	1	0	0	0	31	31	26	0	1	0	0	27	27.5
21:15	21	1	1	0	0	23	23.5	20	0	1	0	0	21	21.5
21:30	17	1	1	0	0	19	19.5	16	0	1	0	0	17	17.5
21:45	23	1	0	0	0	24	24	23	1	0	0	0	24	24
H/TOT	91	4	2	0	0	97	98	85	1	3	0	0	89	90.5
22:00	19	0	1	0	0	20	20.5	17	2	1	0	0	20	20.5
22:15	24	1	1	0	0	26	26.5	20	1	1	0	0	22	22.5
22:30	21	1	0	0	0	22	22	10	1	0	0	0	11	11
22:45	14	0	1	0	0	15	15.5	15	2	2	0	0	19	20
H/TOT	78	2	3	0	0	83	84.5	62	6	4	0	0	72	74
23:00	14	1	2	0	0	17	18	17	0	1	0	0	18	18.5
23:15	8	0	0	0	0	8	8	15	0	0	0	0	15	15
23:30	10	0	1	0	0	11	11.5	9	2	1	0	0	12	12.5
23:45	19	2	1	0	0	22	22.5	11	0	1	0	0	12	12.5
H/TOT	51	3	4	0	0	58	60	52	2	3	0	0	57	58.5
24 TOT	4214	395	107	7	1	4724	4788	4095	305	98	8	2	4508	4569

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 1
Date : 12/11/17
Location : Ballyogan Road



	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
00:00	13	1	0	0	0	14	14	8	2	0	0	0	10	10
00:15	12	1	0	0	0	13	13	11	0	0	0	0	11	11
00:30	12	2	0	0	0	14	14	8	0	0	0	0	8	8
00:45	10	4	1	0	0	15	15.5	11	0	0	0	0	11	11
H/TOT	47	8	1	0	0	56	56.5	38	2	0	0	0	40	40
01:00	11	0	2	0	0	13	14	13	1	0	0	0	14	14
01:15	7	1	0	0	0	8	8	8	0	1	0	0	9	9.5
01:30	10	1	1	0	0	12	12.5	8	0	0	0	0	8	8
01:45	4	0	0	0	0	4	4	7	0	0	0	0	7	7
H/TOT	32	2	3	0	0	37	38.5	36	1	1	0	0	38	38.5
02:00	6	0	0	0	0	6	6	7	1	0	0	0	8	8
02:15	6	0	0	0	0	6	6	3	0	0	0	0	3	3
02:30	3	2	1	0	0	6	6.5	5	0	1	0	0	6	6.5
02:45	8	0	0	0	0	8	8	6	0	0	0	0	6	6
H/TOT	23	2	1	0	0	26	26.5	21	1	1	0	0	23	23.5
03:00	3	0	0	0	0	3	3	3	0	0	0	0	3	3
03:15	8	1	0	0	0	9	9	3	0	0	0	0	3	3
03:30	3	2	1	0	0	6	6.5	9	1	0	0	0	10	10
03:45	5	1	0	0	0	6	6	6	0	0	0	0	6	6
H/TOT	19	4	1	0	0	24	24.5	21	1	0	0	0	22	22
04:00	4	0	0	0	0	4	4	2	0	0	0	0	2	2
04:15	3	0	1	0	0	4	4.5	2	0	1	0	0	3	3.5
04:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
04:45	7	0	0	0	0	7	7	2	0	0	0	0	2	2
H/TOT	16	0	1	0	0	17	17.5	8	0	1	0	0	9	9.5
05:00	6	0	0	0	0	6	6	0	1	0	0	0	1	1
05:15	6	0	0	0	0	6	6	1	0	0	0	0	1	1
05:30	3	0	0	0	0	3	3	5	0	0	0	0	5	5
05:45	3	0	0	0	0	3	3	6	1	0	0	0	7	7
H/TOT	18	0	0	0	0	18	18	12	2	0	0	0	14	14
06:00	6	0	1	0	0	7	7.5	1	0	0	0	0	1	1
06:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
06:30	4	0	0	0	0	4	4	5	0	0	0	0	5	5
06:45	10	1	0	0	0	11	11	7	0	0	0	0	7	7
H/TOT	21	1	1	0	0	23	23.5	14	0	0	0	0	14	14
07:00	2	1	0	0	0	3	3	8	1	2	0	0	11	12
07:15	7	0	0	0	0	7	7	3	0	0	0	0	3	3
07:30	5	1	0	0	0	6	6	9	1	1	0	0	11	11.5
07:45	5	0	0	0	0	5	5	8	0	0	0	0	8	8
H/TOT	19	2	0	0	0	21	21	28	2	3	0	0	33	34.5

08:00	2	1	0	0	0	3	3	8	1	0	0	0	9	9
08:15	4	2	0	0	0	6	6	11	3	0	0	0	14	14
08:30	9	1	0	0	0	10	10	15	2	0	0	0	17	17
08:45	8	2	0	0	0	10	10	28	1	0	0	0	29	29
H/TOT	23	6	0	0	0	29	29	62	7	0	0	0	69	69
09:00	13	3	0	0	0	16	16	20	3	1	0	0	24	24.5
09:15	18	0	2	0	0	20	21	22	5	1	0	0	28	28.5
09:30	19	8	1	0	0	28	28.5	38	3	1	0	0	42	42.5
09:45	31	3	2	0	0	36	37	39	3	0	0	0	42	42
H/TOT	81	14	5	0	0	100	102.5	119	14	3	0	0	136	137.5
10:00	27	2	1	0	0	30	30.5	40	5	2	0	0	47	48
10:15	29	4	1	0	0	34	34.5	51	9	0	0	0	60	60
10:30	33	7	1	0	0	41	41.5	51	5	1	0	0	57	57.5
10:45	55	11	2	0	0	68	69	67	7	1	0	0	75	75.5
H/TOT	144	24	5	0	0	173	175.5	209	26	4	0	0	239	241
11:00	48	4	1	0	0	53	53.5	76	5	2	0	0	83	84
11:15	52	10	1	0	0	63	63.5	73	7	2	0	0	82	83
11:30	69	5	1	1	0	76	77.8	74	5	2	2	0	83	86.6
11:45	68	6	2	0	0	76	77	87	6	1	0	0	94	94.5
H/TOT	237	25	5	1	0	268	271.8	310	23	7	2	0	342	348.1
12:00	85	9	1	0	0	95	95.5	83	3	2	0	0	88	89
12:15	119	6	1	0	0	126	126.5	64	5	2	1	0	72	74.3
12:30	88	11	0	0	0	99	99	95	5	2	0	0	102	103
12:45	86	11	0	0	0	97	97	94	14	0	1	0	109	110.3
H/TOT	378	37	2	0	0	417	418	336	27	6	2	0	371	376.6
13:00	79	8	1	0	0	88	88.5	86	6	1	1	0	94	95.8
13:15	92	9	2	0	0	103	104	76	4	0	0	0	80	80
13:30	95	9	0	0	0	104	104	81	9	2	0	0	92	93
13:45	93	14	2	0	0	109	110	106	4	1	0	0	111	111.5
H/TOT	359	40	5	0	0	404	406.5	349	23	4	1	0	377	380.3
14:00	83	9	1	1	0	94	95.8	92	9	1	0	0	102	102.5
14:15	90	13	0	0	0	103	103	91	10	1	0	0	102	102.5
14:30	101	6	1	0	0	108	108.5	86	6	2	0	0	94	95
14:45	98	8	1	0	0	107	107.5	87	8	0	1	0	96	97.3
H/TOT	372	36	3	1	0	412	414.8	356	33	4	1	0	394	397.3
15:00	94	8	1	0	0	103	103.5	96	7	0	0	0	103	103
15:15	114	3	1	0	0	118	118.5	103	11	1	0	0	115	115.5
15:30	77	4	0	0	0	81	81	76	3	1	0	0	80	80.5
15:45	108	7	0	0	0	115	115	74	3	1	0	0	78	78.5
H/TOT	393	22	2	0	0	417	418	349	24	3	0	0	376	377.5
16:00	105	8	1	0	0	114	114.5	89	8	0	2	0	99	101.6
16:15	97	7	1	0	0	105	105.5	75	5	0	0	0	80	80
16:30	109	8	0	0	0	117	117	71	5	0	0	0	76	76
16:45	114	9	2	0	0	125	126	79	1	1	0	0	81	81.5
H/TOT	425	32	4	0	0	461	463	314	19	1	2	0	336	339.1
17:00	123	14	1	0	0	138	138.5	63	5	2	0	0	70	71
17:15	124	14	4	0	0	142	144	67	5	1	0	0	73	73.5
17:30	99	13	2	0	0	114	115	66	3	1	0	0	70	70.5
17:45	73	6	0	0	0	79	79	59	7	1	0	0	67	67.5
H/TOT	419	47	7	0	0	473	476.5	255	20	5	0	0	280	282.5

18:00	76	6	2	0	0	84	85	56	0	1	0	0	57	57.5
18:15	69	6	2	0	0	77	78	48	4	0	0	0	52	52
18:30	64	2	3	0	0	69	70.5	36	0	1	0	0	37	37.5
18:45	47	3	0	0	0	50	50	41	1	1	0	0	43	43.5
H/TOT	256	17	7	0	0	280	283.5	181	5	3	0	0	189	190.5
19:00	45	4	1	0	0	50	50.5	28	4	1	0	0	33	33.5
19:15	38	5	3	0	0	46	47.5	31	2	0	0	0	33	33
19:30	38	1	0	0	0	39	39	33	4	1	0	0	38	38.5
19:45	24	1	1	0	0	26	26.5	30	5	1	0	0	36	36.5
H/TOT	145	11	5	0	0	161	163.5	122	15	3	0	0	140	141.5
20:00	21	4	1	0	0	26	26.5	32	1	0	0	0	33	33
20:15	33	0	0	0	0	33	33	23	1	1	0	0	25	25.5
20:30	28	1	1	0	0	30	30.5	28	1	1	1	0	31	32.8
20:45	22	2	1	0	0	25	25.5	22	1	1	0	0	24	24.5
H/TOT	104	7	3	0	0	114	115.5	105	4	3	1	0	113	115.8
21:00	26	1	1	0	0	28	28.5	20	0	0	0	0	20	20
21:15	16	0	1	0	0	17	17.5	13	0	0	0	0	13	13
21:30	19	0	1	0	0	20	20.5	19	2	1	0	0	22	22.5
21:45	14	0	0	0	0	14	14	13	0	0	0	0	13	13
H/TOT	75	1	3	0	0	79	80.5	65	2	1	0	0	68	68.5
22:00	19	1	1	0	0	21	21.5	4	0	1	0	0	5	5.5
22:15	12	0	1	0	0	13	13.5	6	1	1	0	0	8	8.5
22:30	11	0	0	0	0	11	11	12	1	0	0	0	13	13
22:45	18	1	2	0	0	21	22	9	0	1	0	0	10	10.5
H/TOT	60	2	4	0	0	66	68	31	2	3	0	0	36	37.5
23:00	6	0	1	0	0	7	7.5	6	0	1	0	0	7	7.5
23:15	11	2	0	0	0	13	13	5	0	0	0	0	5	5
23:30	10	0	0	0	0	10	10	13	0	0	0	0	13	13
23:45	4	0	1	0	0	5	5.5	6	0	1	0	0	7	7.5
H/TOT	31	2	2	0	0	35	36	30	0	2	0	0	32	33
24 TOT	3697	342	70	2	0	4111	4149	3371	253	58	9	0	3691	3732

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 06/11/17
Location : Glenamuck Road

	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	5	0	0	0	0	5	5	1	0	0	0	0	1	1
00:15	4	0	0	0	0	4	4	0	0	0	0	0	0	0
00:30	1	0	0	0	0	1	1	3	1	0	0	0	4	4
00:45	6	0	0	0	0	6	6	3	0	0	0	0	3	3
H/TOT	16	0	0	0	0	16	16	7	1	0	0	0	8	8
01:00	1	0	0	0	0	1	1	2	2	0	0	0	4	4
01:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	3	2	0	0	0	5	5
02:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
02:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:15	1	0	0	0	0	1	1	1	1	0	0	0	2	2
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	3	1	0	0	0	4	4
04:00	1	0	0	0	0	1	1	1	0	0	0	1	2	3
04:15	0	1	0	0	0	1	1	1	0	0	0	0	1	1
04:30	0	0	0	0	0	0	0	0	2	0	0	0	2	2
04:45	1	0	1	0	0	2	2.5	1	2	0	0	0	3	3
H/TOT	2	1	1	0	0	4	4.5	3	4	0	0	1	8	9
05:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:15	5	0	0	0	0	5	5	1	0	0	0	0	1	1
05:30	0	0	1	0	0	1	1.5	8	0	1	0	0	9	9.5
05:45	2	0	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	7	0	1	0	0	8	8.5	15	0	1	0	0	16	16.5
06:00	2	1	0	0	0	3	3	5	1	2	0	0	8	9
06:15	11	4	0	0	0	15	15	13	2	2	1	0	18	20.3
06:30	11	4	0	0	0	15	15	10	4	1	0	0	15	15.5
06:45	11	2	1	0	0	14	14.5	17	4	3	1	0	25	27.8
H/TOT	35	11	1	0	0	47	47.5	45	11	8	2	0	66	72.6
07:00	23	3	3	1	0	30	32.8	23	5	3	1	0	32	34.8
07:15	43	8	2	0	0	53	54	61	13	2	1	0	77	79.3
07:30	35	4	0	1	0	40	41.3	68	24	8	0	0	100	104
07:45	44	7	4	1	0	56	59.3	95	31	3	1	0	130	132.8

H/TOT	145	22	9	3	0	179	187.4	247	73	16	3	0	339	350.9
08:00	44	6	0	0	0	50	50	120	25	1	0	1	147	148.5
08:15	47	12	0	0	0	59	59	108	27	3	1	0	139	141.8
08:30	52	8	2	0	0	62	63	89	33	2	1	0	125	127.3
08:45	40	7	2	0	2	51	54	98	27	2	0	0	127	128
H/TOT	183	33	4	0	2	222	226	415	112	8	2	1	538	545.6
09:00	51	5	1	0	0	57	57.5	84	25	3	1	0	113	115.8
09:15	47	3	3	0	0	53	54.5	56	12	3	0	0	71	72.5
09:30	25	7	3	1	0	36	38.8	65	17	3	0	1	86	88.5
09:45	23	3	5	0	0	31	33.5	42	8	4	1	0	55	58.3
H/TOT	146	18	12	1	0	177	184.3	247	62	13	2	1	325	335.1
10:00	30	2	4	0	0	36	38	28	13	5	1	0	47	50.8
10:15	34	9	3	2	0	48	52.1	25	3	4	0	0	32	34
10:30	31	8	4	0	1	44	47	32	7	2	0	0	41	42
10:45	28	3	5	0	0	36	38.5	37	12	2	0	0	51	52
H/TOT	123	22	16	2	1	164	175.6	122	35	13	1	0	171	178.8
11:00	44	5	1	1	0	51	52.8	40	6	4	0	0	50	52
11:15	32	6	2	0	0	40	41	31	9	4	1	0	45	48.3
11:30	39	2	1	0	0	42	42.5	38	11	4	2	0	55	59.6
11:45	53	6	3	1	0	63	65.8	49	13	5	1	0	68	71.8
H/TOT	168	19	7	2	0	196	202.1	158	39	17	4	0	218	231.7
12:00	54	9	2	0	0	65	66	40	5	4	1	0	50	53.3
12:15	38	2	3	0	0	43	44.5	50	14	3	1	0	68	70.8
12:30	64	4	3	1	0	72	74.8	41	11	4	0	1	57	60
12:45	59	9	1	0	0	69	69.5	41	16	2	0	0	59	60
H/TOT	215	24	9	1	0	249	254.8	172	46	13	2	1	234	244.1
13:00	57	8	3	0	0	68	69.5	43	10	4	0	0	57	59
13:15	61	8	3	0	0	72	73.5	39	16	3	1	0	59	61.8
13:30	41	10	4	0	0	55	57	50	19	5	0	0	74	76.5
13:45	59	7	2	0	0	68	69	41	10	2	0	0	53	54
H/TOT	218	33	12	0	0	263	269	173	55	14	1	0	243	251.3
14:00	56	10	1	1	0	68	69.8	42	13	5	0	0	60	62.5
14:15	51	6	2	1	0	60	62.3	62	10	6	0	0	78	81
14:30	46	7	1	1	0	55	56.8	51	20	1	0	0	72	72.5
14:45	66	4	3	0	0	73	74.5	44	16	4	1	0	65	68.3
H/TOT	219	27	7	3	0	256	263.4	199	59	16	1	0	275	284.3
15:00	51	3	2	0	0	56	57	47	11	3	0	0	61	62.5
15:15	66	6	3	0	0	75	76.5	48	8	4	0	0	60	62
15:30	57	6	2	0	0	65	66	47	13	3	1	1	65	68.8
15:45	60	11	4	1	0	76	79.3	43	10	4	1	0	58	61.3
H/TOT	234	26	11	1	0	272	278.8	185	42	14	2	1	244	254.6
16:00	72	11	2	0	0	85	86	49	13	2	0	0	64	65
16:15	53	13	1	0	0	67	67.5	45	14	2	1	0	62	64.3
16:30	106	12	2	1	0	121	123.3	25	9	1	0	0	35	35.5
16:45	128	18	0	0	0	146	146	42	10	0	0	0	52	52
H/TOT	359	54	5	1	0	419	422.8	161	46	5	1	0	213	216.8
17:00	157	18	3	0	0	178	179.5	58	9	1	0	0	68	68.5
17:15	126	12	2	0	0	140	141	37	4	1	1	0	43	44.8
17:30	118	11	3	0	0	132	133.5	26	9	1	0	0	36	36.5

17:45	132	17	1	0	0	150	150.5	29	10	4	0	0	43	45
H/TOT	533	58	9	0	0	600	604.5	150	32	7	1	0	190	194.8
18:00	119	6	1	1	0	127	128.8	35	8	1	0	0	44	44.5
18:15	87	6	2	0	0	95	96	27	12	2	0	0	41	42
18:30	109	8	1	0	0	118	118.5	50	12	0	0	0	62	62
18:45	101	13	0	0	0	114	114	44	8	1	0	0	53	53.5
H/TOT	416	33	4	1	0	454	457.3	156	40	4	0	0	200	202
19:00	57	4	2	0	0	63	64	62	13	0	0	0	75	75
19:15	63	4	0	0	0	67	67	24	7	1	0	0	32	32.5
19:30	51	6	2	0	0	59	60	22	6	0	0	0	28	28
19:45	78	8	1	0	0	87	87.5	32	10	0	0	0	42	42
H/TOT	249	22	5	0	0	276	278.5	140	36	1	0	0	177	177.5
20:00	37	4	0	0	0	41	41	69	23	2	0	0	94	95
20:15	32	0	1	0	0	33	33.5	30	7	0	0	0	37	37
20:30	29	2	1	0	0	32	32.5	19	2	1	0	0	22	22.5
20:45	22	1	0	0	0	23	23	17	3	1	0	0	21	21.5
H/TOT	120	7	2	0	0	129	130	135	35	4	0	0	174	176
21:00	30	2	0	0	0	32	32	21	5	0	0	0	26	26
21:15	26	2	1	0	0	29	29.5	18	7	0	0	0	25	25
21:30	14	1	1	0	0	16	16.5	12	5	1	0	0	18	18.5
21:45	21	2	0	0	0	23	23	8	1	1	0	0	10	10.5
H/TOT	91	7	2	0	0	100	101	59	18	2	0	0	79	80
22:00	13	5	1	0	0	19	19.5	11	3	0	0	0	14	14
22:15	11	3	3	0	0	17	18.5	11	1	1	0	0	13	13.5
22:30	11	1	1	0	0	13	13.5	9	1	1	0	0	11	11.5
22:45	8	0	1	0	0	9	9.5	5	0	2	0	0	7	8
H/TOT	43	9	6	0	0	58	61	36	5	4	0	0	45	47
23:00	7	1	0	0	0	8	8	5	6	1	0	0	12	12.5
23:15	6	0	2	0	0	8	9	2	3	0	0	0	5	5
23:30	3	1	0	0	0	4	4	4	0	0	0	0	4	4
23:45	4	0	0	0	0	4	4	4	1	0	0	0	5	5
H/TOT	20	2	2	0	0	24	25	15	10	1	0	0	26	26.5
24 TOT	3550	428	125	15	3	4121	4206	2847	764	161	22	5	3799	3913

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 07/11/17
Location : Glenamuck Road

	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	3	0	0	0	0	3	3	4	1	0	0	0	5	5
00:15	4	0	0	0	0	4	4	0	0	0	0	0	0	0
00:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
00:45	2	0	0	0	0	2	2	1	0	1	0	0	2	2.5
H/TOT	11	0	0	0	0	11	11	6	1	1	0	0	8	8.5
01:00	1	0	0	0	0	1	1	2	0	0	1	0	3	4.3
01:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3
01:45	3	0	1	0	0	4	4.5	1	0	0	0	0	1	1
H/TOT	6	0	1	0	0	7	7.5	6	0	0	1	0	7	8.3
02:00	0	1	0	0	0	1	1	1	0	0	0	0	1	1
02:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	2	2	4	0	0	0	0	4	4
03:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
03:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	3	0	0	0	0	3	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	2	1	0	0	0	3	3	2	1	0	0	0	3	3
04:30	0	1	0	0	0	1	1	0	2	0	0	0	2	2
04:45	1	0	0	0	0	1	1	1	3	0	0	0	4	4
H/TOT	3	2	0	0	0	5	5	3	6	0	0	0	9	9
05:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
05:15	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
05:30	4	0	1	0	0	5	5.5	3	0	1	0	1	5	6.5
05:45	4	0	1	0	0	5	5.5	2	0	1	1	0	4	5.8
H/TOT	10	0	2	0	0	12	13	9	0	3	1	1	14	17.8
06:00	3	0	2	0	0	5	6	7	0	2	0	0	9	10
06:15	10	2	0	0	0	12	12	9	1	4	0	0	14	16
06:30	8	8	0	0	0	16	16	9	3	1	0	0	13	13.5
06:45	11	3	1	0	0	15	15.5	21	4	2	2	0	29	32.6
H/TOT	32	13	3	0	0	48	49.5	46	8	9	2	0	65	72.1
07:00	13	8	2	0	0	23	24	22	5	4	1	0	32	35.3
07:15	29	6	4	0	0	39	41	68	23	2	0	0	93	94
07:30	40	9	0	0	0	49	49	84	17	4	1	0	106	109.3
07:45	40	6	2	0	0	48	49	114	23	8	0	0	145	149

H/TOT	122	29	8	0	0	159	163	288	68	18	2	0	376	387.6
08:00	37	5	2	1	0	45	47.3	102	27	3	1	1	134	137.8
08:15	52	9	3	0	0	64	65.5	122	29	7	1	0	159	163.8
08:30	59	8	3	0	0	70	71.5	105	38	4	1	0	148	151.3
08:45	49	5	2	0	0	56	57	107	34	3	0	0	144	145.5
H/TOT	197	27	10	1	0	235	241.3	436	128	17	3	1	585	598.4
09:00	48	7	4	0	0	59	61	87	19	2	0	1	109	111
09:15	37	5	1	0	0	43	43.5	57	17	5	1	0	80	83.8
09:30	40	3	4	0	0	47	49	55	19	1	1	0	76	77.8
09:45	35	6	5	0	0	46	48.5	44	8	5	2	0	59	64.1
H/TOT	160	21	14	0	0	195	202	243	63	13	4	1	324	336.7
10:00	45	4	2	1	0	52	54.3	40	9	2	0	0	51	52
10:15	29	3	4	0	0	36	38	28	9	3	1	0	41	43.8
10:30	31	7	5	0	0	43	45.5	21	6	5	0	0	32	34.5
10:45	35	2	2	0	0	39	40	24	10	1	0	0	35	35.5
H/TOT	140	16	13	1	0	170	177.8	113	34	11	1	0	159	165.8
11:00	32	1	1	0	0	34	34.5	39	10	0	0	0	49	49
11:15	43	0	4	0	0	47	49	40	9	5	0	0	54	56.5
11:30	40	8	1	0	0	49	49.5	33	7	6	0	2	48	53
11:45	38	6	2	0	0	46	47	34	8	3	0	0	45	46.5
H/TOT	153	15	8	0	0	176	180	146	34	14	0	2	196	205
12:00	41	7	1	0	0	49	49.5	38	7	2	1	0	48	50.3
12:15	38	4	3	0	0	45	46.5	35	8	4	1	0	48	51.3
12:30	40	7	3	1	3	54	59.8	36	7	5	0	0	48	50.5
12:45	60	11	0	1	0	72	73.3	54	8	4	0	1	67	70
H/TOT	179	29	7	2	3	220	229.1	163	30	15	2	1	211	222.1
13:00	69	9	2	1	0	81	83.3	43	9	4	0	0	56	58
13:15	68	3	2	1	0	74	76.3	52	11	3	0	1	67	69.5
13:30	46	14	3	1	0	64	66.8	53	7	7	0	0	67	70.5
13:45	71	4	4	0	0	79	81	38	13	4	0	0	55	57
H/TOT	254	30	11	3	0	298	307.4	186	40	18	0	1	245	255
14:00	63	7	0	1	0	71	72.3	61	11	5	1	0	78	81.8
14:15	65	8	2	1	0	76	78.3	51	12	3	0	0	66	67.5
14:30	44	10	1	2	0	57	60.1	39	11	3	0	0	53	54.5
14:45	54	10	3	0	0	67	68.5	60	17	4	0	0	81	83
H/TOT	226	35	6	4	0	271	279.2	211	51	15	1	0	278	286.8
15:00	48	10	0	0	0	58	58	49	9	6	1	0	65	69.3
15:15	58	8	1	0	0	67	67.5	49	13	6	1	0	69	73.3
15:30	65	11	5	0	0	81	83.5	39	8	3	0	0	50	51.5
15:45	47	10	3	1	0	61	63.8	45	9	5	0	0	59	61.5
H/TOT	218	39	9	1	0	267	272.8	182	39	20	2	0	243	255.6
16:00	66	11	3	1	1	82	85.8	52	19	5	0	0	76	78.5
16:15	87	5	1	0	0	93	93.5	48	18	2	0	0	68	69
16:30	118	22	1	3	0	144	148.4	38	11	1	0	0	50	50.5
16:45	139	10	2	3	0	154	158.9	36	16	2	0	0	54	55
H/TOT	410	48	7	7	1	473	486.6	174	64	10	0	0	248	253
17:00	129	15	2	1	0	147	149.3	42	7	2	0	0	51	52
17:15	63	0	0	0	0	63	63	65	4	1	0	0	70	70.5
17:30	97	3	5	1	0	106	109.8	75	6	5	0	0	86	88.5

17:45	123	7	3	1	0	134	136.8	66	3	2	0	0	71	72
H/TOT	412	25	10	3	0	450	458.9	248	20	10	0	0	278	283
18:00	128	13	1	0	0	142	142.5	34	8	1	0	0	43	43.5
18:15	130	13	2	1	0	146	148.3	27	9	1	0	0	37	37.5
18:30	105	13	1	0	0	119	119.5	39	10	2	0	0	51	52
18:45	102	9	0	0	0	111	111	45	10	1	0	0	56	56.5
H/TOT	465	48	4	1	0	518	521.3	145	37	5	0	0	187	189.5
19:00	82	8	1	0	0	91	91.5	52	18	2	0	0	72	73
19:15	64	6	1	0	1	72	73.5	30	9	2	0	0	41	42
19:30	45	4	0	0	0	49	49	30	4	1	0	0	35	35.5
19:45	63	9	3	1	0	76	78.8	27	7	2	0	0	36	37
H/TOT	254	27	5	1	1	288	292.8	139	38	7	0	0	184	187.5
20:00	54	3	3	0	0	60	61.5	37	11	2	0	0	50	51
20:15	53	3	0	0	0	56	56	20	9	0	0	0	29	29
20:30	30	7	2	0	0	39	40	20	8	1	0	0	29	29.5
20:45	29	2	0	0	0	31	31	13	7	1	0	0	21	21.5
H/TOT	166	15	5	0	0	186	188.5	90	35	4	0	0	129	131
21:00	27	4	0	0	0	31	31	24	4	0	0	1	29	30
21:15	26	2	1	0	0	29	29.5	21	6	1	0	0	28	28.5
21:30	21	1	0	0	0	22	22	20	1	1	0	0	22	22.5
21:45	18	0	0	0	0	18	18	36	6	0	0	0	42	42
H/TOT	92	7	1	0	0	100	100.5	101	17	2	0	1	121	123
22:00	28	0	2	0	0	30	31	33	4	2	0	0	39	40
22:15	11	2	0	0	0	13	13	17	5	1	0	1	24	25.5
22:30	14	1	1	0	0	16	16.5	15	3	1	0	0	19	19.5
22:45	8	1	1	0	0	10	10.5	11	1	1	0	0	13	13.5
H/TOT	61	4	4	0	0	69	71	76	13	5	0	1	95	98.5
23:00	4	1	1	0	0	6	6.5	7	1	0	0	0	8	8
23:15	11	0	2	0	0	13	14	1	2	1	0	0	4	4.5
23:30	9	0	0	0	0	9	9	5	3	0	0	0	8	8
23:45	2	1	0	0	0	3	3	0	0	0	0	0	0	0
H/TOT	26	2	3	0	0	31	32.5	13	6	1	0	0	20	20.5
24 TOT	3602	433	131	24	5	4195	4297	3031	732	198	19	9	3989	4122

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 08/11/17
Location : Glenamuck Road

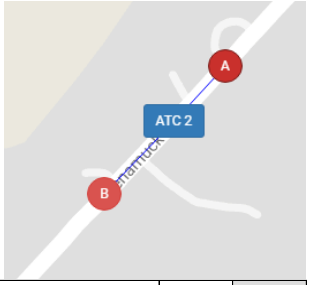
	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	6	0	0	0	0	6	6	4	0	0	0	0	4	4
00:15	7	0	0	0	0	7	7	1	0	0	0	0	1	1
00:30	2	0	1	0	0	3	3.5	6	0	0	0	0	6	6
00:45	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	17	0	1	0	0	18	18.5	13	0	0	0	0	13	13
01:00	2	0	0	0	0	2	2	3	1	0	1	0	5	6.3
01:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
01:30	0	1	0	0	0	1	1	1	1	0	0	0	2	2
01:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	5	1	0	0	0	6	6	6	2	0	1	0	9	10.3
02:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	1	2	0	0	0	3	3
03:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:15	1	0	0	0	0	1	1	0	1	0	0	0	1	1
03:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
03:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	2	1	0	0	0	3	3
04:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
04:30	1	1	0	0	0	2	2	0	1	0	0	0	1	1
04:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	3	1	0	0	0	4	4	4	1	0	0	0	5	5
05:00	3	0	0	0	0	3	3	4	0	0	1	0	5	6.3
05:15	1	1	0	0	0	2	2	2	1	1	0	0	4	4.5
05:30	3	0	1	0	0	4	4.5	4	0	0	0	0	4	4
05:45	4	0	0	0	0	4	4	6	0	1	0	0	7	7.5
H/TOT	11	1	1	0	0	13	13.5	16	1	2	1	0	20	22.3
06:00	3	2	0	0	0	5	5	5	1	0	1	0	7	8.3
06:15	4	2	0	0	0	6	6	8	1	2	0	0	11	12
06:30	13	4	0	0	0	17	17	10	2	1	1	0	14	15.8
06:45	8	4	1	0	0	13	13.5	12	2	3	1	0	18	20.8
H/TOT	28	12	1	0	0	41	41.5	35	6	6	3	0	50	56.9
07:00	18	9	2	1	0	30	32.3	27	8	2	0	0	37	38
07:15	34	13	2	0	0	49	50	52	17	3	0	0	72	73.5
07:30	42	6	2	0	0	50	51	78	24	4	2	0	108	112.6
07:45	40	4	4	1	0	49	52.3	110	19	7	0	1	137	141.5

H/TOT	134	32	10	2	0	178	185.6	267	68	16	2	1	354	365.6
08:00	42	9	5	0	0	56	58.5	88	21	6	2	0	117	122.6
08:15	48	6	0	0	0	54	54	124	26	9	0	0	159	163.5
08:30	53	6	3	1	0	63	65.8	90	33	2	0	0	125	126
08:45	44	10	1	1	0	56	57.8	96	22	7	0	1	126	130.5
H/TOT	187	31	9	2	0	229	236.1	398	102	24	2	1	527	542.6
09:00	49	6	2	1	0	58	60.3	95	35	2	1	0	133	135.3
09:15	49	7	5	0	0	61	63.5	47	17	7	0	0	71	74.5
09:30	37	6	1	0	0	44	44.5	59	20	2	0	0	81	82
09:45	53	6	3	0	0	62	63.5	45	17	6	0	1	69	73
H/TOT	188	25	11	1	0	225	231.8	246	89	17	1	1	354	364.8
10:00	32	7	3	0	1	43	45.5	35	7	3	0	0	45	46.5
10:15	36	6	3	0	0	45	46.5	36	13	5	0	0	54	56.5
10:30	38	5	3	1	0	47	49.8	39	14	2	0	0	55	56
10:45	33	1	3	1	0	38	40.8	45	6	3	0	0	54	55.5
H/TOT	139	19	12	2	1	173	182.6	155	40	13	0	0	208	214.5
11:00	45	5	0	0	0	50	50	41	14	8	0	0	63	67
11:15	48	6	2	0	0	56	57	38	10	7	1	0	56	60.8
11:30	38	6	3	0	0	47	48.5	36	13	4	1	1	55	59.3
11:45	47	9	5	0	0	61	63.5	35	11	4	0	1	51	54
H/TOT	178	26	10	0	0	214	219	150	48	23	2	2	225	241.1
12:00	47	6	1	1	0	55	56.8	48	16	1	0	0	65	65.5
12:15	48	6	0	1	0	55	56.3	38	7	9	0	0	54	58.5
12:30	50	6	0	0	0	56	56	51	11	3	0	0	65	66.5
12:45	67	3	5	0	0	75	77.5	79	12	4	0	0	95	97
H/TOT	212	21	6	2	0	241	246.6	216	46	17	0	0	279	287.5
13:00	58	6	2	0	1	67	69	49	13	2	0	0	64	65
13:15	65	1	2	0	0	68	69	42	7	4	1	1	55	59.3
13:30	59	7	4	0	0	70	72	52	20	2	0	0	74	75
13:45	68	5	1	3	0	77	81.4	52	7	7	1	0	67	71.8
H/TOT	250	19	9	3	1	282	291.4	195	47	15	2	1	260	271.1
14:00	61	11	3	1	1	77	80.8	47	7	4	1	0	59	62.3
14:15	63	5	0	2	0	70	72.6	70	14	7	0	1	92	96.5
14:30	46	10	1	2	0	59	62.1	55	15	3	0	0	73	74.5
14:45	52	6	1	1	0	60	61.8	83	18	9	0	0	110	114.5
H/TOT	222	32	5	6	1	266	277.3	255	54	23	1	1	334	347.8
15:00	49	7	3	1	0	60	62.8	57	16	3	1	0	77	79.8
15:15	55	4	2	0	0	61	62	59	7	3	1	0	70	72.8
15:30	59	8	6	1	0	74	78.3	52	15	3	0	0	70	71.5
15:45	63	5	2	1	1	72	75.3	54	13	2	0	0	69	70
H/TOT	226	24	13	3	1	267	278.4	222	51	11	2	0	286	294.1
16:00	64	8	3	2	0	77	81.1	69	8	5	0	1	83	86.5
16:15	97	11	1	2	0	111	114.1	27	10	3	0	0	40	41.5
16:30	128	9	6	0	0	143	146	53	12	0	0	0	65	65
16:45	134	17	1	1	0	153	154.8	34	10	6	0	0	50	53
H/TOT	423	45	11	5	0	484	496	183	40	14	0	1	238	246
17:00	131	16	4	1	0	152	155.3	29	8	0	0	0	37	37
17:15	107	4	2	1	0	114	116.3	53	4	1	0	0	58	58.5
17:30	118	6	5	2	0	131	136.1	93	3	2	0	0	98	99

17:45	70	4	6	0	0	80	83	70	6	3	0	0	79	80.5
H/TOT	426	30	17	4	0	477	490.7	245	21	6	0	0	272	275
18:00	102	1	3	3	1	110	116.4	96	2	2	0	0	100	101
18:15	121	5	1	0	0	127	127.5	69	8	0	0	0	77	77
18:30	71	6	1	1	0	79	80.8	66	4	0	0	0	70	70
18:45	109	9	6	0	0	124	127	70	14	3	0	0	87	88.5
H/TOT	403	21	11	4	1	440	451.7	301	28	5	0	0	334	336.5
19:00	99	5	5	0	0	109	111.5	70	14	0	0	0	84	84
19:15	45	4	4	0	0	53	55	48	15	0	0	0	63	63
19:30	67	3	2	0	0	72	73	45	3	0	0	0	48	48
19:45	53	5	2	0	0	60	61	39	6	1	0	0	46	46.5
H/TOT	264	17	13	0	0	294	300.5	202	38	1	0	0	241	241.5
20:00	51	7	1	0	0	59	59.5	39	10	2	0	0	51	52
20:15	52	5	1	0	0	58	58.5	37	15	1	0	0	53	53.5
20:30	32	3	1	0	0	36	36.5	25	9	1	0	0	35	35.5
20:45	30	0	0	0	0	30	30	21	6	1	0	0	28	28.5
H/TOT	165	15	3	0	0	183	184.5	122	40	5	0	0	167	169.5
21:00	26	4	0	0	0	30	30	31	4	0	0	0	35	35
21:15	36	3	2	0	0	41	42	38	6	1	0	0	45	45.5
21:30	34	1	0	0	0	35	35	14	5	2	0	0	21	22
21:45	19	1	0	0	0	20	20	26	5	1	0	0	32	32.5
H/TOT	115	9	2	0	0	126	127	109	20	4	0	0	133	135
22:00	14	0	2	0	0	16	17	14	2	0	0	0	16	16
22:15	14	1	0	0	0	15	15	18	4	3	0	0	25	26.5
22:30	18	2	1	0	0	21	21.5	15	7	0	0	0	22	22
22:45	9	0	0	0	0	9	9	10	2	1	0	0	13	13.5
H/TOT	55	3	3	0	0	61	62.5	57	15	4	0	0	76	78
23:00	13	0	1	0	0	14	14.5	8	0	0	0	0	8	8
23:15	10	2	1	0	0	13	13.5	6	0	1	0	0	7	7.5
23:30	5	2	0	0	0	7	7	8	1	2	0	0	11	12
23:45	2	0	1	0	0	3	3.5	0	1	1	0	0	2	2.5
H/TOT	30	4	3	0	0	37	38.5	22	2	4	0	0	28	30
24 TOT	3688	388	151	34	5	4266	4391	3422	762	210	17	8	4419	4554

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 09/11/17
Location : Glenamuck Road



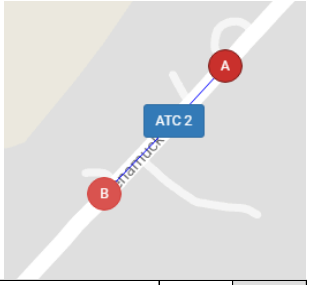
	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	5	1	0	0	0	6	6	6	0	0	0	0	6	6
00:15	2	0	0	0	0	2	2	2	1	0	0	0	3	3
00:30	3	0	0	0	0	3	3	4	0	0	0	0	4	4
00:45	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	12	1	0	0	0	13	13	14	1	0	0	0	15	15
01:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
01:15	1	0	0	0	0	1	1	1	2	0	0	0	3	3
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	5	0	0	0	0	5	5	6	2	0	0	0	8	8
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	1	0	0	0	1	1	1	0	0	0	0	1	1
03:30	1	1	0	0	0	2	2	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	2	0	0	0	3	3	3	0	0	0	0	3	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	2	0	0	0	3	3	0	1	0	0	0	1	1
04:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	3	2	0	0	0	5	5	0	1	0	0	0	1	1
05:00	3	0	0	0	0	3	3	1	1	1	0	1	4	5.5
05:15	1	1	0	0	0	2	2	2	0	0	2	0	4	6.6
05:30	0	1	0	0	0	1	1	8	1	0	0	0	9	9
05:45	3	0	3	0	0	6	7.5	2	1	0	0	0	3	3
H/TOT	7	2	3	0	0	12	13.5	13	3	1	2	1	20	24.1
06:00	3	0	0	0	0	3	3	3	0	2	0	1	6	8
06:15	11	0	0	0	0	11	11	7	2	3	0	0	12	13.5
06:30	8	6	1	0	0	15	15.5	10	3	3	0	0	16	17.5
06:45	13	2	0	2	0	17	19.6	11	7	2	1	0	21	23.3
H/TOT	35	8	1	2	0	46	49.1	31	12	10	1	1	55	62.3
07:00	19	4	1	0	0	24	24.5	32	4	0	0	0	36	36
07:15	44	8	5	0	0	57	59.5	61	9	1	0	0	71	71.5
07:30	42	4	2	0	0	48	49	87	26	3	2	0	118	122.1
07:45	45	4	0	0	0	49	49	111	18	4	0	0	133	135

H/TOT	150	20	8	0	0	178	182	291	57	8	2	0	358	364.6
08:00	50	4	2	0	0	56	57	110	26	6	0	1	143	147
08:15	50	3	2	0	0	55	56	115	34	5	0	0	154	156.5
08:30	61	6	3	0	0	70	71.5	126	23	0	0	1	150	151
08:45	51	3	3	0	1	58	60.5	90	31	6	0	0	127	130
H/TOT	212	16	10	0	1	239	245	441	114	17	0	2	574	584.5
09:00	56	3	3	1	0	63	65.8	121	26	5	0	0	152	154.5
09:15	42	1	1	1	0	45	46.8	80	15	0	0	0	95	95
09:30	39	4	3	0	0	46	47.5	64	13	3	0	0	80	81.5
09:45	38	1	4	0	0	43	45	52	9	5	0	0	66	68.5
H/TOT	175	9	11	2	0	197	205.1	317	63	13	0	0	393	399.5
10:00	41	2	0	1	0	44	45.3	31	11	4	0	0	46	48
10:15	32	3	2	0	0	37	38	42	10	3	0	0	55	56.5
10:30	33	6	4	1	0	44	47.3	43	7	2	0	0	52	53
10:45	44	4	2	0	0	50	51	42	7	5	1	0	55	58.8
H/TOT	150	15	8	2	0	175	181.6	158	35	14	1	0	208	216.3
11:00	42	0	1	0	0	43	43.5	42	8	1	1	0	52	53.8
11:15	35	8	0	1	0	44	45.3	36	3	3	1	0	43	45.8
11:30	31	3	2	0	0	36	37	43	6	2	0	0	51	52
11:45	43	4	2	0	0	49	50	39	6	6	1	0	52	56.3
H/TOT	151	15	5	1	0	172	175.8	160	23	12	3	0	198	207.9
12:00	51	3	0	0	0	54	54	55	10	8	0	0	73	77
12:15	59	1	2	0	0	62	63	54	12	7	1	0	74	78.8
12:30	46	2	2	0	0	50	51	34	14	1	0	0	49	49.5
12:45	71	4	2	0	0	77	78	59	11	1	0	0	71	71.5
H/TOT	227	10	6	0	0	243	246	202	47	17	1	0	267	276.8
13:00	60	3	3	0	0	66	67.5	60	9	4	1	0	74	77.3
13:15	66	3	3	0	0	72	73.5	52	8	4	0	0	64	66
13:30	52	4	1	0	0	57	57.5	71	8	6	2	1	88	94.6
13:45	72	9	1	0	0	82	82.5	64	16	3	2	0	85	89.1
H/TOT	250	19	8	0	0	277	281	247	41	17	5	1	311	327
14:00	50	3	3	0	0	56	57.5	61	14	2	0	0	77	78
14:15	67	3	4	1	0	75	78.3	47	10	4	0	0	61	63
14:30	45	3	1	0	0	49	49.5	32	11	7	0	0	50	53.5
14:45	46	5	2	0	0	53	54	81	18	0	0	0	99	99
H/TOT	208	14	10	1	0	233	239.3	221	53	13	0	0	287	293.5
15:00	48	3	2	0	0	53	54	76	16	3	0	0	95	96.5
15:15	71	3	1	1	0	76	77.8	71	11	7	1	0	90	94.8
15:30	58	4	2	0	0	64	65	58	10	1	3	0	72	76.4
15:45	55	4	1	0	0	60	60.5	70	5	9	0	0	84	88.5
H/TOT	232	14	6	1	0	253	257.3	275	42	20	4	0	341	356.2
16:00	67	7	4	2	0	80	84.6	46	11	6	0	0	63	66
16:15	90	10	6	0	0	106	109	59	12	1	0	0	72	72.5
16:30	115	3	5	0	0	123	125.5	47	8	4	0	0	59	61
16:45	146	16	3	1	0	166	168.8	68	7	2	0	0	77	78
H/TOT	418	36	18	3	0	475	487.9	220	38	13	0	0	271	277.5
17:00	99	2	1	2	0	104	107.1	79	4	2	0	0	85	86
17:15	98	0	0	3	1	102	106.9	90	7	2	0	0	99	100
17:30	73	1	0	1	1	76	78.3	56	3	2	0	0	61	62

17:45	70	3	1	0	1	75	76.5	57	14	0	0	0	71	71
H/TOT	340	6	2	6	3	357	368.8	282	28	6	0	0	316	319
18:00	120	1	4	2	0	127	131.6	80	4	0	0	0	84	84
18:15	103	3	1	1	0	108	109.8	43	7	2	0	0	52	53
18:30	84	4	2	0	0	90	91	60	10	1	0	0	71	71.5
18:45	111	5	2	0	0	118	119	55	8	2	0	0	65	66
H/TOT	418	13	9	3	0	443	451.4	238	29	5	0	0	272	274.5
19:00	98	3	4	0	0	105	107	83	18	2	1	0	104	106.3
19:15	90	7	2	1	0	100	102.3	50	7	1	0	0	58	58.5
19:30	82	2	1	0	0	85	85.5	44	5	2	0	0	51	52
19:45	89	5	1	0	0	95	95.5	34	2	0	0	0	36	36
H/TOT	359	17	8	1	0	385	390.3	211	32	5	1	0	249	252.8
20:00	70	2	0	1	0	73	74.3	34	5	4	0	0	43	45
20:15	46	4	0	0	0	50	50	25	5	0	0	0	30	30
20:30	32	5	2	0	0	39	40	42	8	3	0	0	53	54.5
20:45	30	2	1	0	0	33	33.5	24	5	2	1	0	32	34.3
H/TOT	178	13	3	1	0	195	197.8	125	23	9	1	0	158	163.8
21:00	37	1	0	0	0	38	38	25	4	0	0	0	29	29
21:15	28	4	1	0	0	33	33.5	28	5	0	0	0	33	33
21:30	27	0	1	0	0	28	28.5	25	5	1	0	0	31	31.5
21:45	30	1	0	0	0	31	31	28	2	0	0	0	30	30
H/TOT	122	6	2	0	0	130	131	106	16	1	0	0	123	123.5
22:00	18	2	2	0	0	22	23	16	4	0	0	0	20	20
22:15	19	2	0	0	0	21	21	20	3	1	0	0	24	24.5
22:30	12	0	0	0	0	12	12	17	3	0	0	0	20	20
22:45	6	1	0	0	0	7	7	11	4	1	0	0	16	16.5
H/TOT	55	5	2	0	0	62	63	64	14	2	0	0	80	81
23:00	13	1	0	0	0	14	14	10	2	0	0	0	12	12
23:15	12	0	1	0	0	13	13.5	4	0	0	0	0	4	4
23:30	6	0	0	0	0	6	6	1	2	0	0	0	3	3
23:45	3	0	0	0	0	3	3	5	0	0	0	0	5	5
H/TOT	34	1	1	0	0	36	36.5	20	4	0	0	0	24	24
24 TOT	3744	244	121	23	4	4136	4230	3646	678	183	21	5	4533	4657

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 10/11/17
Location : Glenamuck Road



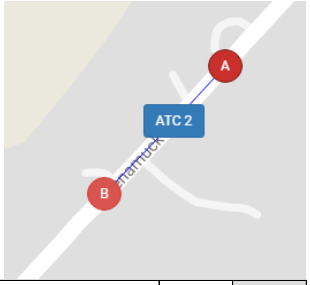
	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	9	0	0	0	0	9	9	6	2	0	0	0	8	8
00:15	3	2	0	0	0	5	5	10	0	0	0	0	10	10
00:30	11	1	0	0	0	12	12	0	2	0	0	0	2	2
00:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	25	3	0	0	0	28	28	19	4	0	0	0	23	23
01:00	7	0	0	0	0	7	7	5	3	0	1	0	9	10.3
01:15	6	0	0	0	0	6	6	0	1	0	0	0	1	1
01:30	5	0	0	0	0	5	5	1	0	0	0	0	1	1
01:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	19	0	0	0	0	19	19	10	4	0	1	0	15	16.3
02:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0
02:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
02:30	2	1	0	0	0	3	3	2	0	0	0	0	2	2
02:45	5	0	0	0	0	5	5	0	0	0	0	0	0	0
H/TOT	8	2	0	0	0	10	10	4	0	0	0	0	4	4
03:00	3	0	0	0	0	3	3	1	0	0	0	0	1	1
03:15	2	0	0	0	0	2	2	2	1	0	0	0	3	3
03:30	2	1	0	0	0	3	3	0	1	0	0	0	1	1
03:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	7	1	0	0	0	8	8	7	2	0	0	0	9	9
04:00	0	1	0	0	0	1	1	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3
04:30	1	0	0	0	0	1	1	0	1	0	0	0	1	1
04:45	2	0	0	0	0	2	2	0	1	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	4	2	0	0	0	6	6
05:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
05:15	3	0	0	0	0	3	3	2	0	0	0	2	4	6
05:30	7	0	0	0	0	7	7	5	0	0	0	0	5	5
05:45	5	0	1	0	0	6	6.5	3	0	1	0	0	4	4.5
H/TOT	16	0	1	0	0	17	17.5	12	0	1	0	2	15	17.5
06:00	5	4	0	0	0	9	9	6	0	0	1	0	7	8.3
06:15	17	1	1	0	0	19	19.5	6	1	3	0	0	10	11.5
06:30	24	7	1	0	0	32	32.5	15	3	5	0	0	23	25.5
06:45	26	2	1	0	0	29	29.5	20	7	0	0	0	27	27
H/TOT	72	14	3	0	0	89	90.5	47	11	8	1	0	67	72.3
07:00	33	6	1	0	0	40	40.5	23	9	6	0	0	38	41
07:15	36	11	1	0	0	48	48.5	39	18	3	2	0	62	66.1
07:30	36	4	4	0	0	44	46	54	25	3	1	0	83	85.8
07:45	50	9	3	1	0	63	65.8	82	18	4	0	1	105	108

H/TOT	155	30	9	1	0	195	200.8	198	70	16	3	1	288	300.9
08:00	31	7	4	0	0	42	44	89	22	2	1	0	114	116.3
08:15	56	4	2	0	0	62	63	114	25	6	0	0	145	148
08:30	58	8	5	0	0	71	73.5	81	20	1	1	0	103	104.8
08:45	65	2	2	0	0	69	70	110	23	5	0	0	138	140.5
H/TOT	210	21	13	0	0	244	250.5	394	90	14	2	0	500	509.6
09:00	61	1	2	0	0	64	65	94	22	5	0	0	121	123.5
09:15	42	5	4	0	0	51	53	73	19	5	1	0	98	101.8
09:30	35	5	4	0	0	44	46	60	15	3	0	0	78	79.5
09:45	32	6	1	0	0	39	39.5	60	16	5	1	0	82	85.8
H/TOT	170	17	11	0	0	198	203.5	287	72	18	2	0	379	390.6
10:00	29	7	1	0	0	37	37.5	46	8	1	1	0	56	57.8
10:15	39	7	1	2	0	49	52.1	48	11	3	0	0	62	63.5
10:30	46	6	2	1	0	55	57.3	37	10	6	0	0	53	56
10:45	50	4	2	0	0	56	57	38	11	3	0	0	52	53.5
H/TOT	164	24	6	3	0	197	203.9	169	40	13	1	0	223	230.8
11:00	42	3	1	0	0	46	46.5	42	14	0	2	0	58	60.6
11:15	43	5	3	0	0	51	52.5	30	13	5	0	0	48	50.5
11:30	49	8	2	0	1	60	62	49	9	2	2	0	62	65.6
11:45	61	3	1	1	0	66	67.8	46	11	3	1	0	61	63.8
H/TOT	195	19	7	1	1	223	228.8	167	47	10	5	0	229	240.5
12:00	45	4	3	0	0	52	53.5	63	9	4	1	1	78	82.3
12:15	55	2	2	2	0	61	64.6	54	14	3	2	0	73	77.1
12:30	55	5	2	1	0	63	65.3	67	6	5	0	0	78	80.5
12:45	62	4	3	0	0	69	70.5	42	16	5	1	1	65	69.8
H/TOT	217	15	10	3	0	245	253.9	226	45	17	4	2	294	309.7
13:00	71	5	1	0	0	77	77.5	67	13	3	0	0	83	84.5
13:15	61	4	1	2	0	68	71.1	56	11	5	0	0	72	74.5
13:30	57	7	2	1	0	67	69.3	53	6	3	0	0	62	63.5
13:45	61	5	0	0	0	66	66	49	9	3	0	0	61	62.5
H/TOT	250	21	4	3	0	278	283.9	225	39	14	0	0	278	285
14:00	59	5	0	0	0	64	64	51	8	3	1	0	63	65.8
14:15	52	9	3	0	0	64	65.5	71	16	1	1	0	89	90.8
14:30	48	3	2	0	0	53	54	75	20	5	1	0	101	104.8
14:45	73	0	0	2	0	75	77.6	86	15	2	0	1	104	106
H/TOT	232	17	5	2	0	256	261.1	283	59	11	3	1	357	367.4
15:00	61	1	1	0	0	63	63.5	82	15	4	0	0	101	103
15:15	61	5	2	1	0	69	71.3	69	11	3	0	0	83	84.5
15:30	77	5	0	0	0	82	82	66	16	2	0	0	84	85
15:45	97	8	2	1	0	108	110.3	65	11	4	0	0	80	82
H/TOT	296	19	5	2	0	322	327.1	282	53	13	0	0	348	354.5
16:00	99	5	0	0	0	104	104	89	11	2	0	0	102	103
16:15	133	4	6	0	0	143	146	98	5	1	0	0	104	104.5
16:30	133	11	2	1	0	147	149.3	72	10	2	0	0	84	85
16:45	92	6	1	1	1	101	103.8	72	8	0	0	0	80	80
H/TOT	457	26	9	2	1	495	503.1	331	34	5	0	0	370	372.5
17:00	91	0	3	4	1	99	106.7	55	5	1	0	0	61	61.5
17:15	111	4	3	0	0	118	119.5	87	14	0	0	0	101	101
17:30	120	4	3	0	0	127	128.5	79	5	0	0	0	84	84

17:45	69	0	1	0	0	70	70.5	65	4	0	0	0	69	69
H/TOT	391	8	10	4	1	414	425.2	286	28	1	0	0	315	315.5
18:00	80	4	5	2	0	91	96.1	66	8	2	0	0	76	77
18:15	103	2	2	0	0	107	108	78	11	0	1	0	90	91.3
18:30	108	1	4	0	0	113	115	87	7	0	0	0	94	94
18:45	86	4	5	0	0	95	97.5	53	5	2	0	0	60	61
H/TOT	377	11	16	2	0	406	416.6	284	31	4	1	0	320	323.3
19:00	71	3	4	0	0	78	80	74	9	0	0	0	83	83
19:15	56	2	2	0	0	60	61	32	4	0	0	0	36	36
19:30	39	3	2	0	0	44	45	38	5	1	0	0	44	44.5
19:45	60	3	0	0	0	63	63	40	10	1	0	0	51	51.5
H/TOT	226	11	8	0	0	245	249	184	28	2	0	0	214	215
20:00	37	5	0	0	0	42	42	32	8	3	0	0	43	44.5
20:15	36	0	0	0	0	36	36	21	5	0	0	0	26	26
20:30	30	2	2	0	0	34	35	30	6	0	0	0	36	36
20:45	28	1	1	0	0	30	30.5	25	3	0	0	0	28	28
H/TOT	131	8	3	0	0	142	143.5	108	22	3	0	0	133	134.5
21:00	23	0	0	0	0	23	23	6	2	2	0	0	10	11
21:15	26	0	0	0	0	26	26	34	6	3	0	0	43	44.5
21:30	21	3	0	0	0	24	24	19	0	1	0	0	20	20.5
21:45	16	1	0	0	0	17	17	19	1	1	0	0	21	21.5
H/TOT	86	4	0	0	0	90	90	78	9	7	0	0	94	97.5
22:00	24	1	1	0	0	26	26.5	11	1	0	0	0	12	12
22:15	10	3	0	0	0	13	13	13	3	2	0	0	18	19
22:30	14	1	2	0	0	17	18	16	2	0	0	0	18	18
22:45	13	1	1	0	0	15	15.5	11	3	1	0	0	15	15.5
H/TOT	61	6	4	0	0	71	73	51	9	3	0	0	63	64.5
23:00	10	0	0	0	0	10	10	10	1	0	0	0	11	11
23:15	13	0	0	0	0	13	13	9	2	1	0	0	12	12.5
23:30	7	1	0	0	0	8	8	7	3	0	0	0	10	10
23:45	9	0	1	0	0	10	10.5	9	2	2	0	0	13	14
H/TOT	39	1	1	0	0	41	41.5	35	8	3	0	0	46	47.5
24 TOT	3807	279	125	23	3	4237	4332	3691	707	163	23	6	4590	4707

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 11/11/17
Location : Glenamuck Road



	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	6	1	0	0	0	7	7	2	0	0	0	0	2	2
00:15	9	1	0	0	0	10	10	6	2	0	0	0	8	8
00:30	8	1	0	0	0	9	9	6	2	0	0	0	8	8
00:45	10	0	0	0	0	10	10	8	3	0	0	0	11	11
H/TOT	33	3	0	0	0	36	36	22	7	0	0	0	29	29
01:00	2	0	0	0	0	2	2	9	1	0	0	0	10	10
01:15	6	1	0	0	0	7	7	7	1	0	0	0	8	8
01:30	4	2	0	0	0	6	6	7	1	0	0	0	8	8
01:45	5	0	0	0	0	5	5	1	0	0	0	0	1	1
H/TOT	17	3	0	0	0	20	20	24	3	0	0	0	27	27
02:00	2	0	0	0	0	2	2	5	2	0	0	0	7	7
02:15	2	1	0	0	0	3	3	2	2	0	0	0	4	4
02:30	1	0	0	0	0	1	1	1	1	0	0	0	2	2
02:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	7	1	0	0	0	8	8	9	5	0	0	0	14	14
03:00	1	0	2	0	0	3	4	3	0	0	0	0	3	3
03:15	2	0	0	0	0	2	2	0	0	1	0	0	1	1.5
03:30	2	1	0	0	0	3	3	0	0	0	0	0	0	0
03:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	6	1	2	0	0	9	10	5	0	1	0	0	6	6.5
04:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
04:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
04:45	2	1	0	0	0	3	3	1	1	0	0	0	2	2
H/TOT	6	1	0	0	0	7	7	5	1	0	0	0	6	6
05:00	0	0	0	0	0	0	0	0	0	0	0	1	1	2
05:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	2	1	0	0	0	3	3	1	1	0	0	0	2	2
H/TOT	2	1	0	0	0	3	3	4	1	0	0	1	6	7
06:00	1	1	0	0	0	2	2	1	1	0	0	0	2	2
06:15	1	0	0	0	0	1	1	3	1	0	0	0	4	4
06:30	3	4	0	0	0	7	7	2	0	0	0	0	2	2
06:45	5	4	1	0	0	10	10.5	7	4	2	0	0	13	14
H/TOT	10	9	1	0	0	20	20.5	13	6	2	0	0	21	22
07:00	10	2	1	0	0	13	13.5	4	1	0	0	0	5	5
07:15	10	5	1	0	0	16	16.5	10	2	1	0	0	13	13.5
07:30	14	3	2	0	0	19	20	1	3	0	1	1	6	8.3
07:45	15	3	1	0	0	19	19.5	13	6	3	1	0	23	25.8

H/TOT	49	13	5	0	0	67	69.5	28	12	4	2	1	47	52.6
08:00	9	3	0	0	0	12	12	10	7	1	0	0	18	18.5
08:15	11	2	1	0	0	14	14.5	18	11	2	0	0	31	32
08:30	15	2	0	0	0	17	17	22	5	2	0	0	29	30
08:45	23	8	1	0	0	32	32.5	31	8	1	0	0	40	40.5
H/TOT	58	15	2	0	0	75	76	81	31	6	0	0	118	121
09:00	34	6	0	0	0	40	40	30	7	1	0	0	38	38.5
09:15	52	5	1	0	0	58	58.5	53	10	2	0	0	65	66
09:30	50	3	1	0	0	54	54.5	50	10	2	0	0	62	63
09:45	65	5	3	0	0	73	74.5	64	13	2	0	0	79	80
H/TOT	201	19	5	0	0	225	227.5	197	40	7	0	0	244	247.5
10:00	58	4	1	0	0	63	63.5	68	9	1	0	0	78	78.5
10:15	49	1	2	0	0	52	53	83	18	1	0	0	102	102.5
10:30	79	2	3	0	0	84	85.5	75	16	2	0	0	93	94
10:45	62	4	2	0	0	68	69	87	14	1	0	0	102	102.5
H/TOT	248	11	8	0	0	267	271	313	57	5	0	0	375	377.5
11:00	62	1	1	0	0	64	64.5	63	18	1	0	0	82	82.5
11:15	77	5	2	0	0	84	85	69	10	3	0	0	82	83.5
11:30	49	6	3	0	0	58	59.5	74	25	2	0	0	101	102
11:45	67	2	4	1	0	74	77.3	58	16	0	0	0	74	74
H/TOT	255	14	10	1	0	280	286.3	264	69	6	0	0	339	342
12:00	90	7	3	0	0	100	101.5	64	15	3	0	0	82	83.5
12:15	91	5	0	0	0	96	96	80	15	1	0	0	96	96.5
12:30	89	7	0	0	0	96	96	86	14	3	0	0	103	104.5
12:45	91	8	1	0	0	100	100.5	97	24	0	0	0	121	121
H/TOT	361	27	4	0	0	392	394	327	68	7	0	0	402	405.5
13:00	71	6	0	0	0	77	77	88	15	1	0	0	104	104.5
13:15	70	4	2	0	0	76	77	82	18	2	0	0	102	103
13:30	65	8	0	3	0	76	79.9	64	16	2	0	0	82	83
13:45	68	3	2	0	0	73	74	60	18	2	1	0	81	83.3
H/TOT	274	21	4	3	0	302	307.9	294	67	7	1	0	369	373.8
14:00	73	8	2	1	0	84	86.3	71	17	3	0	0	91	92.5
14:15	65	4	1	0	0	70	70.5	76	14	5	1	0	96	99.8
14:30	56	6	1	0	0	63	63.5	75	16	1	0	0	92	92.5
14:45	49	5	1	1	0	56	57.8	76	12	4	0	0	92	94
H/TOT	243	23	5	2	0	273	278.1	298	59	13	1	0	371	378.8
15:00	61	5	1	0	0	67	67.5	69	16	4	0	0	89	91
15:15	60	6	2	0	0	68	69	73	13	2	0	0	88	89
15:30	74	5	1	0	0	80	80.5	61	18	5	0	0	84	86.5
15:45	58	2	3	0	0	63	64.5	55	18	0	0	0	73	73
H/TOT	253	18	7	0	0	278	281.5	258	65	11	0	0	334	339.5
16:00	61	2	1	1	0	65	66.8	45	16	3	0	0	64	65.5
16:15	53	7	0	0	0	60	60	67	14	0	0	0	81	81
16:30	61	7	0	0	0	68	68	57	13	1	0	0	71	71.5
16:45	67	5	2	0	0	74	75	40	10	1	0	0	51	51.5
H/TOT	242	21	3	1	0	267	269.8	209	53	5	0	0	267	269.5
17:00	58	7	1	0	0	66	66.5	41	12	2	0	0	55	56
17:15	41	2	2	1	1	47	50.3	49	15	2	0	0	66	67
17:30	64	2	0	0	0	66	66	34	9	0	0	0	43	43

17:45	52	4	0	0	0	56	56	24	10	2	0	0	36	37
H/TOT	215	15	3	1	1	235	238.8	148	46	6	0	0	200	203
18:00	32	6	0	0	0	38	38	19	7	0	0	0	26	26
18:15	35	2	1	0	0	38	38.5	30	8	1	0	0	39	39.5
18:30	37	4	0	0	0	41	41	40	5	2	0	0	47	48
18:45	38	3	1	0	0	42	42.5	27	7	0	0	0	34	34
H/TOT	142	15	2	0	0	159	160	116	27	3	0	0	146	147.5
19:00	28	2	0	0	0	30	30	28	4	1	0	0	33	33.5
19:15	31	2	0	0	0	33	33	28	7	0	0	0	35	35
19:30	32	3	1	0	0	36	36.5	22	6	2	0	0	30	31
19:45	26	5	0	0	0	31	31	16	2	1	0	0	19	19.5
H/TOT	117	12	1	0	0	130	130.5	94	19	4	0	0	117	119
20:00	21	1	0	0	1	23	24	22	4	0	0	0	26	26
20:15	21	5	1	0	0	27	27.5	13	5	0	0	0	18	18
20:30	18	0	1	0	0	19	19.5	17	6	1	0	0	24	24.5
20:45	25	2	0	0	0	27	27	11	3	0	0	0	14	14
H/TOT	85	8	2	0	1	96	98	63	18	1	0	0	82	82.5
21:00	16	0	1	0	0	17	17.5	12	1	1	0	0	14	14.5
21:15	13	2	0	0	0	15	15	8	1	2	0	0	11	12
21:30	14	0	1	0	0	15	15.5	11	4	0	0	0	15	15
21:45	18	3	0	0	0	21	21	12	2	0	0	0	14	14
H/TOT	61	5	2	0	0	68	69	43	8	3	0	0	54	55.5
22:00	15	0	0	0	0	15	15	10	5	1	0	0	16	16.5
22:15	18	1	0	0	0	19	19	7	0	0	0	0	7	7
22:30	19	1	2	0	0	22	23	10	3	0	0	0	13	13
22:45	13	0	0	0	0	13	13	11	3	2	0	0	16	17
H/TOT	65	2	2	0	0	69	70	38	11	3	0	0	52	53.5
23:00	11	1	0	0	0	12	12	12	1	0	0	0	13	13
23:15	7	1	1	0	0	9	9.5	10	1	0	0	0	11	11
23:30	10	1	0	0	0	11	11	6	3	1	0	0	10	10.5
23:45	17	1	1	0	0	19	19.5	10	2	1	0	0	13	13.5
H/TOT	45	4	2	0	0	51	52	38	7	2	0	0	47	48
24 TOT	2995	262	70	8	2	3337	3384	2891	680	96	4	2	3673	3728

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 2
Date : 12/11/17
Location : Glenamuck Road

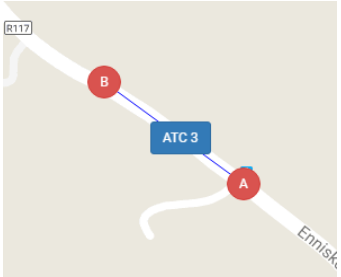
	SOUTHWEST BOUND							NORTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	10	2	0	0	0	12	12	5	1	0	0	0	6	6
00:15	11	0	0	0	0	11	11	4	2	0	0	0	6	6
00:30	6	1	1	0	0	8	8.5	6	2	0	0	0	8	8
00:45	5	0	0	0	0	5	5	6	1	1	0	0	8	8.5
H/TOT	32	3	1	0	0	36	36.5	21	6	1	0	0	28	28.5
01:00	11	2	1	0	0	14	14.5	5	0	0	0	0	5	5
01:15	6	2	0	0	0	8	8	7	1	0	0	0	8	8
01:30	6	0	0	0	0	6	6	5	2	0	0	0	7	7
01:45	7	1	0	0	0	8	8	7	1	0	0	0	8	8
H/TOT	30	5	1	0	0	36	36.5	24	4	0	0	0	28	28
02:00	2	3	1	0	0	6	6.5	6	2	1	0	0	9	9.5
02:15	2	0	0	0	0	2	2	4	2	0	0	0	6	6
02:30	5	0	0	0	0	5	5	1	0	0	0	0	1	1
02:45	5	0	0	0	0	5	5	1	1	0	0	0	2	2
H/TOT	14	3	1	0	0	18	18.5	12	5	1	0	0	18	18.5
03:00	4	0	0	0	0	4	4	2	2	0	0	0	4	4
03:15	6	1	0	0	0	7	7	4	2	0	0	0	6	6
03:30	6	0	0	0	0	6	6	3	0	0	0	0	3	3
03:45	3	1	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	19	2	0	0	0	21	21	11	4	0	0	0	15	15
04:00	4	0	0	0	0	4	4	5	0	0	0	0	5	5
04:15	5	0	0	0	0	5	5	2	0	0	0	0	2	2
04:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:45	3	2	0	0	0	5	5	2	0	0	0	0	2	2
H/TOT	13	2	0	0	0	15	15	10	0	0	0	0	10	10
05:00	3	0	0	0	0	3	3	2	0	0	0	0	2	2
05:15	1	1	0	0	0	2	2	2	2	0	0	0	4	4
05:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
05:45	1	1	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	7	2	0	0	0	9	9	7	2	0	0	0	9	9
06:00	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
06:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
06:30	2	1	0	0	0	3	3	1	1	0	0	0	2	2
06:45	2	0	0	0	0	2	2	4	2	1	0	0	7	7.5
H/TOT	6	1	0	0	0	7	7	7	3	2	0	0	12	13
07:00	4	0	0	0	0	4	4	3	0	0	0	0	3	3
07:15	3	0	0	0	0	3	3	7	1	0	0	0	8	8
07:30	12	1	0	0	0	13	13	4	2	0	0	0	6	6
07:45	14	1	1	0	0	16	16.5	6	2	1	0	0	9	9.5

H/TOT	33	2	1	0	0	36	36.5	20	5	1	0	0	26	26.5
08:00	10	1	0	0	0	11	11	3	3	0	0	0	6	6
08:15	16	0	0	0	0	16	16	14	1	0	0	0	15	15
08:30	22	0	0	1	0	23	24.3	15	3	1	0	0	19	19.5
08:45	27	4	0	0	0	31	31	14	6	0	0	0	20	20
H/TOT	75	5	0	1	0	81	82.3	46	13	1	0	0	60	60.5
09:00	41	3	0	0	0	44	44	16	7	1	0	0	24	24.5
09:15	32	2	0	0	0	34	34	29	5	2	0	0	36	37
09:30	47	5	0	0	0	52	52	28	4	0	0	0	32	32
09:45	52	6	1	0	0	59	59.5	32	8	1	0	0	41	41.5
H/TOT	172	16	1	0	0	189	189.5	105	24	4	0	0	133	135
10:00	64	4	0	0	0	68	68	36	10	2	0	0	48	49
10:15	54	5	1	0	0	60	60.5	44	5	0	0	0	49	49
10:30	57	5	2	1	0	65	67.3	76	19	2	0	0	97	98
10:45	52	4	0	0	0	56	56	50	16	5	0	0	71	73.5
H/TOT	227	18	3	1	0	249	251.8	206	50	9	0	0	265	269.5
11:00	52	6	0	0	0	58	58	55	9	0	0	0	64	64
11:15	77	6	3	0	0	86	87.5	82	17	2	0	0	101	102
11:30	53	5	1	0	0	59	59.5	64	15	0	0	2	81	83
11:45	80	4	0	1	0	85	86.3	53	20	1	0	0	74	74.5
H/TOT	262	21	4	1	0	288	291.3	254	61	3	0	2	320	323.5
12:00	83	3	0	0	0	86	86	76	10	0	0	0	86	86
12:15	73	5	2	0	0	80	81	83	14	5	1	0	103	106.8
12:30	60	4	0	0	0	64	64	69	19	1	0	0	89	89.5
12:45	71	3	0	0	0	74	74	67	15	0	0	0	82	82
H/TOT	287	15	2	0	0	304	305	295	58	6	1	0	360	364.3
13:00	84	7	0	0	0	91	91	66	16	2	0	0	84	85
13:15	87	4	1	0	0	92	92.5	48	12	0	0	0	60	60
13:30	64	6	1	1	0	72	73.8	80	21	0	0	0	101	101
13:45	78	6	1	0	0	85	85.5	81	25	2	0	0	108	109
H/TOT	313	23	3	1	0	340	342.8	275	74	4	0	0	353	355
14:00	72	4	1	0	0	77	77.5	67	14	0	0	0	81	81
14:15	76	5	1	1	0	83	84.8	62	15	0	1	0	78	79.3
14:30	75	4	0	1	0	80	81.3	69	18	1	0	0	88	88.5
14:45	73	2	1	0	0	76	76.5	62	20	1	1	0	84	85.8
H/TOT	296	15	3	2	0	316	320.1	260	67	2	2	0	331	334.6
15:00	78	6	2	1	0	87	89.3	60	12	0	0	0	72	72
15:15	78	6	0	0	0	84	84	76	11	1	0	0	88	88.5
15:30	64	6	1	1	0	72	73.8	57	10	0	0	0	67	67
15:45	49	8	3	0	0	60	61.5	77	11	0	1	0	89	90.3
H/TOT	269	26	6	2	0	303	308.6	270	44	1	1	0	316	317.8
16:00	70	4	0	0	0	74	74	55	12	1	0	0	68	68.5
16:15	67	4	0	0	0	71	71	66	14	0	0	0	80	80
16:30	51	5	1	0	0	57	57.5	64	15	2	0	0	81	82
16:45	59	4	1	0	0	64	64.5	59	14	0	0	0	73	73
H/TOT	247	17	2	0	0	266	267	244	55	3	0	0	302	303.5
17:00	70	2	1	0	0	73	73.5	57	18	2	0	0	77	78
17:15	74	5	2	0	0	81	82	46	9	0	0	0	55	55
17:30	58	3	1	0	0	62	62.5	49	11	3	0	0	63	64.5

17:45	52	2	2	0	0	56	57	49	7	0	0	0	56	56
H/TOT	254	12	6	0	0	272	275	201	45	5	0	0	251	253.5
18:00	48	3	1	0	0	52	52.5	33	6	0	0	0	39	39
18:15	44	5	2	0	0	51	52	43	3	2	0	0	48	49
18:30	38	4	0	0	0	42	42	30	7	1	0	0	38	38.5
18:45	36	4	1	0	0	41	41.5	23	2	1	0	0	26	26.5
H/TOT	166	16	4	0	0	186	188	129	18	4	0	0	151	153
19:00	31	1	0	0	0	32	32	24	2	1	0	0	27	27.5
19:15	22	2	0	0	0	24	24	21	4	0	0	0	25	25
19:30	27	2	1	0	0	30	30.5	24	3	0	0	1	28	29
19:45	18	3	0	0	0	21	21	21	7	1	0	0	29	29.5
H/TOT	98	8	1	0	0	107	107.5	90	16	2	0	1	109	111
20:00	32	1	0	0	0	33	33	13	3	0	0	0	16	16
20:15	17	2	1	0	0	20	20.5	25	1	0	0	0	26	26
20:30	20	0	0	0	0	20	20	20	4	1	0	0	25	25.5
20:45	28	1	0	0	0	29	29	20	2	0	0	0	22	22
H/TOT	97	4	1	0	0	102	102.5	78	10	1	0	0	89	89.5
21:00	9	1	1	0	0	11	11.5	16	3	1	0	0	20	20.5
21:15	25	0	0	0	0	25	25	13	3	1	0	0	17	17.5
21:30	13	1	0	0	0	14	14	11	2	0	0	0	13	13
21:45	11	1	1	0	0	13	13.5	10	2	0	0	0	12	12
H/TOT	58	3	2	0	0	63	64	50	10	2	0	0	62	63
22:00	12	1	0	0	0	13	13	11	0	1	0	0	12	12.5
22:15	18	0	0	0	0	18	18	13	2	0	0	0	15	15
22:30	3	0	2	0	0	5	6	6	0	0	0	0	6	6
22:45	8	0	0	0	0	8	8	9	3	1	0	1	14	15.5
H/TOT	41	1	2	0	0	44	45	39	5	2	0	1	47	49
23:00	6	1	0	0	0	7	7	3	0	0	0	0	3	3
23:15	7	2	1	0	0	10	10.5	6	1	0	0	0	7	7
23:30	5	0	0	0	0	5	5	4	0	0	0	0	4	4
23:45	4	0	1	0	0	5	5.5	3	0	0	0	0	3	3
H/TOT	22	3	2	0	0	27	28	16	1	0	0	0	17	17
24 TOT	3038	223	46	8	0	3315	3348	2670	580	54	4	4	3312	3348

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 06/11/17
Location: Enniskerry Road



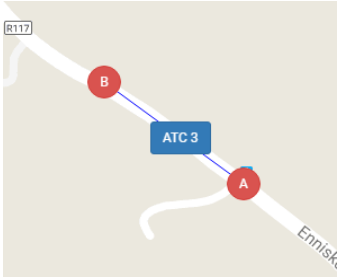
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	2	1	0	0	0	3	3	2	2	1	0	0	5	5.5
00:15	2	0	1	0	0	3	3.5	3	0	0	0	0	3	3
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	2	0	0	0	0	2	2	2	1	0	0	0	3	3
H/TOT	6	1	1	0	0	8	8.5	7	3	1	0	0	11	11.5
01:00	0	1	0	1	0	2	3.3	1	0	0	0	0	1	1
01:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
01:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	1	0	1	0	4	5.3	4	0	0	0	0	4	4
02:00	3	0	0	0	0	3	3	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	0	1	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	2	1	0	0	0	3	3
05:00	1	1	0	0	0	2	2	1	0	0	0	0	1	1
05:15	1	2	0	0	0	3	3	0	0	0	0	0	0	0
05:30	2	1	1	0	0	4	4.5	5	0	2	1	0	8	10.3
05:45	3	1	1	0	0	5	5.5	4	0	0	0	0	4	4
H/TOT	7	5	2	0	0	14	15	10	0	2	1	0	13	15.3
06:00	3	0	0	0	0	3	3	3	0	1	0	0	4	4.5
06:15	11	1	0	0	0	12	12	4	1	1	0	0	6	6.5
06:30	8	5	2	0	0	15	16	7	0	2	0	0	9	10
06:45	14	5	1	0	0	20	20.5	6	2	1	0	0	9	9.5
H/TOT	36	11	3	0	0	50	51.5	20	3	5	0	0	28	30.5
07:00	11	13	1	0	0	25	25.5	22	4	2	1	0	29	31.3
07:15	32	16	4	0	0	52	54	25	8	1	0	0	34	34.5
07:30	55	13	3	0	0	71	72.5	38	9	0	0	0	47	47
07:45	47	8	4	1	0	60	63.3	72	13	2	1	0	88	90.3

H/TOT	145	50	12	1	0	208	215.3	157	34	5	2	0	198	203.1
08:00	51	9	4	4	0	68	75.2	76	17	1	0	0	94	94.5
08:15	43	13	1	0	0	57	57.5	126	23	1	0	0	150	150.5
08:30	79	16	0	0	0	95	95	136	37	5	0	0	178	180.5
08:45	95	17	2	0	0	114	115	81	14	1	0	0	96	96.5
H/TOT	268	55	7	4	0	334	342.7	419	91	8	0	0	518	522
09:00	66	22	3	0	0	91	92.5	68	11	2	0	0	81	82
09:15	53	12	3	0	1	69	71.5	50	5	3	0	0	58	59.5
09:30	29	11	2	0	0	42	43	38	12	1	0	0	51	51.5
09:45	27	9	4	0	0	40	42	36	4	2	0	0	42	43
H/TOT	175	54	12	0	1	242	249	192	32	8	0	0	232	236
10:00	37	4	3	0	0	44	45.5	34	3	5	0	0	42	44.5
10:15	34	1	3	1	0	39	41.8	24	4	2	0	0	30	31
10:30	26	3	4	1	0	34	37.3	34	3	1	0	0	38	38.5
10:45	19	7	2	0	0	28	29	28	3	1	0	0	32	32.5
H/TOT	116	15	12	2	0	145	153.6	120	13	9	0	0	142	146.5
11:00	20	7	0	0	0	27	27	45	9	3	1	0	58	60.8
11:15	33	7	2	0	0	42	43	22	4	5	1	0	32	35.8
11:30	36	13	3	0	0	52	53.5	39	8	2	0	1	50	52
11:45	38	7	0	0	0	45	45	30	5	3	0	0	38	39.5
H/TOT	127	34	5	0	0	166	168.5	136	26	13	2	1	178	188.1
12:00	36	7	3	0	0	46	47.5	39	7	1	1	1	49	51.8
12:15	40	8	2	0	0	50	51	66	15	5	0	0	86	88.5
12:30	35	10	2	0	0	47	48	45	6	0	1	1	53	55.3
12:45	51	6	1	1	0	59	60.8	50	22	2	1	0	75	77.3
H/TOT	162	31	8	1	0	202	207.3	200	50	8	3	2	263	272.9
13:00	36	11	1	0	0	48	48.5	65	16	3	0	0	84	85.5
13:15	59	16	4	0	0	79	81	58	6	2	0	0	66	67
13:30	51	14	0	0	0	65	65	40	6	4	0	0	50	52
13:45	50	8	1	0	0	59	59.5	55	10	4	0	0	69	71
H/TOT	196	49	6	0	0	251	254	218	38	13	0	0	269	275.5
14:00	45	13	2	1	0	61	63.3	53	15	4	0	0	72	74
14:15	44	12	3	1	0	60	62.8	77	11	1	0	0	89	89.5
14:30	74	24	4	0	0	102	104	61	2	0	0	0	63	63
14:45	74	14	3	0	0	91	92.5	55	13	4	0	0	72	74
H/TOT	237	63	12	2	0	314	322.6	246	41	9	0	0	296	300.5
15:00	57	10	3	1	0	71	73.8	46	12	5	0	0	63	65.5
15:15	61	11	3	0	0	75	76.5	54	11	3	0	0	68	69.5
15:30	45	4	3	0	0	52	53.5	47	9	2	0	0	58	59
15:45	49	13	1	0	0	63	63.5	54	9	6	0	0	69	72
H/TOT	212	38	10	1	0	261	267.3	201	41	16	0	0	258	266
16:00	50	14	2	0	0	66	67	55	15	5	1	0	76	79.8
16:15	43	16	2	0	0	61	62	61	18	3	0	0	82	83.5
16:30	52	10	3	0	0	65	66.5	52	16	6	0	0	74	77
16:45	41	10	1	0	0	52	52.5	102	19	6	0	1	128	132
H/TOT	186	50	8	0	0	244	248	270	68	20	1	1	360	372.3
17:00	50	11	0	0	0	61	61	106	22	6	0	0	134	137
17:15	51	22	0	0	0	73	73	129	24	2	0	0	155	156
17:30	33	12	2	0	0	47	48	110	26	3	1	0	140	142.8

17:45	45	9	1	0	0	55	55.5	126	28	1	0	0	155	155.5
H/TOT	179	54	3	0	0	236	237.5	471	100	12	1	0	584	591.3
18:00	53	12	2	0	0	67	68	100	26	2	0	0	128	129
18:15	46	15	0	0	0	61	61	99	25	4	0	0	128	130
18:30	31	14	1	0	0	46	46.5	93	19	4	0	0	116	118
18:45	41	9	1	0	0	51	51.5	62	13	0	0	0	75	75
H/TOT	171	50	4	0	0	225	227	354	83	10	0	0	447	452
19:00	59	17	1	0	0	77	77.5	48	9	0	0	0	57	57
19:15	39	7	1	0	0	47	47.5	33	10	3	0	0	46	47.5
19:30	35	6	0	0	0	41	41	43	16	2	0	0	61	62
19:45	35	13	1	0	0	49	49.5	36	9	0	1	0	46	47.3
H/TOT	168	43	3	0	0	214	215.5	160	44	5	1	0	210	213.8
20:00	51	17	2	0	0	70	71	47	9	0	0	0	56	56
20:15	22	1	1	0	0	24	24.5	22	2	1	0	0	25	25.5
20:30	20	0	0	0	0	20	20	31	1	0	0	0	32	32
20:45	21	2	1	0	0	24	24.5	12	2	0	0	0	14	14
H/TOT	114	20	4	0	0	138	140	112	14	1	0	0	127	127.5
21:00	16	0	0	0	0	16	16	15	4	1	0	0	20	20.5
21:15	14	7	0	0	0	21	21	12	4	0	0	0	16	16
21:30	16	4	1	0	0	21	21.5	19	1	0	0	0	20	20
21:45	6	1	0	0	0	7	7	17	3	0	0	0	20	20
H/TOT	52	12	1	0	0	65	65.5	63	12	1	0	0	76	76.5
22:00	12	3	0	0	0	15	15	11	2	1	0	0	14	14.5
22:15	7	1	0	0	0	8	8	13	0	0	0	0	13	13
22:30	11	0	1	0	0	12	12.5	10	0	0	0	0	10	10
22:45	6	1	0	0	0	7	7	5	4	0	0	0	9	9
H/TOT	36	5	1	0	0	42	42.5	39	6	1	0	0	46	46.5
23:00	1	1	0	0	0	2	2	5	2	1	0	0	8	8.5
23:15	3	1	0	0	0	4	4	2	1	0	0	0	3	3
23:30	1	0	2	0	0	3	4	3	1	0	0	0	4	4
23:45	2	0	0	0	0	2	2	4	2	0	0	0	6	6
H/TOT	7	2	2	0	0	11	12	14	6	1	0	0	21	21.5
24 TOT	2606	643	116	12	1	3378	3453	3416	707	148	11	4	4286	4378

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 07/11/17
Location: Enniskerry Road



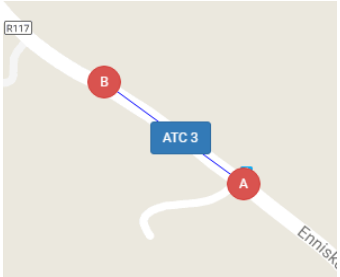
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	2	1	0	0	0	3	3	4	0	1	0	0	5	5.5
00:15	1	1	1	0	0	3	3.5	1	0	0	0	0	1	1
00:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
00:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	4	2	1	0	0	7	7.5	10	0	1	0	0	11	11.5
01:00	1	0	0	0	0	1	1	3	0	0	0	0	3	3
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	4	0	0	0	0	4	4
02:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0
02:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	3	0	1	0	0	4	4.5	2	1	0	0	0	3	3
03:00	2	0	0	0	0	2	2	0	1	0	0	0	1	1
03:15	0	1	0	0	0	1	1	1	0	0	0	0	1	1
03:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:45	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	2	0	0	0	5	5	1	1	0	0	0	2	2
04:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
H/TOT	2	0	0	0	0	2	2	0	1	1	0	0	2	2.5
05:00	0	1	1	0	0	2	2.5	0	0	1	0	0	1	1.5
05:15	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
05:30	2	1	1	0	0	4	4.5	1	0	0	0	0	1	1
05:45	5	1	0	0	0	6	6	5	0	0	2	0	7	9.6
H/TOT	7	3	2	0	0	12	13	7	0	2	2	0	11	14.6
06:00	2	0	0	0	1	3	4	4	1	0	0	0	5	5
06:15	8	3	1	0	0	12	12.5	5	0	0	0	0	5	5
06:30	9	3	1	0	0	13	13.5	7	1	2	0	0	10	11
06:45	18	10	3	2	0	33	37.1	16	3	0	0	0	19	19
H/TOT	37	16	5	2	1	61	67.1	32	5	2	0	0	39	40
07:00	21	9	1	0	0	31	31.5	13	6	4	0	0	23	25
07:15	34	10	5	0	0	49	51.5	21	4	3	0	0	28	29.5
07:30	58	15	5	0	0	78	80.5	41	9	5	0	0	55	57.5
07:45	56	18	4	0	0	78	80	70	14	4	0	0	88	90

H/TOT	169	52	15	0	0	236	243.5	145	33	16	0	0	194	202
08:00	61	9	5	0	1	76	79.5	97	14	8	0	0	119	123
08:15	52	16	5	0	0	73	75.5	121	27	3	0	0	151	152.5
08:30	75	22	3	1	0	101	103.8	156	24	3	0	0	183	184.5
08:45	102	16	2	0	0	120	121	80	22	1	1	0	104	105.8
H/TOT	290	63	15	1	1	370	379.8	454	87	15	1	0	557	565.8
09:00	91	20	2	0	0	113	114	77	9	1	0	0	87	87.5
09:15	46	8	5	0	0	59	61.5	50	9	3	2	0	64	68.1
09:30	48	16	2	1	1	68	71.3	41	7	5	0	0	53	55.5
09:45	44	10	3	1	0	58	60.8	35	9	1	0	0	45	45.5
H/TOT	229	54	12	2	1	298	307.6	203	34	10	2	0	249	256.6
10:00	31	3	4	0	0	38	40	37	6	3	0	0	46	47.5
10:15	25	7	1	1	0	34	35.8	44	4	3	0	0	51	52.5
10:30	43	11	7	0	0	61	64.5	26	7	2	0	0	35	36
10:45	21	7	2	0	0	30	31	37	5	5	0	0	47	49.5
H/TOT	120	28	14	1	0	163	171.3	144	22	13	0	0	179	185.5
11:00	30	3	4	0	0	37	39	36	5	8	0	0	49	53
11:15	26	7	4	0	0	37	39	28	5	4	0	0	37	39
11:30	40	2	2	0	0	44	45	31	6	2	0	1	40	42
11:45	34	4	2	0	0	40	41	35	5	2	0	0	42	43
H/TOT	130	16	12	0	0	158	164	130	21	16	0	1	168	177
12:00	28	6	4	0	0	38	40	35	10	3	0	0	48	49.5
12:15	30	7	2	1	0	40	42.3	46	6	4	0	0	56	58
12:30	23	6	5	1	0	35	38.8	42	6	2	0	0	50	51
12:45	41	9	2	0	0	52	53	49	5	4	0	0	58	60
H/TOT	122	28	13	2	0	165	174.1	172	27	13	0	0	212	218.5
13:00	35	11	1	0	0	47	47.5	64	17	2	0	0	83	84
13:15	37	17	1	1	0	56	57.8	53	16	3	0	1	73	75.5
13:30	48	8	3	0	0	59	60.5	43	9	5	0	0	57	59.5
13:45	41	13	0	0	0	54	54	63	9	3	1	0	76	78.8
H/TOT	161	49	5	1	0	216	219.8	223	51	13	1	1	289	297.8
14:00	58	11	1	1	0	71	72.8	73	14	2	0	0	89	90
14:15	75	12	4	0	0	91	93	52	15	4	0	0	71	73
14:30	63	9	3	0	0	75	76.5	43	13	0	1	0	57	58.3
14:45	75	24	1	0	0	100	100.5	58	8	3	1	0	70	72.8
H/TOT	271	56	9	1	0	337	342.8	226	50	9	2	0	287	294.1
15:00	62	11	3	1	1	78	81.8	49	6	2	1	0	58	60.3
15:15	54	10	2	0	0	66	67	47	13	3	1	0	64	66.8
15:30	59	12	4	0	0	75	77	46	9	3	2	0	60	64.1
15:45	50	14	0	0	0	64	64	47	6	3	0	1	57	59.5
H/TOT	225	47	9	1	1	283	289.8	189	34	11	4	1	239	250.7
16:00	39	11	1	0	0	51	51.5	66	16	4	0	0	86	88
16:15	44	8	2	0	0	54	55	81	18	2	0	0	101	102
16:30	52	11	3	0	0	66	67.5	87	14	8	1	0	110	115.3
16:45	55	10	3	0	0	68	69.5	100	18	4	0	0	122	124
H/TOT	190	40	9	0	0	239	243.5	334	66	18	1	0	419	429.3
17:00	63	7	0	0	0	70	70	114	34	3	1	0	152	154.8
17:15	56	12	1	0	0	69	69.5	127	15	1	0	0	143	143.5
17:30	45	3	2	0	0	50	51	110	28	2	0	0	140	141

17:45	55	11	0	0	0	66	66	114	18	3	1	0	136	138.8
H/TOT	219	33	3	0	0	255	256.5	465	95	9	2	0	571	578.1
18:00	50	11	0	0	0	61	61	117	21	2	0	0	140	141
18:15	54	9	1	0	0	64	64.5	92	17	2	1	0	112	114.3
18:30	50	13	0	0	0	63	63	92	21	2	0	0	115	116
18:45	50	13	0	0	0	63	63	92	17	1	0	0	110	110.5
H/TOT	204	46	1	0	0	251	251.5	393	76	7	1	0	477	481.8
19:00	42	11	2	0	0	55	56	56	19	5	0	0	80	82.5
19:15	39	12	1	0	0	52	52.5	40	12	1	1	0	54	55.8
19:30	37	9	1	0	0	47	47.5	52	8	1	0	0	61	61.5
19:45	36	8	0	0	0	44	44	49	16	2	0	0	67	68
H/TOT	154	40	4	0	0	198	200	197	55	9	1	0	262	267.8
20:00	49	14	2	0	0	65	66	41	7	0	0	0	48	48
20:15	34	6	0	0	0	40	40	36	8	0	0	0	44	44
20:30	27	10	0	0	0	37	37	23	7	0	0	0	30	30
20:45	22	7	0	0	0	29	29	31	7	1	0	0	39	39.5
H/TOT	132	37	2	0	0	171	172	131	29	1	0	0	161	161.5
21:00	29	8	0	0	0	37	37	28	5	1	0	0	34	34.5
21:15	30	1	0	0	0	31	31	26	3	2	0	0	31	32
21:30	12	1	1	0	0	14	14.5	28	6	0	0	0	34	34
21:45	20	2	2	0	0	24	25	27	3	0	0	0	30	30
H/TOT	91	12	3	0	0	106	107.5	109	17	3	0	0	129	130.5
22:00	22	2	1	0	0	25	25.5	42	4	1	0	0	47	47.5
22:15	11	2	0	0	0	13	13	16	1	0	0	0	17	17
22:30	6	1	1	0	0	8	8.5	10	1	0	0	0	11	11
22:45	10	0	0	0	0	10	10	9	0	1	0	0	10	10.5
H/TOT	49	5	2	0	0	56	57	77	6	2	0	0	85	86
23:00	10	1	0	0	0	11	11	7	1	1	0	0	9	9.5
23:15	5	0	1	0	0	6	6.5	7	0	0	0	0	7	7
23:30	5	0	1	0	0	6	6.5	4	1	0	0	0	5	5
23:45	5	0	0	0	0	5	5	3	0	0	0	0	3	3
H/TOT	25	1	2	0	0	28	29	21	2	1	0	0	24	24.5
24 TOT	2839	630	139	11	4	3623	3711	3669	713	172	17	3	4574	4685

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 08/11/17
Location: Enniskerry Road



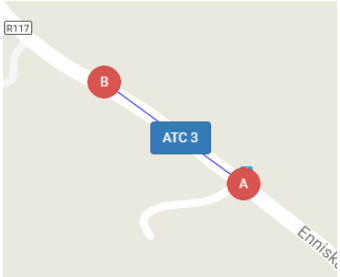
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	6	1	1	0	0	8	8.5
00:15	4	1	0	0	0	5	5	4	0	0	0	0	4	4
00:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
00:45	1	0	0	0	0	1	1	3	1	0	0	0	4	4
H/TOT	7	1	0	0	0	8	8	15	2	1	0	0	18	18.5
01:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:15	1	0	0	0	0	1	1	0	1	0	0	0	1	1
01:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	2	0	0	0	0	2	2	3	2	0	0	0	5	5
02:00	1	0	0	0	0	1	1	0	1	0	0	0	1	1
02:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	2	1	0	0	0	3	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	1	0	0	0	1	1	0	1	0	0	0	1	1
03:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	2	2	0	1	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	1	1	0	0	0	2	2
05:00	0	2	0	0	0	2	2	2	0	1	0	0	3	3.5
05:15	0	1	1	0	0	2	2.5	0	0	0	0	0	0	0
05:30	3	2	1	0	0	6	6.5	5	1	0	0	0	6	6
05:45	5	2	1	0	0	8	8.5	5	1	0	0	0	6	6
H/TOT	8	7	3	0	0	18	19.5	12	2	1	0	0	15	15.5
06:00	3	1	1	0	0	5	5.5	1	0	1	1	0	3	4.8
06:15	3	1	0	1	0	5	6.3	7	0	2	0	0	9	10
06:30	15	5	2	0	0	22	23	1	0	2	0	0	3	4
06:45	18	5	3	0	0	26	27.5	9	1	0	0	0	10	10
H/TOT	39	12	6	1	0	58	62.3	18	1	5	1	0	25	28.8
07:00	15	9	1	2	0	27	30.1	10	5	3	0	0	18	19.5
07:15	33	11	4	0	2	50	54	28	5	0	0	0	33	33
07:30	56	12	3	1	0	72	74.8	45	9	4	0	0	58	60
07:45	51	9	4	0	0	64	66	75	4	2	0	0	81	82

H/TOT	155	41	12	3	2	213	224.9	158	23	9	0	0	190	194.5
08:00	45	11	3	0	0	59	60.5	81	9	2	0	0	92	93
08:15	55	8	1	1	1	66	68.8	117	31	6	0	0	154	157
08:30	75	16	4	0	0	95	97	143	32	6	1	0	182	186.3
08:45	88	12	2	0	0	102	103	85	8	3	0	1	97	99.5
H/TOT	263	47	10	1	1	322	329.3	426	80	17	1	1	525	535.8
09:00	74	20	1	2	0	97	100.1	71	11	3	0	0	85	86.5
09:15	56	13	1	0	0	70	70.5	55	8	1	0	0	64	64.5
09:30	47	11	3	0	0	61	62.5	36	9	0	0	0	45	45
09:45	41	9	1	0	1	52	53.5	39	8	4	1	0	52	55.3
H/TOT	218	53	6	2	1	280	286.6	201	36	8	1	0	246	251.3
10:00	32	3	3	0	0	38	39.5	35	5	2	0	0	42	43
10:15	32	6	3	0	0	41	42.5	40	11	6	0	0	57	60
10:30	27	4	7	0	0	38	41.5	32	7	2	0	0	41	42
10:45	20	5	2	0	0	27	28	31	10	1	0	0	42	42.5
H/TOT	111	18	15	0	0	144	151.5	138	33	11	0	0	182	187.5
11:00	30	10	4	1	0	45	48.3	35	13	3	0	0	51	52.5
11:15	30	6	2	0	0	38	39	40	7	4	0	0	51	53
11:30	47	2	4	1	0	54	57.3	53	5	2	1	0	61	63.3
11:45	40	5	4	1	0	50	53.3	72	12	3	1	1	89	92.8
H/TOT	147	23	14	3	0	187	197.9	200	37	12	2	1	252	261.6
12:00	38	9	1	0	0	48	48.5	39	11	4	0	0	54	56
12:15	37	8	2	0	0	47	48	32	11	4	1	1	49	53.3
12:30	31	8	2	0	0	41	42	46	5	1	0	0	52	52.5
12:45	45	7	3	2	0	57	61.1	56	14	4	1	0	75	78.3
H/TOT	151	32	8	2	0	193	199.6	173	41	13	2	1	230	240.1
13:00	55	8	0	1	0	64	65.3	56	10	4	0	0	70	72
13:15	48	15	3	0	0	66	67.5	50	10	1	0	0	61	61.5
13:30	49	11	3	0	0	63	64.5	54	7	3	0	0	64	65.5
13:45	36	8	2	0	0	46	47	70	7	4	0	0	81	83
H/TOT	188	42	8	1	0	239	244.3	230	34	12	0	0	276	282
14:00	49	17	4	0	0	70	72	80	14	5	0	0	99	101.5
14:15	67	11	3	0	0	81	82.5	61	11	2	0	0	74	75
14:30	68	13	2	0	0	83	84	55	10	1	0	0	66	66.5
14:45	83	17	3	0	0	103	104.5	52	13	0	1	0	66	67.3
H/TOT	267	58	12	0	0	337	343	248	48	8	1	0	305	310.3
15:00	44	8	4	0	0	56	58	60	15	3	0	1	79	81.5
15:15	74	18	5	0	0	97	99.5	45	16	5	0	0	66	68.5
15:30	54	15	5	0	0	74	76.5	61	18	3	0	0	82	83.5
15:45	59	14	2	1	0	76	78.3	70	15	2	1	0	88	90.3
H/TOT	231	55	16	1	0	303	312.3	236	64	13	1	1	315	323.8
16:00	48	13	0	0	0	61	61	58	17	3	0	1	79	81.5
16:15	64	17	3	0	0	84	85.5	61	17	2	0	1	81	83
16:30	55	12	2	0	0	69	70	82	21	5	0	0	108	110.5
16:45	52	15	0	0	0	67	67	142	34	5	0	0	181	183.5
H/TOT	219	57	5	0	0	281	283.5	343	89	15	0	2	449	458.5
17:00	58	13	1	1	0	73	74.8	126	23	4	1	0	154	157.3
17:15	52	10	5	0	0	67	69.5	114	22	5	0	0	141	143.5
17:30	63	10	0	0	0	73	73	104	19	3	1	0	127	129.8

17:45	50	13	1	0	0	64	64.5	108	21	1	0	0	130	130.5
H/TOT	223	46	7	1	0	277	281.8	452	85	13	2	0	552	561.1
18:00	49	15	1	0	0	65	65.5	108	19	1	1	0	129	130.8
18:15	57	10	0	0	0	67	67	109	29	3	0	0	141	142.5
18:30	43	13	1	0	0	57	57.5	112	25	3	0	0	140	141.5
18:45	37	10	0	0	0	47	47	113	26	2	0	0	141	142
H/TOT	186	48	2	0	0	236	237	442	99	9	1	0	551	556.8
19:00	66	16	0	0	0	82	82	79	20	0	0	0	99	99
19:15	41	7	0	0	0	48	48	56	14	2	0	0	72	73
19:30	30	5	1	0	0	36	36.5	60	9	1	0	0	70	70.5
19:45	32	10	2	0	0	44	45	29	3	1	0	0	33	33.5
H/TOT	169	38	3	0	0	210	211.5	224	46	4	0	0	274	276
20:00	31	14	0	0	0	45	45	47	10	1	0	1	59	60.5
20:15	53	7	0	0	0	60	60	35	8	2	0	0	45	46
20:30	25	5	0	0	0	30	30	30	8	1	0	0	39	39.5
20:45	18	3	0	0	0	21	21	24	5	1	0	0	30	30.5
H/TOT	127	29	0	0	0	156	156	136	31	5	0	1	173	176.5
21:00	19	6	0	0	0	25	25	19	6	1	0	0	26	26.5
21:15	14	5	0	0	0	19	19	25	7	1	0	0	33	33.5
21:30	19	2	1	0	0	22	22.5	25	7	1	0	0	33	33.5
21:45	22	2	0	0	0	24	24	15	4	0	0	0	19	19
H/TOT	74	15	1	0	0	90	90.5	84	24	3	0	0	111	112.5
22:00	10	0	1	0	0	11	11.5	19	2	1	0	0	22	22.5
22:15	14	2	0	0	0	16	16	18	0	0	0	0	18	18
22:30	15	2	1	0	0	18	18.5	12	0	0	0	0	12	12
22:45	6	2	0	0	0	8	8	12	1	0	0	0	13	13
H/TOT	45	6	2	0	0	53	54	61	3	1	0	0	65	65.5
23:00	5	0	0	0	0	5	5	6	2	1	0	0	9	9.5
23:15	7	2	1	0	0	10	10.5	11	1	0	0	0	12	12
23:30	4	0	1	0	0	5	5.5	4	0	0	0	0	4	4
23:45	1	1	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	17	3	2	0	0	22	23	25	3	1	0	0	29	29.5
24 TOT	2851	632	132	15	4	3634	3724	3828	786	161	12	7	4794	4897

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 09/11/17
Location: Enniskerry Road



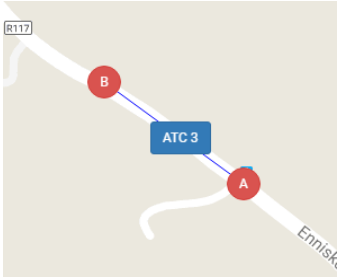
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	4	0	0	0	0	4	4	3	0	1	0	0	4	4.5
00:15	3	0	0	0	0	3	3	3	0	0	0	0	3	3
00:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
00:45	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	10	0	0	0	0	10	10	8	0	1	0	0	9	9.5
01:00	3	1	0	0	0	4	4	1	1	0	0	0	2	2
01:15	0	0	0	0	0	0	0	2	1	0	0	0	3	3
01:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	5	2	0	0	0	7	7
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2
03:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	2	0	0	0	0	2	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
H/TOT	1	0	0	0	0	1	1	0	1	1	0	0	2	2.5
05:00	1	1	0	0	0	2	2	0	0	0	0	0	0	0
05:15	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
05:30	1	0	2	0	0	3	4	5	0	1	0	0	6	6.5
05:45	3	2	2	0	0	7	8	2	0	1	0	0	3	3.5
H/TOT	6	3	4	0	0	13	15	7	0	3	0	0	10	11.5
06:00	6	0	0	0	0	6	6	1	0	1	0	0	2	2.5
06:15	2	0	0	0	0	2	2	3	0	1	0	0	4	4.5
06:30	10	5	2	0	0	17	18	6	1	2	0	0	9	10
06:45	19	5	2	1	0	27	29.3	8	2	1	0	0	11	11.5
H/TOT	37	10	4	1	0	52	55.3	18	3	5	0	0	26	28.5
07:00	23	8	0	0	0	31	31	21	3	2	0	0	26	27
07:15	28	13	4	1	0	46	49.3	24	5	2	0	0	31	32
07:30	48	7	6	0	0	61	64	44	9	3	0	0	56	57.5
07:45	53	6	6	0	0	65	68	70	12	2	0	0	84	85

H/TOT	152	34	16	1	0	203	212.3	159	29	9	0	0	197	201.5
08:00	55	12	5	0	0	72	74.5	72	14	3	0	0	89	90.5
08:15	55	13	4	0	0	72	74	122	28	3	0	0	153	154.5
08:30	82	12	0	0	0	94	94	151	30	3	0	0	184	185.5
08:45	83	16	2	0	0	101	102	98	14	1	0	1	114	115.5
H/TOT	275	53	11	0	0	339	344.5	443	86	10	0	1	540	546
09:00	80	30	1	0	0	111	111.5	72	6	0	0	0	78	78
09:15	53	8	3	0	0	64	65.5	55	8	3	0	0	66	67.5
09:30	44	4	4	0	0	52	54	37	8	2	0	0	47	48
09:45	38	12	4	1	0	55	58.3	50	8	7	0	0	65	68.5
H/TOT	215	54	12	1	0	282	289.3	214	30	12	0	0	256	262
10:00	30	7	3	1	0	41	43.8	38	8	6	0	1	53	57
10:15	23	8	1	0	0	32	32.5	28	9	3	0	0	40	41.5
10:30	24	6	4	0	0	34	36	31	4	1	1	0	37	38.8
10:45	23	6	2	0	0	31	32	34	9	2	0	0	45	46
H/TOT	100	27	10	1	0	138	144.3	131	30	12	1	1	175	183.3
11:00	36	6	6	1	0	49	53.3	43	6	3	0	0	52	53.5
11:15	25	7	0	0	1	33	34	47	11	4	0	0	62	64
11:30	29	4	3	0	0	36	37.5	37	10	3	0	0	50	51.5
11:45	48	12	2	1	0	63	65.3	55	5	4	1	0	65	68.3
H/TOT	138	29	11	2	1	181	190.1	182	32	14	1	0	229	237.3
12:00	54	16	6	1	0	77	81.3	39	11	1	0	0	51	51.5
12:15	68	15	5	0	0	88	90.5	44	9	2	0	0	55	56
12:30	34	11	2	0	0	47	48	28	9	3	0	0	40	41.5
12:45	43	6	1	0	0	50	50.5	58	8	3	0	1	70	72.5
H/TOT	199	48	14	1	0	262	270.3	169	37	9	0	1	216	221.5
13:00	37	13	3	0	0	53	54.5	59	17	5	0	0	81	83.5
13:15	41	15	2	0	0	58	59	69	13	3	1	0	86	88.8
13:30	60	17	1	0	1	79	80.5	61	9	4	0	0	74	76
13:45	36	15	3	0	0	54	55.5	68	12	3	1	0	84	86.8
H/TOT	174	60	9	0	1	244	249.5	257	51	15	2	0	325	335.1
14:00	58	11	0	0	0	69	69	64	21	1	0	0	86	86.5
14:15	61	11	2	0	0	74	75	63	14	3	1	0	81	83.8
14:30	53	14	2	0	0	69	70	53	10	1	0	0	64	64.5
14:45	78	18	3	0	0	99	100.5	57	15	2	0	0	74	75
H/TOT	250	54	7	0	0	311	314.5	237	60	7	1	0	305	309.8
15:00	48	11	2	0	0	61	62	55	6	3	0	0	64	65.5
15:15	45	16	4	1	0	66	69.3	63	10	4	0	0	77	79
15:30	62	9	2	0	0	73	74	56	10	4	1	0	71	74.3
15:45	45	9	1	0	0	55	55.5	46	9	2	1	0	58	60.3
H/TOT	200	45	9	1	0	255	260.8	220	35	13	2	0	270	279.1
16:00	59	9	5	0	0	73	75.5	51	9	2	0	0	62	63
16:15	58	10	1	0	0	69	69.5	93	17	5	1	1	117	121.8
16:30	68	14	3	1	0	86	88.8	82	16	3	0	0	101	102.5
16:45	47	3	2	0	0	52	53	104	32	4	0	0	140	142
H/TOT	232	36	11	1	0	280	286.8	330	74	14	1	1	420	429.3
17:00	48	6	1	1	0	56	57.8	133	30	3	0	0	166	167.5
17:15	65	9	1	1	0	76	77.8	106	15	5	0	1	127	130.5
17:30	52	12	0	0	0	64	64	122	26	5	0	0	153	155.5

17:45	48	14	3	0	0	65	66.5	108	26	4	0	0	138	140
H/TOT	213	41	5	2	0	261	266.1	469	97	17	0	1	584	593.5
18:00	39	10	1	0	0	50	50.5	100	17	2	1	0	120	122.3
18:15	61	18	1	0	0	80	80.5	93	18	3	0	0	114	115.5
18:30	46	14	1	0	0	61	61.5	78	14	3	1	0	96	98.8
18:45	73	14	4	0	0	91	93	82	13	0	0	0	95	95
H/TOT	219	56	7	0	0	282	285.5	353	62	8	2	0	425	431.6
19:00	58	9	1	0	0	68	68.5	73	17	1	1	0	92	93.8
19:15	33	13	1	0	0	47	47.5	58	11	2	0	0	71	72
19:30	35	6	1	0	0	42	42.5	51	11	1	0	0	63	63.5
19:45	49	9	1	0	0	59	59.5	62	7	2	0	0	71	72
H/TOT	175	37	4	0	0	216	218	244	46	6	1	0	297	301.3
20:00	63	9	1	0	0	73	73.5	55	8	3	0	0	66	67.5
20:15	37	3	0	0	0	40	40	46	9	1	0	0	56	56.5
20:30	25	6	2	0	0	33	34	35	7	0	0	0	42	42
20:45	18	6	0	0	0	24	24	34	6	1	0	0	41	41.5
H/TOT	143	24	3	0	0	170	171.5	170	30	5	0	0	205	207.5
21:00	21	6	0	0	0	27	27	40	5	0	0	0	45	45
21:15	25	5	0	0	0	30	30	35	4	2	0	0	41	42
21:30	31	1	0	0	0	32	32	29	5	0	0	0	34	34
21:45	27	6	0	0	0	33	33	17	3	0	0	0	20	20
H/TOT	104	18	0	0	0	122	122	121	17	2	0	0	140	141
22:00	10	2	0	0	0	12	12	21	3	1	0	0	25	25.5
22:15	11	2	0	0	0	13	13	17	3	0	0	0	20	20
22:30	16	5	1	0	0	22	22.5	12	2	0	0	0	14	14
22:45	12	3	0	0	0	15	15	7	0	0	0	0	7	7
H/TOT	49	12	1	0	0	62	62.5	57	8	1	0	0	66	66.5
23:00	16	0	0	0	0	16	16	10	6	1	0	0	17	17.5
23:15	9	1	1	0	0	11	11.5	12	3	0	0	0	15	15
23:30	6	0	1	0	0	7	7.5	5	1	0	0	0	6	6
23:45	5	1	0	0	0	6	6	3	1	0	0	0	4	4
H/TOT	36	2	2	0	0	40	41	30	11	1	0	0	42	42.5
24 TOT	2934	644	140	11	2	3731	3817	3828	741	165	11	5	4750	4852

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 10/11/17
Location: Enniskerry Road



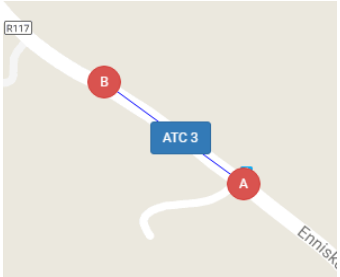
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	4	1	0	0	0	5	5	8	1	1	0	0	10	10.5
00:15	2	0	1	0	0	3	3.5	10	0	0	0	0	10	10
00:30	3	2	0	0	0	5	5	1	1	0	0	0	2	2
00:45	2	0	0	0	0	2	2	2	1	0	0	0	3	3
H/TOT	11	3	1	0	0	15	15.5	21	3	1	0	0	25	25.5
01:00	4	0	0	0	0	4	4	2	3	0	0	0	5	5
01:15	1	1	0	0	0	2	2	1	0	0	0	0	1	1
01:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	7	1	0	0	0	8	8	4	3	0	0	0	7	7
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:30	0	1	0	0	0	1	1	2	0	0	0	0	2	2
02:45	1	1	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	1	2	0	0	0	3	3	2	1	0	0	0	3	3
03:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:15	0	1	0	0	0	1	1	1	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	1	0	0	0	0	1	1	0	1	0	0	0	1	1
H/TOT	2	1	0	0	0	3	3	2	1	0	0	0	3	3
04:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	0	0	0	0	1	1	0	1	0	0	0	1	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	1	1	0	0	0	2	2
05:00	0	1	0	0	0	1	1	3	0	0	0	0	3	3
05:15	1	2	1	0	0	4	4.5	1	0	2	0	0	3	4
05:30	6	0	1	0	0	7	7.5	3	0	0	0	0	3	3
05:45	2	1	2	0	0	5	6	4	0	2	0	0	6	7
H/TOT	9	4	4	0	0	17	19	11	0	4	0	0	15	17
06:00	3	1	0	0	0	4	4	3	0	1	0	0	4	4.5
06:15	5	0	0	0	0	5	5	7	1	1	0	0	9	9.5
06:30	16	5	1	0	0	22	22.5	7	1	1	0	0	9	9.5
06:45	16	5	1	0	0	22	22.5	13	2	1	0	0	16	16.5
H/TOT	40	11	2	0	0	53	54	30	4	4	0	0	38	40
07:00	16	10	2	1	0	29	31.3	16	4	1	0	0	21	21.5
07:15	18	16	3	1	0	38	40.8	23	7	0	0	0	30	30
07:30	47	13	3	1	0	64	66.8	39	13	3	0	0	55	56.5
07:45	46	9	7	0	0	62	65.5	64	11	1	0	0	76	76.5

H/TOT	127	48	15	3	0	193	204.4	142	35	5	0	0	182	184.5
08:00	38	10	3	0	0	51	52.5	84	13	3	0	0	100	101.5
08:15	50	10	1	0	0	61	61.5	117	25	3	0	0	145	146.5
08:30	65	15	0	0	0	80	80	153	34	7	0	0	194	197.5
08:45	87	27	2	0	0	116	117	89	19	1	0	0	109	109.5
H/TOT	240	62	6	0	0	308	311	443	91	14	0	0	548	555
09:00	90	23	1	1	0	115	116.8	69	10	2	0	0	81	82
09:15	44	7	2	0	1	54	56	69	9	1	0	0	79	79.5
09:30	41	15	5	1	0	62	65.8	43	12	7	0	0	62	65.5
09:45	34	9	2	0	0	45	46	37	4	4	0	1	46	49
H/TOT	209	54	10	2	1	276	284.6	218	35	14	0	1	268	276
10:00	28	6	3	0	0	37	38.5	43	10	1	0	0	54	54.5
10:15	36	8	1	1	0	46	47.8	48	11	3	2	0	64	68.1
10:30	24	6	4	0	0	34	36	41	12	2	1	0	56	58.3
10:45	31	10	1	0	0	42	42.5	27	0	1	0	0	28	28.5
H/TOT	119	30	9	1	0	159	164.8	159	33	7	3	0	202	209.4
11:00	30	6	3	0	0	39	40.5	30	8	4	1	0	43	46.3
11:15	24	10	0	1	0	35	36.3	32	14	3	0	0	49	50.5
11:30	34	8	2	0	0	44	45	49	10	1	1	0	61	62.8
11:45	54	5	5	0	1	65	68.5	44	10	2	0	1	57	59
H/TOT	142	29	10	1	1	183	190.3	155	42	10	2	1	210	218.6
12:00	34	8	1	0	0	43	43.5	35	11	7	0	0	53	56.5
12:15	44	9	5	0	0	58	60.5	49	9	0	3	0	61	64.9
12:30	48	8	4	0	0	60	62	39	6	2	0	0	47	48
12:45	40	14	3	1	0	58	60.8	54	9	4	0	0	67	69
H/TOT	166	39	13	1	0	219	226.8	177	35	13	3	0	228	238.4
13:00	36	6	3	1	0	46	48.8	60	20	2	0	0	82	83
13:15	37	20	1	1	0	59	60.8	52	12	3	1	1	69	72.8
13:30	54	11	2	0	0	67	68	44	14	2	0	1	61	63
13:45	61	14	4	0	1	80	83	55	17	4	0	0	76	78
H/TOT	188	51	10	2	1	252	260.6	211	63	11	1	2	288	296.8
14:00	38	13	4	1	0	56	59.3	83	13	4	0	0	100	102
14:15	62	18	4	0	0	84	86	89	19	1	0	0	109	109.5
14:30	77	21	2	0	0	100	101	65	12	2	2	0	81	84.6
14:45	74	12	2	1	0	89	91.3	58	10	5	0	0	73	75.5
H/TOT	251	64	12	2	0	329	337.6	295	54	12	2	0	363	371.6
15:00	50	11	2	0	0	63	64	62	13	6	0	0	81	84
15:15	59	11	4	0	0	74	76	55	16	1	1	1	74	76.8
15:30	60	10	2	0	1	73	75	62	17	4	0	0	83	85
15:45	63	10	3	0	0	76	77.5	69	18	1	1	0	89	90.8
H/TOT	232	42	11	0	1	286	292.5	248	64	12	2	1	327	336.6
16:00	77	10	4	0	0	91	93	88	12	10	0	0	110	115
16:15	49	19	3	0	0	71	72.5	87	23	4	1	0	115	118.3
16:30	70	14	2	0	0	86	87	86	24	5	0	0	115	117.5
16:45	38	10	2	0	0	50	51	123	22	4	0	0	149	151
H/TOT	234	53	11	0	0	298	303.5	384	81	23	1	0	489	501.8
17:00	46	15	0	1	0	62	63.3	121	17	5	0	0	143	145.5
17:15	58	6	2	0	0	66	67	102	21	1	1	0	125	126.8
17:30	63	7	2	0	0	72	73	100	20	1	0	0	121	121.5

17:45	47	13	5	0	0	65	67.5	94	20	1	0	0	115	115.5
H/TOT	214	41	9	1	0	265	270.8	417	78	8	1	0	504	509.3
18:00	56	11	2	0	0	69	70	99	16	3	0	0	118	119.5
18:15	41	10	1	0	0	52	52.5	99	14	3	0	0	116	117.5
18:30	50	11	0	0	0	61	61	92	22	3	0	0	117	118.5
18:45	47	8	2	0	0	57	58	66	12	2	0	0	80	81
H/TOT	194	40	5	0	0	239	241.5	356	64	11	0	0	431	436.5
19:00	49	15	0	0	0	64	64	61	10	1	1	0	73	74.8
19:15	40	7	1	0	0	48	48.5	36	10	4	0	0	50	52
19:30	31	3	0	0	0	34	34	39	9	1	0	0	49	49.5
19:45	29	6	1	0	0	36	36.5	30	6	1	0	0	37	37.5
H/TOT	149	31	2	0	0	182	183	166	35	7	1	0	209	213.8
20:00	19	10	0	0	0	29	29	31	4	1	0	0	36	36.5
20:15	20	1	0	0	0	21	21	31	7	0	0	1	39	40
20:30	21	5	0	0	0	26	26	38	5	0	0	0	43	43
20:45	16	4	0	0	0	20	20	16	6	3	0	0	25	26.5
H/TOT	76	20	0	0	0	96	96	116	22	4	0	1	143	146
21:00	18	2	0	0	0	20	20	20	2	0	0	0	22	22
21:15	17	4	0	0	0	21	21	22	3	1	0	0	26	26.5
21:30	17	4	1	0	0	22	22.5	13	3	0	0	0	16	16
21:45	8	5	0	0	0	13	13	15	3	1	0	0	19	19.5
H/TOT	60	15	1	0	0	76	76.5	70	11	2	0	0	83	84
22:00	7	6	0	0	0	13	13	11	3	1	0	0	15	15.5
22:15	12	3	1	0	0	16	16.5	20	3	1	0	0	24	24.5
22:30	13	1	1	0	0	15	15.5	15	1	0	0	0	16	16
22:45	9	3	1	0	0	13	13.5	7	1	0	0	0	8	8
H/TOT	41	13	3	0	0	57	58.5	53	8	2	0	0	63	64
23:00	4	0	0	0	0	4	4	13	0	1	0	0	14	14.5
23:15	11	0	0	0	0	11	11	8	1	0	0	0	9	9
23:30	6	3	2	0	0	11	12	5	1	0	0	0	6	6
23:45	4	2	0	0	0	6	6	9	0	0	0	0	9	9
H/TOT	25	5	2	0	0	32	33	35	2	1	0	0	38	38.5
24 TOT	2740	659	136	13	4	3552	3641	3716	766	165	16	6	4669	4778

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 11/11/17
Location: Enniskerry Road



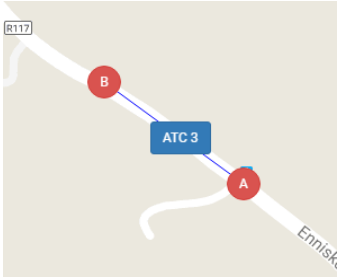
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	3	2	0	0	0	5	5	6	0	1	0	0	7	7.5
00:15	4	2	0	0	0	6	6	3	3	0	0	0	6	6
00:30	5	1	0	0	0	6	6	4	0	0	0	0	4	4
00:45	6	1	1	0	0	8	8.5	6	3	0	0	0	9	9
H/TOT	18	6	1	0	0	25	25.5	19	6	1	0	0	26	26.5
01:00	3	1	0	0	0	4	4	11	1	0	0	0	12	12
01:15	5	0	0	0	0	5	5	5	0	0	0	0	5	5
01:30	6	0	0	0	0	6	6	5	0	1	0	0	6	6.5
01:45	2	3	0	0	0	5	5	3	1	0	0	0	4	4
H/TOT	16	4	0	0	0	20	20	24	2	1	0	0	27	27.5
02:00	1	1	0	0	0	2	2	2	1	0	0	0	3	3
02:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	3	2	0	0	0	5	5
02:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	5	1	0	0	0	6	6	7	3	0	0	0	10	10
03:00	1	1	0	0	0	2	2	3	0	0	0	0	3	3
03:15	1	0	0	0	0	1	1	1	1	0	0	0	2	2
03:30	3	1	0	0	0	4	4	1	1	0	0	0	2	2
03:45	2	1	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	7	3	0	0	0	10	10	7	2	0	0	0	9	9
04:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3
04:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2
04:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
04:45	1	1	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	4	1	0	0	0	5	5	7	1	0	0	0	8	8
05:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	1	0	0	0	1	1	2	0	0	0	0	2	2
05:45	2	1	1	0	0	4	4.5	3	0	1	0	0	4	4.5
H/TOT	2	3	1	0	0	6	6.5	5	0	1	0	0	6	6.5
06:00	0	0	0	0	0	0	0	2	1	2	0	0	5	6
06:15	0	2	0	1	0	3	4.3	1	0	0	0	0	1	1
06:30	2	0	0	0	0	2	2	2	0	2	0	0	4	5
06:45	2	0	1	0	0	3	3.5	4	1	0	0	0	5	5
H/TOT	4	2	1	1	0	8	9.8	9	2	4	0	0	15	17
07:00	2	0	3	0	0	5	6.5	4	1	0	1	0	6	7.3
07:15	5	4	1	1	0	11	12.8	8	3	0	0	0	11	11
07:30	8	2	0	0	0	10	10	6	4	0	0	0	10	10
07:45	7	2	1	0	1	11	12.5	14	5	3	0	0	22	23.5

H/TOT	22	8	5	1	1	37	41.8	32	13	3	1	0	49	51.8
08:00	15	1	3	0	0	19	20.5	9	5	0	0	0	14	14
08:15	16	5	1	1	0	23	24.8	15	3	4	0	0	22	24
08:30	18	7	0	0	0	25	25	23	7	2	0	1	33	35
08:45	20	9	4	0	0	33	35	22	7	0	0	0	29	29
H/TOT	69	22	8	1	0	100	105.3	69	22	6	0	1	98	102
09:00	29	7	2	0	2	40	43	49	7	2	1	0	59	61.3
09:15	28	4	2	0	0	34	35	54	9	0	1	0	64	65.3
09:30	33	4	0	0	0	37	37	67	14	6	0	0	87	90
09:45	37	5	0	1	0	43	44.3	65	20	3	0	0	88	89.5
H/TOT	127	20	4	1	2	154	159.3	235	50	11	2	0	298	306.1
10:00	42	7	2	0	0	51	52	63	16	1	0	0	80	80.5
10:15	46	13	0	0	0	59	59	57	11	1	0	0	69	69.5
10:30	46	5	1	1	0	53	54.8	79	11	2	0	0	92	93
10:45	52	13	1	1	0	67	68.8	68	7	1	0	0	76	76.5
H/TOT	186	38	4	2	0	230	234.6	267	45	5	0	0	317	319.5
11:00	34	14	2	0	1	51	53	48	8	3	0	0	59	60.5
11:15	51	10	1	2	0	64	67.1	76	10	1	0	0	87	87.5
11:30	48	11	1	0	0	60	60.5	64	11	3	0	0	78	79.5
11:45	55	9	1	0	0	65	65.5	60	16	0	0	1	77	78
H/TOT	188	44	5	2	1	240	246.1	248	45	7	0	1	301	305.5
12:00	50	13	1	0	0	64	64.5	69	19	0	1	0	89	90.3
12:15	56	15	1	1	0	73	74.8	52	12	3	0	0	67	68.5
12:30	50	17	2	1	0	70	72.3	69	18	4	1	0	92	95.3
12:45	71	16	0	1	0	88	89.3	75	12	1	0	0	88	88.5
H/TOT	227	61	4	3	0	295	300.9	265	61	8	2	0	336	342.6
13:00	61	16	0	0	0	77	77	61	9	1	1	0	72	73.8
13:15	68	17	2	0	0	87	88	68	14	1	0	0	83	83.5
13:30	55	12	1	0	0	68	68.5	49	15	1	0	0	65	65.5
13:45	54	11	0	1	0	66	67.3	62	11	2	1	0	76	78.3
H/TOT	238	56	3	1	0	298	300.8	240	49	5	2	0	296	301.1
14:00	56	13	0	0	0	69	69	62	4	1	0	0	67	67.5
14:15	51	9	3	0	0	63	64.5	54	9	2	0	0	65	66
14:30	66	16	1	0	0	83	83.5	66	8	1	1	0	76	77.8
14:45	50	13	0	1	0	64	65.3	66	12	2	0	0	80	81
H/TOT	223	51	4	1	0	279	282.3	248	33	6	1	0	288	292.3
15:00	59	10	0	0	0	69	69	59	8	1	0	0	68	68.5
15:15	54	12	3	0	0	69	70.5	55	5	0	0	0	60	60
15:30	42	13	4	0	0	59	61	45	14	1	0	0	60	60.5
15:45	62	12	2	0	0	76	77	61	5	1	0	0	67	67.5
H/TOT	217	47	9	0	0	273	277.5	220	32	3	0	0	255	256.5
16:00	66	10	0	0	0	76	76	43	6	1	0	0	50	50.5
16:15	54	6	4	0	0	64	66	57	7	1	0	0	65	65.5
16:30	49	21	1	0	0	71	71.5	54	8	1	0	0	63	63.5
16:45	49	11	2	0	0	62	63	51	7	0	0	0	58	58
H/TOT	218	48	7	0	0	273	276.5	205	28	3	0	0	236	237.5
17:00	57	8	1	0	0	66	66.5	41	5	2	0	0	48	49
17:15	32	10	1	0	0	43	43.5	45	4	2	0	0	51	52
17:30	37	5	0	0	0	42	42	35	8	0	0	0	43	43

17:45	41	3	1	0	0	45	45.5	37	6	1	0	0	44	44.5
H/TOT	167	26	3	0	0	196	197.5	158	23	5	0	0	186	188.5
18:00	25	8	0	0	0	33	33	26	6	1	0	0	33	33.5
18:15	24	7	1	0	0	32	32.5	29	9	2	1	0	41	43.3
18:30	30	6	0	0	0	36	36	43	9	1	0	0	53	53.5
18:45	25	6	0	0	0	31	31	22	4	0	0	0	26	26
H/TOT	104	27	1	0	0	132	132.5	120	28	4	1	0	153	156.3
19:00	24	2	0	0	0	26	26	27	4	0	0	0	31	31
19:15	23	2	0	0	0	25	25	27	7	1	0	0	35	35.5
19:30	23	7	1	0	0	31	31.5	31	5	0	0	0	36	36
19:45	21	5	1	0	0	27	27.5	28	4	1	0	0	33	33.5
H/TOT	91	16	2	0	0	109	110	113	20	2	0	0	135	136
20:00	22	1	0	0	0	23	23	17	5	1	0	0	23	23.5
20:15	16	3	0	0	0	19	19	10	3	0	0	0	13	13
20:30	13	1	1	0	0	15	15.5	20	2	1	0	0	23	23.5
20:45	13	6	1	0	0	20	20.5	19	3	0	0	0	22	22
H/TOT	64	11	2	0	0	77	78	66	13	2	0	0	81	82
21:00	15	0	0	0	0	15	15	8	1	1	0	0	10	10.5
21:15	5	5	0	0	0	10	10	9	0	0	0	0	9	9
21:30	15	3	1	0	0	19	19.5	12	4	0	0	0	16	16
21:45	16	5	0	0	0	21	21	11	3	0	0	0	14	14
H/TOT	51	13	1	0	0	65	65.5	40	8	1	0	0	49	49.5
22:00	11	1	0	0	0	12	12	11	7	1	0	0	19	19.5
22:15	8	3	0	0	0	11	11	9	2	0	0	0	11	11
22:30	9	4	2	0	0	15	16	9	0	0	0	0	9	9
22:45	10	4	0	0	0	14	14	10	4	1	0	0	15	15.5
H/TOT	38	12	2	0	0	52	53	39	13	2	0	0	54	55
23:00	12	1	0	0	0	13	13	15	2	0	0	0	17	17
23:15	5	2	0	0	0	7	7	7	2	0	0	0	9	9
23:30	8	2	1	0	0	11	11.5	9	2	0	0	0	11	11
23:45	11	4	0	0	0	15	15	9	1	0	0	0	10	10
H/TOT	36	9	1	0	0	46	46.5	40	7	0	0	0	47	47
24 TOT	2322	529	68	13	4	2936	2991	2683	506	80	9	2	3280	3334

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 3
Date : 12/11/17
Location: Enniskerry Road



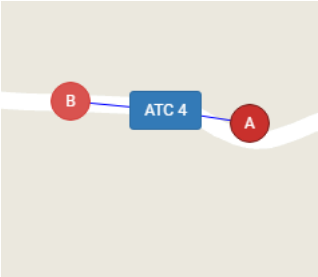
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	7	3	0	0	0	10	10	4	0	1	0	0	5	5.5
00:15	4	0	1	0	0	5	5.5	7	1	0	0	0	8	8
00:30	6	3	0	0	0	9	9	8	1	0	0	0	9	9
00:45	8	1	0	0	0	9	9	7	0	0	0	0	7	7
H/TOT	25	7	1	0	0	33	33.5	26	2	1	0	0	29	29.5
01:00	6	1	0	0	0	7	7	6	1	0	0	0	7	7
01:15	3	1	0	0	0	4	4	3	0	0	0	0	3	3
01:30	5	0	0	0	0	5	5	4	1	0	0	0	5	5
01:45	2	1	1	0	0	4	4.5	4	0	0	0	0	4	4
H/TOT	16	3	1	0	0	20	20.5	17	2	0	0	0	19	19
02:00	3	0	0	0	0	3	3	3	1	0	0	0	4	4
02:15	1	1	0	0	0	2	2	0	1	0	0	0	1	1
02:30	1	1	0	0	0	2	2	2	0	0	0	0	2	2
02:45	1	1	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	6	3	0	0	0	9	9	8	2	0	0	0	10	10
03:00	3	0	0	0	0	3	3	1	1	0	0	0	2	2
03:15	1	1	0	0	0	2	2	0	0	0	0	0	0	0
03:30	1	0	0	0	0	1	1	2	1	0	0	0	3	3
03:45	2	1	0	1	0	4	5.3	1	0	0	0	0	1	1
H/TOT	7	2	0	1	0	10	11.3	4	2	0	0	0	6	6
04:00	1	2	0	0	0	3	3	3	2	0	0	0	5	5
04:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2
04:30	6	0	0	0	0	6	6	3	0	0	0	0	3	3
04:45	3	0	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	13	2	0	0	0	15	15	10	2	0	0	0	12	12
05:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
05:15	1	0	0	0	0	1	1	0	1	0	0	0	1	1
05:30	0	1	0	0	0	1	1	2	0	0	0	0	2	2
05:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	4	1	0	0	0	5	5	5	1	0	0	0	6	6
06:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
06:15	1	0	0	0	0	1	1	1	0	0	1	0	2	3.3
06:30	0	0	0	0	0	0	0	1	1	0	0	0	2	2
06:45	0	1	1	0	0	2	2.5	4	0	0	0	0	4	4
H/TOT	2	1	1	0	0	4	4.5	8	1	0	1	0	10	11.3
07:00	1	0	1	1	0	3	4.8	5	0	1	0	0	6	6.5
07:15	4	0	0	0	0	4	4	3	1	0	0	0	4	4
07:30	3	1	1	0	0	5	5.5	4	4	0	0	0	8	8
07:45	6	3	2	0	0	11	12	10	4	0	0	0	14	14

H/TOT	14	4	4	1	0	23	26.3	22	9	1	0	0	32	32.5
08:00	6	2	0	0	0	8	8	12	5	0	0	0	17	17
08:15	10	1	0	0	0	11	11	16	4	0	0	0	20	20
08:30	12	1	0	0	0	13	13	16	3	0	0	0	19	19
08:45	20	10	1	0	0	31	31.5	15	4	0	0	0	19	19
H/TOT	48	14	1	0	0	63	63.5	59	16	0	0	0	75	75
09:00	39	9	0	0	0	48	48	26	9	1	0	0	36	36.5
09:15	24	10	0	0	0	34	34	33	6	0	4	0	43	48.2
09:30	22	8	0	0	0	30	30	49	10	0	0	0	59	59
09:45	33	14	0	0	0	47	47	62	20	1	1	0	84	85.8
H/TOT	118	41	0	0	0	159	159	170	45	2	5	0	222	229.5
10:00	35	6	0	0	0	41	41	72	12	2	0	0	86	87
10:15	37	8	3	0	0	48	49.5	87	16	2	0	0	105	106
10:30	44	15	2	0	0	61	62	89	26	3	0	0	118	119.5
10:45	41	9	0	0	0	50	50	72	22	2	1	0	97	99.3
H/TOT	157	38	5	0	0	200	202.5	320	76	9	1	0	406	411.8
11:00	51	4	2	0	0	57	58	54	11	0	0	0	65	65
11:15	46	17	1	0	0	64	64.5	73	11	1	1	0	86	87.8
11:30	67	10	1	0	0	78	78.5	84	9	2	0	0	95	96
11:45	56	13	0	0	0	69	69	112	14	1	0	1	128	129.5
H/TOT	220	44	4	0	0	268	270	323	45	4	1	1	374	378.3
12:00	61	11	1	0	0	73	73.5	89	11	1	0	0	101	101.5
12:15	68	19	0	0	0	87	87	64	9	2	0	0	75	76
12:30	95	16	3	0	0	114	115.5	86	10	2	0	0	98	99
12:45	78	9	0	0	0	87	87	97	10	0	1	0	108	109.3
H/TOT	302	55	4	0	0	361	363	336	40	5	1	0	382	385.8
13:00	60	11	2	0	0	73	74	61	8	0	0	0	69	69
13:15	61	11	2	1	0	75	77.3	60	14	0	1	0	75	76.3
13:30	75	15	0	0	0	90	90	83	10	0	0	0	93	93
13:45	51	10	1	0	0	62	62.5	65	11	3	0	0	79	80.5
H/TOT	247	47	5	1	0	300	303.8	269	43	3	1	0	316	318.8
14:00	59	7	2	1	0	69	71.3	72	10	2	1	0	85	87.3
14:15	69	24	0	0	0	93	93	72	11	0	0	1	84	85
14:30	76	14	0	0	0	90	90	76	12	1	0	0	89	89.5
14:45	81	15	0	0	0	96	96	73	10	1	0	0	84	84.5
H/TOT	285	60	2	1	0	348	350.3	293	43	4	1	1	342	346.3
15:00	64	11	2	0	0	77	78	82	13	0	0	0	95	95
15:15	73	11	0	0	0	84	84	59	18	1	1	0	79	80.8
15:30	60	15	0	0	0	75	75	49	13	0	0	0	62	62
15:45	72	17	1	0	0	90	90.5	57	17	1	0	0	75	75.5
H/TOT	269	54	3	0	0	326	327.5	247	61	2	1	0	311	313.3
16:00	80	18	2	1	0	101	103.3	42	14	0	0	0	56	56
16:15	77	14	0	0	0	91	91	55	13	0	0	0	68	68
16:30	85	21	0	1	0	107	108.3	68	10	1	1	0	80	81.8
16:45	64	11	0	0	0	75	75	47	8	2	0	0	57	58
H/TOT	306	64	2	2	0	374	377.6	212	45	3	1	0	261	263.8
17:00	60	13	1	0	0	74	74.5	46	6	1	1	0	54	55.8
17:15	69	16	1	0	0	86	86.5	45	11	2	0	0	58	59
17:30	53	10	1	0	0	64	64.5	48	6	0	0	0	54	54

17:45	48	9	0	1	0	58	59.3	40	9	0	0	0	49	49
H/TOT	230	48	3	1	0	282	284.8	179	32	3	1	0	215	217.8
18:00	39	13	0	0	0	52	52	40	7	1	0	0	48	48.5
18:15	42	7	1	0	0	50	50.5	32	13	1	0	0	46	46.5
18:30	33	4	0	0	0	37	37	39	7	0	0	0	46	46
18:45	22	7	0	0	0	29	29	23	3	0	0	0	26	26
H/TOT	136	31	1	0	0	168	168.5	134	30	2	0	0	166	167
19:00	22	5	0	0	0	27	27	25	4	1	0	0	30	30.5
19:15	24	3	0	0	0	27	27	25	1	0	0	0	26	26
19:30	28	5	1	0	0	34	34.5	22	2	0	0	0	24	24
19:45	18	3	1	0	0	22	22.5	21	3	0	0	0	24	24
H/TOT	92	16	2	0	0	110	111	93	10	1	0	0	104	104.5
20:00	17	5	0	0	0	22	22	16	0	1	0	0	17	17.5
20:15	18	4	1	0	0	23	23.5	14	2	0	0	0	16	16
20:30	17	3	2	0	0	22	23	20	1	1	0	0	22	22.5
20:45	19	3	0	0	0	22	22	14	4	0	0	0	18	18
H/TOT	71	15	3	0	0	89	90.5	64	7	2	0	0	73	74
21:00	8	3	0	0	0	11	11	13	5	1	1	0	20	21.8
21:15	16	1	0	0	0	17	17	12	1	0	0	0	13	13
21:30	11	3	1	0	0	15	15.5	12	5	1	0	0	18	18.5
21:45	10	0	0	0	0	10	10	6	2	0	0	0	8	8
H/TOT	45	7	1	0	0	53	53.5	43	13	2	1	0	59	61.3
22:00	8	2	0	1	0	11	12.3	13	0	1	0	0	14	14.5
22:15	11	1	0	0	0	12	12	13	0	0	0	0	13	13
22:30	2	0	1	0	0	3	3.5	5	0	0	0	0	5	5
22:45	5	2	0	0	0	7	7	3	1	1	0	0	5	5.5
H/TOT	26	5	1	1	0	33	34.8	34	1	2	0	0	37	38
23:00	6	1	0	0	0	7	7	6	0	0	0	0	6	6
23:15	9	0	0	0	0	9	9	6	3	0	0	0	9	9
23:30	4	1	1	0	0	6	6.5	3	1	0	0	0	4	4
23:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	21	2	1	0	0	24	24.5	16	4	0	0	0	20	20
24 TOT	2660	564	45	8	0	3277	3310	2892	532	46	15	2	3487	3532

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 06/11/17
Location : R116



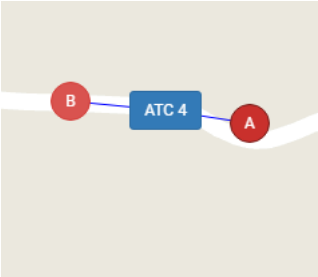
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3
00:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	2	0	0	0	0	2	2	5	0	0	0	0	5	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	3	0	0	0	0	3	3
06:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1
06:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3
06:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0
06:45	2	0	0	0	0	2	2	8	1	0	0	0	9	9
H/TOT	4	0	0	0	0	4	4	11	2	0	0	0	13	13
07:00	6	0	1	0	0	7	7.5	12	1	0	0	0	13	13
07:15	2	2	0	0	0	4	4	19	1	1	1	0	22	23.8
07:30	4	1	1	0	0	6	6.5	10	3	0	0	0	13	13
07:45	9	3	0	1	0	13	14.3	18	3	1	0	0	22	22.5

H/TOT	21	6	2	1	0	30	32.3	59	8	2	1	0	70	72.3
08:00	13	2	0	0	0	15	15	19	1	0	1	0	21	22.3
08:15	14	5	0	0	0	19	19	24	1	0	0	0	25	25
08:30	13	0	0	0	0	13	13	18	1	1	0	0	20	20.5
08:45	15	1	1	0	0	17	17.5	28	2	0	0	0	30	30
H/TOT	55	8	1	0	0	64	64.5	89	5	1	1	0	96	97.8
09:00	24	2	0	0	0	26	26	15	3	1	0	0	19	19.5
09:15	16	3	2	0	0	21	22	18	1	0	0	0	19	19
09:30	6	3	0	0	0	9	9	46	2	1	0	0	49	49.5
09:45	9	0	0	0	0	9	9	14	2	1	0	0	17	17.5
H/TOT	55	8	2	0	0	65	66	93	8	3	0	0	104	105.5
10:00	8	0	0	0	0	8	8	13	3	0	0	0	16	16
10:15	10	0	1	0	0	11	11.5	8	2	0	0	0	10	10
10:30	4	1	1	1	0	7	8.8	8	1	1	0	0	10	10.5
10:45	9	1	1	0	0	11	11.5	7	3	0	0	0	10	10
H/TOT	31	2	3	1	0	37	39.8	36	9	1	0	0	46	46.5
11:00	13	4	1	0	0	18	18.5	8	2	0	0	0	10	10
11:15	7	3	0	0	0	10	10	11	2	0	1	0	14	15.3
11:30	7	2	1	0	0	10	10.5	1	1	1	0	0	3	3.5
11:45	6	5	0	0	0	11	11	10	2	1	0	0	13	13.5
H/TOT	33	14	2	0	0	49	50	30	7	2	1	0	40	42.3
12:00	14	3	0	0	0	17	17	11	1	0	0	0	12	12
12:15	9	0	2	0	0	11	12	12	2	1	0	0	15	15.5
12:30	7	1	2	0	0	10	11	6	1	0	0	0	7	7
12:45	14	4	0	0	0	18	18	7	2	0	0	0	9	9
H/TOT	44	8	4	0	0	56	58	36	6	1	0	0	43	43.5
13:00	18	2	0	0	0	20	20	12	3	0	0	0	15	15
13:15	10	2	0	0	0	12	12	25	2	1	0	0	28	28.5
13:30	10	3	1	0	0	14	14.5	13	1	2	0	0	16	17
13:45	20	2	1	0	0	23	23.5	10	1	0	0	0	11	11
H/TOT	58	9	2	0	0	69	70	60	7	3	0	0	70	71.5
14:00	4	2	0	0	0	6	6	22	3	0	0	0	25	25
14:15	12	0	0	0	0	12	12	11	3	1	0	0	15	15.5
14:30	13	0	0	0	0	13	13	13	3	0	0	0	16	16
14:45	16	4	0	0	0	20	20	15	0	0	1	0	16	17.3
H/TOT	45	6	0	0	0	51	51	61	9	1	1	0	72	73.8
15:00	13	1	1	0	0	15	15.5	24	3	0	0	0	27	27
15:15	11	1	0	0	0	12	12	21	2	1	0	0	24	24.5
15:30	13	1	0	0	0	14	14	13	1	1	0	0	15	15.5
15:45	14	1	0	0	0	15	15	9	3	0	0	0	12	12
H/TOT	51	4	1	0	0	56	56.5	67	9	2	0	0	78	79
16:00	12	4	0	0	0	16	16	7	3	0	0	0	10	10
16:15	12	4	0	0	0	16	16	10	3	0	0	0	13	13
16:30	17	3	0	0	0	20	20	9	2	0	0	0	11	11
16:45	14	2	0	0	0	16	16	12	2	0	0	0	14	14
H/TOT	55	13	0	0	0	68	68	38	10	0	0	0	48	48
17:00	12	4	0	0	0	16	16	12	1	0	0	0	13	13
17:15	23	1	0	0	0	24	24	10	3	0	0	0	13	13
17:30	22	3	1	0	0	26	26.5	9	1	0	0	0	10	10

17:45	13	1	1	0	0	15	15.5	22	1	0	0	0	23	23
H/TOT	70	9	2	0	0	81	82	53	6	0	0	0	59	59
18:00	7	2	0	1	0	10	11.3	7	0	0	0	0	7	7
18:15	11	0	0	0	0	11	11	8	0	0	0	0	8	8
18:30	15	0	0	0	0	15	15	9	0	0	0	0	9	9
18:45	16	1	0	0	0	17	17	6	1	0	0	0	7	7
H/TOT	49	3	0	1	0	53	54.3	30	1	0	0	0	31	31
19:00	12	0	0	0	0	12	12	5	1	0	0	0	6	6
19:15	6	1	0	0	0	7	7	13	2	0	0	0	15	15
19:30	10	0	0	0	0	10	10	14	1	0	0	0	15	15
19:45	18	2	0	0	0	20	20	7	1	0	0	0	8	8
H/TOT	46	3	0	0	0	49	49	39	5	0	0	0	44	44
20:00	8	1	0	0	0	9	9	3	0	0	0	0	3	3
20:15	6	1	0	0	0	7	7	12	0	0	0	0	12	12
20:30	5	2	0	0	0	7	7	8	1	0	0	0	9	9
20:45	8	1	0	0	0	9	9	1	0	0	0	0	1	1
H/TOT	27	5	0	0	0	32	32	24	1	0	0	0	25	25
21:00	11	2	0	0	0	13	13	2	0	0	0	0	2	2
21:15	4	0	0	0	0	4	4	3	1	0	0	0	4	4
21:30	5	0	0	0	0	5	5	2	0	0	0	0	2	2
21:45	2	2	0	0	0	4	4	4	2	0	0	0	6	6
H/TOT	22	4	0	0	0	26	26	11	3	0	0	0	14	14
22:00	5	1	0	0	0	6	6	6	0	0	0	0	6	6
22:15	6	1	0	0	0	7	7	1	0	0	0	0	1	1
22:30	4	1	0	0	0	5	5	3	0	0	0	0	3	3
22:45	1	0	1	0	0	2	2.5	3	0	0	0	0	3	3
H/TOT	16	3	1	0	0	20	20.5	13	0	0	0	0	13	13
23:00	5	0	0	0	0	5	5	3	0	1	0	0	4	4.5
23:15	1	0	0	0	0	1	1	4	0	0	0	0	4	4
23:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	7	0	0	0	0	7	7	8	0	1	0	0	9	9.5
24 TOT	693	105	20	3	0	821	834.9	771	96	17	4	0	888	901.7

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 07/11/17
Location : R116



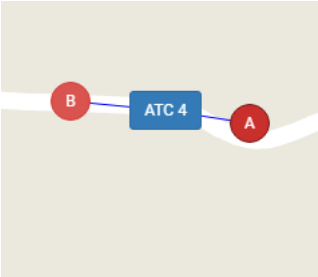
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	3	0	0	0	0	3	3	0	0	0	0	0	0	0
00:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
00:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
00:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	7	0	0	0	0	7	7	1	0	0	0	0	1	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
03:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	4	0	0	0	0	4	4
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	4	0	0	0	0	4	4
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	2	0	0	0	0	2	2	1	1	0	0	0	2	2
06:30	2	0	0	0	0	2	2	3	0	0	0	0	3	3
06:45	5	0	0	0	0	5	5	9	0	0	0	0	9	9
H/TOT	9	0	0	0	0	9	9	13	1	0	0	0	14	14
07:00	4	3	1	0	0	8	8.5	14	1	0	0	0	15	15
07:15	5	3	0	0	0	8	8	18	2	1	0	0	21	21.5
07:30	6	3	0	0	0	9	9	19	4	0	0	0	23	23
07:45	10	2	0	0	0	12	12	16	2	1	0	0	19	19.5

H/TOT	25	11	1	0	0	37	37.5	67	9	2	0	0	78	79
08:00	11	2	0	0	0	13	13	22	0	0	0	0	22	22
08:15	14	1	0	1	0	16	17.3	27	4	1	0	0	32	32.5
08:30	13	1	0	0	0	14	14	24	1	0	0	0	25	25
08:45	21	1	0	0	0	22	22	26	3	0	0	0	29	29
H/TOT	59	5	0	1	0	65	66.3	99	8	1	0	0	108	108.5
09:00	24	0	0	0	0	24	24	14	4	0	0	0	18	18
09:15	19	4	2	0	0	25	26	23	2	0	0	0	25	25
09:30	4	1	1	0	0	6	6.5	36	0	0	0	0	36	36
09:45	12	2	1	0	0	15	15.5	9	1	4	1	0	15	18.3
H/TOT	59	7	4	0	0	70	72	82	7	4	1	0	94	97.3
10:00	10	3	0	0	0	13	13	15	1	0	0	0	16	16
10:15	7	1	0	0	0	8	8	9	3	1	0	0	13	13.5
10:30	13	2	0	0	0	15	15	5	2	2	0	0	9	10
10:45	7	2	1	0	0	10	10.5	12	3	1	0	0	16	16.5
H/TOT	37	8	1	0	0	46	46.5	41	9	4	0	0	54	56
11:00	5	3	2	0	0	10	11	8	0	0	0	0	8	8
11:15	11	0	0	0	0	11	11	4	4	0	0	0	8	8
11:30	7	3	2	0	0	12	13	5	3	0	0	0	8	8
11:45	8	4	0	0	0	12	12	10	1	0	0	0	11	11
H/TOT	31	10	4	0	0	45	47	27	8	0	0	0	35	35
12:00	9	5	1	0	0	15	15.5	7	3	1	0	0	11	11.5
12:15	7	1	0	0	0	8	8	14	0	0	0	0	14	14
12:30	3	3	0	0	1	7	8	13	2	0	0	0	15	15
12:45	12	5	1	0	0	18	18.5	7	2	0	0	1	10	11
H/TOT	31	14	2	0	1	48	50	41	7	1	0	1	50	51.5
13:00	9	0	1	0	0	10	10.5	6	1	0	0	0	7	7
13:15	9	0	1	0	0	10	10.5	6	2	1	0	0	9	9.5
13:30	8	2	0	0	0	10	10	10	1	2	0	0	13	14
13:45	21	2	0	0	0	23	23	10	3	1	0	0	14	14.5
H/TOT	47	4	2	0	0	53	54	32	7	4	0	0	43	45
14:00	3	0	1	0	0	4	4.5	17	4	1	0	0	22	22.5
14:15	10	1	0	0	0	11	11	13	1	1	0	0	15	15.5
14:30	19	2	0	0	0	21	21	10	1	1	0	0	12	12.5
14:45	20	5	0	0	0	25	25	9	1	0	0	0	10	10
H/TOT	52	8	1	0	0	61	61.5	49	7	3	0	0	59	60.5
15:00	9	0	0	0	0	9	9	28	1	0	0	0	29	29
15:15	6	1	0	0	0	7	7	8	3	0	0	0	11	11
15:30	10	2	1	1	0	14	15.8	5	2	0	0	0	7	7
15:45	9	3	1	0	0	13	13.5	10	1	0	0	0	11	11
H/TOT	34	6	2	1	0	43	45.3	51	7	0	0	0	58	58
16:00	15	2	1	0	0	18	18.5	14	1	0	0	0	15	15
16:15	26	3	0	0	0	29	29	17	3	1	0	0	21	21.5
16:30	18	0	0	0	0	18	18	17	2	0	1	0	20	21.3
16:45	19	1	0	1	0	21	22.3	19	0	0	0	0	19	19
H/TOT	78	6	1	1	0	86	87.8	67	6	1	1	0	75	76.8
17:00	12	3	1	0	0	16	16.5	18	2	0	0	0	20	20
17:15	12	1	0	0	0	13	13	7	2	0	0	0	9	9
17:30	22	2	1	0	0	25	25.5	13	1	0	0	0	14	14

17:45	19	1	0	0	0	20	20	10	0	2	0	0	12	13
H/TOT	65	7	2	0	0	74	75	48	5	2	0	0	55	56
18:00	19	3	1	0	0	23	23.5	12	1	0	0	0	13	13
18:15	19	0	0	0	0	19	19	11	2	0	0	0	13	13
18:30	13	1	2	0	0	16	17	13	1	0	0	0	14	14
18:45	23	0	0	0	0	23	23	9	0	2	0	0	11	12
H/TOT	74	4	3	0	0	81	82.5	45	4	2	0	0	51	52
19:00	10	1	0	0	0	11	11	11	1	1	0	0	13	13.5
19:15	10	1	0	0	0	11	11	7	0	0	0	0	7	7
19:30	15	1	0	0	0	16	16	12	2	0	0	0	14	14
19:45	12	3	0	0	0	15	15	10	1	0	0	0	11	11
H/TOT	47	6	0	0	0	53	53	40	4	1	0	0	45	45.5
20:00	12	0	0	0	0	12	12	12	0	1	0	0	13	13.5
20:15	11	2	0	0	0	13	13	4	1	0	0	0	5	5
20:30	12	2	0	0	0	14	14	2	1	1	0	0	4	4.5
20:45	7	1	0	0	0	8	8	8	0	1	0	0	9	9.5
H/TOT	42	5	0	0	0	47	47	26	2	3	0	0	31	32.5
21:00	6	0	0	0	0	6	6	4	0	0	0	0	4	4
21:15	10	0	0	0	0	10	10	2	1	0	0	0	3	3
21:30	8	1	0	0	0	9	9	6	1	0	0	0	7	7
21:45	5	0	0	0	0	5	5	1	1	0	0	0	2	2
H/TOT	29	1	0	0	0	30	30	13	3	0	0	0	16	16
22:00	6	0	0	0	0	6	6	1	0	0	0	0	1	1
22:15	9	2	1	0	0	12	12.5	5	0	0	0	0	5	5
22:30	6	0	0	0	0	6	6	9	0	0	0	0	9	9
22:45	0	0	1	0	0	1	1.5	7	0	0	0	0	7	7
H/TOT	21	2	2	0	0	25	26	22	0	0	0	0	22	22
23:00	1	0	1	0	0	2	2.5	1	0	0	0	0	1	1
23:15	2	0	0	0	0	2	2	3	1	0	0	0	4	4
23:30	1	0	0	0	0	1	1	4	0	0	0	0	4	4
23:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	4	0	1	0	0	5	5.5	10	1	0	0	0	11	11
24 TOT	754	104	26	3	1	888	905.9	782	95	28	2	1	908	925.6

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 08/11/17
Location : R116



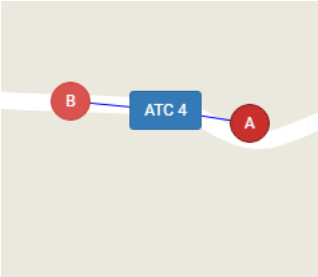
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	3	0	0	0	0	3	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	1	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
H/TOT	1	0	0	0	0	1	1	5	0	1	0	0	6	6.5
06:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3
06:30	3	0	0	0	0	3	3	4	0	0	0	0	4	4
06:45	2	0	0	0	0	2	2	8	1	0	0	0	9	9
H/TOT	5	0	0	0	0	5	5	16	1	0	0	0	17	17
07:00	1	1	2	0	0	4	5	19	0	0	0	0	19	19
07:15	3	1	1	0	0	5	5.5	10	2	1	0	0	13	13.5
07:30	8	1	0	0	0	9	9	25	0	0	0	0	25	25
07:45	9	0	2	0	0	11	12	16	4	1	0	0	21	21.5

H/TOT	21	3	5	0	0	29	31.5	70	6	2	0	0	78	79
08:00	3	3	1	0	0	7	7.5	11	3	0	0	0	14	14
08:15	15	1	0	0	0	16	16	26	6	1	0	0	33	33.5
08:30	18	4	0	0	0	22	22	30	1	0	0	0	31	31
08:45	23	3	0	0	0	26	26	24	1	0	0	0	25	25
H/TOT	59	11	1	0	0	71	71.5	91	11	1	0	0	103	103.5
09:00	23	3	0	0	0	26	26	20	2	1	0	0	23	23.5
09:15	19	5	1	0	0	25	25.5	19	2	2	0	0	23	24
09:30	9	1	2	0	0	12	13	38	5	0	0	0	43	43
09:45	10	5	1	0	0	16	16.5	13	4	1	0	0	18	18.5
H/TOT	61	14	4	0	0	79	81	90	13	4	0	0	107	109
10:00	12	0	2	0	0	14	15	7	3	1	0	0	11	11.5
10:15	14	2	0	0	0	16	16	15	3	1	0	0	19	19.5
10:30	11	3	2	0	0	16	17	20	2	2	0	0	24	25
10:45	10	1	0	0	0	11	11	6	0	1	0	0	7	7.5
H/TOT	47	6	4	0	0	57	59	48	8	5	0	0	61	63.5
11:00	5	2	1	0	0	8	8.5	8	3	1	0	0	12	12.5
11:15	6	4	0	0	0	10	10	8	2	1	0	0	11	11.5
11:30	7	4	0	0	0	11	11	11	2	0	0	0	13	13
11:45	15	2	0	0	0	17	17	8	2	0	0	0	10	10
H/TOT	33	12	1	0	0	46	46.5	35	9	2	0	0	46	47
12:00	13	1	1	0	0	15	15.5	7	1	0	0	0	8	8
12:15	15	5	0	0	0	20	20	14	1	1	0	0	16	16.5
12:30	13	2	0	0	0	15	15	10	5	0	0	0	15	15
12:45	12	5	0	0	0	17	17	13	0	2	0	0	15	16
H/TOT	53	13	1	0	0	67	67.5	44	7	3	0	0	54	55.5
13:00	11	2	0	0	0	13	13	15	2	0	0	0	17	17
13:15	9	1	0	0	0	10	10	12	0	0	0	0	12	12
13:30	21	2	0	0	0	23	23	13	3	0	0	0	16	16
13:45	21	1	1	0	0	23	23.5	8	1	0	0	0	9	9
H/TOT	62	6	1	0	0	69	69.5	48	6	0	0	0	54	54
14:00	6	1	0	0	0	7	7	21	3	1	0	0	25	25.5
14:15	8	2	1	0	0	11	11.5	13	1	1	0	0	15	15.5
14:30	22	3	1	0	0	26	26.5	21	1	0	0	0	22	22
14:45	22	4	0	0	0	26	26	11	3	2	0	0	16	17
H/TOT	58	10	2	0	0	70	71	66	8	4	0	0	78	80
15:00	21	3	0	0	0	24	24	30	4	0	0	0	34	34
15:15	10	6	0	0	0	16	16	18	3	1	0	0	22	22.5
15:30	16	3	0	0	0	19	19	20	0	0	0	0	20	20
15:45	21	2	0	0	0	23	23	19	2	0	0	0	21	21
H/TOT	68	14	0	0	0	82	82	87	9	1	0	0	97	97.5
16:00	11	2	1	0	0	14	14.5	19	2	0	0	0	21	21
16:15	16	2	0	0	0	18	18	4	0	0	0	0	4	4
16:30	32	2	1	0	0	35	35.5	14	1	0	0	0	15	15
16:45	16	4	0	0	0	20	20	9	0	1	0	0	10	10.5
H/TOT	75	10	2	0	0	87	88	46	3	1	0	0	50	50.5
17:00	24	1	0	0	0	25	25	18	1	0	0	0	19	19
17:15	11	0	1	1	0	13	14.8	14	1	0	0	0	15	15
17:30	21	2	0	0	0	23	23	15	1	0	0	0	16	16

17:45	11	2	0	0	0	13	13	10	3	0	0	0	13	13
H/TOT	67	5	1	1	0	74	75.8	57	6	0	0	0	63	63
18:00	18	4	1	0	0	23	23.5	11	3	1	0	0	15	15.5
18:15	15	0	0	0	0	15	15	8	3	0	0	0	11	11
18:30	10	1	0	0	0	11	11	10	1	0	0	0	11	11
18:45	11	1	0	0	0	12	12	15	0	0	0	0	15	15
H/TOT	54	6	1	0	0	61	61.5	44	7	1	0	0	52	52.5
19:00	16	3	0	0	0	19	19	5	1	0	0	0	6	6
19:15	15	3	2	0	0	20	21	13	0	0	0	0	13	13
19:30	13	1	0	0	0	14	14	17	1	0	0	0	18	18
19:45	11	0	0	0	0	11	11	16	0	1	0	0	17	17.5
H/TOT	55	7	2	0	0	64	65	51	2	1	0	0	54	54.5
20:00	8	0	0	0	0	8	8	6	0	0	0	0	6	6
20:15	10	3	0	0	0	13	13	7	1	0	0	0	8	8
20:30	5	2	0	0	0	7	7	8	1	0	0	0	9	9
20:45	7	4	1	0	0	12	12.5	3	0	0	0	0	3	3
H/TOT	30	9	1	0	0	40	40.5	24	2	0	0	0	26	26
21:00	2	3	1	0	0	6	6.5	9	1	1	0	0	11	11.5
21:15	7	0	0	0	0	7	7	6	0	0	0	0	6	6
21:30	13	3	0	0	0	16	16	1	0	0	0	0	1	1
21:45	8	1	0	0	0	9	9	3	1	0	0	0	4	4
H/TOT	30	7	1	0	0	38	38.5	19	2	1	0	0	22	22.5
22:00	6	0	0	0	0	6	6	4	0	0	0	0	4	4
22:15	7	0	0	0	0	7	7	7	0	0	0	0	7	7
22:30	6	1	0	0	0	7	7	3	0	0	0	0	3	3
22:45	4	0	0	0	0	4	4	5	1	0	0	0	6	6
H/TOT	23	1	0	0	0	24	24	19	1	0	0	0	20	20
23:00	6	0	0	0	0	6	6	6	0	0	0	0	6	6
23:15	3	1	0	0	0	4	4	4	1	1	0	0	6	6.5
23:30	5	0	0	0	0	5	5	3	1	1	0	0	5	5.5
23:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	15	1	0	0	0	16	16	16	2	2	0	0	20	21
24 TOT	823	135	27	1	0	986	1001	883	103	29	0	0	1015	1030

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 09/11/17
Location : R116



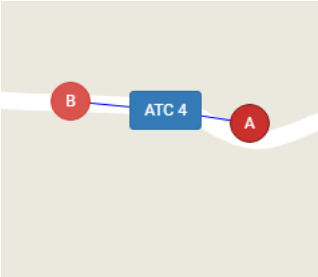
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	2	0	0	0	0	2	2	4	0	0	0	0	4	4
00:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	6	0	0	0	0	6	6
01:00	0	0	0	0	0	0	0	4	0	0	0	0	4	4
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	4	0	0	0	0	4	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	1	1	0	0	0	2	2	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
05:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	6	0	1	0	0	7	7.5
06:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2
06:30	2	0	0	0	0	2	2	3	1	0	0	0	4	4
06:45	2	1	0	0	0	3	3	11	1	0	0	0	12	12
H/TOT	4	1	0	0	0	5	5	16	3	0	0	0	19	19
07:00	3	0	1	0	0	4	4.5	11	1	0	0	0	12	12
07:15	4	4	0	0	0	8	8	18	1	1	0	0	20	20.5
07:30	6	3	1	0	0	10	10.5	20	3	0	0	0	23	23
07:45	9	3	0	0	0	12	12	13	3	1	0	0	17	17.5

H/TOT	22	10	2	0	0	34	35	62	8	2	0	0	72	73
08:00	7	0	0	0	0	7	7	21	2	0	0	0	23	23
08:15	17	1	0	0	0	18	18	25	1	0	0	0	26	26
08:30	13	1	0	0	0	14	14	33	2	1	0	0	36	36.5
08:45	30	1	0	0	0	31	31	29	2	1	0	0	32	32.5
H/TOT	67	3	0	0	0	70	70	108	7	2	0	0	117	118
09:00	28	2	1	0	0	31	31.5	30	4	1	0	0	35	35.5
09:15	15	2	0	0	0	17	17	26	1	1	0	0	28	28.5
09:30	9	2	0	0	0	11	11	29	1	0	0	0	30	30
09:45	9	4	1	0	0	14	14.5	10	1	0	0	0	11	11
H/TOT	61	10	2	0	0	73	74	95	7	2	0	0	104	105
10:00	10	0	0	0	0	10	10	13	2	2	0	0	17	18
10:15	10	2	0	0	0	12	12	14	2	1	0	0	17	17.5
10:30	11	0	1	0	0	12	12.5	12	1	1	0	0	14	14.5
10:45	7	1	1	0	0	9	9.5	9	1	1	0	0	11	11.5
H/TOT	38	3	2	0	0	43	44	48	6	5	0	0	59	61.5
11:00	20	1	0	0	0	21	21	11	1	1	0	0	13	13.5
11:15	22	2	0	0	0	24	24	8	0	0	0	0	8	8
11:30	9	4	1	0	0	14	14.5	8	1	1	0	0	10	10.5
11:45	11	2	0	1	0	14	15.3	54	5	5	0	0	64	66.5
H/TOT	62	9	1	1	0	73	74.8	81	7	7	0	0	95	98.5
12:00	9	3	0	0	0	12	12	16	1	1	0	0	18	18.5
12:15	13	0	0	1	0	14	15.3	9	0	0	0	0	9	9
12:30	11	3	0	1	0	15	16.3	8	3	0	0	0	11	11
12:45	13	2	0	0	0	15	15	19	1	1	0	0	21	21.5
H/TOT	46	8	0	2	0	56	58.6	52	5	2	0	0	59	60
13:00	12	0	2	0	0	14	15	6	2	0	0	0	8	8
13:15	11	1	0	0	0	12	12	9	4	1	0	0	14	14.5
13:30	20	2	0	0	0	22	22	13	4	1	0	0	18	18.5
13:45	23	3	1	0	0	27	27.5	13	3	1	0	0	17	17.5
H/TOT	66	6	3	0	0	75	76.5	41	13	3	0	0	57	58.5
14:00	12	1	0	0	0	13	13	21	0	1	0	0	22	22.5
14:15	14	1	0	0	0	15	15	11	0	0	0	0	11	11
14:30	23	2	0	0	0	25	25	12	3	0	0	0	15	15
14:45	21	7	1	0	0	29	29.5	16	1	0	0	0	17	17
H/TOT	70	11	1	0	0	82	82.5	60	4	1	0	0	65	65.5
15:00	10	3	0	0	0	13	13	17	1	1	0	0	19	19.5
15:15	13	2	0	0	0	15	15	20	5	0	0	0	25	25
15:30	14	4	0	0	0	18	18	11	4	2	0	0	17	18
15:45	17	0	0	0	0	17	17	13	3	0	0	0	16	16
H/TOT	54	9	0	0	0	63	63	61	13	3	0	0	77	78.5
16:00	10	4	0	0	0	14	14	17	1	1	0	0	19	19.5
16:15	16	4	0	0	0	20	20	6	1	0	0	0	7	7
16:30	18	2	1	0	0	21	21.5	15	1	3	0	0	19	20.5
16:45	22	4	0	0	0	26	26	15	0	0	0	0	15	15
H/TOT	66	14	1	0	0	81	81.5	53	3	4	0	0	60	62
17:00	16	4	0	0	0	20	20	19	2	0	0	0	21	21
17:15	21	2	1	0	0	24	24.5	21	1	2	1	0	25	27.3
17:30	14	0	1	0	0	15	15.5	14	1	0	0	0	15	15

17:45	12	1	1	0	0	14	14.5	13	1	0	0	0	14	14
H/TOT	63	7	3	0	0	73	74.5	67	5	2	1	0	75	77.3
18:00	9	2	0	0	0	11	11	5	1	0	0	0	6	6
18:15	18	1	0	0	0	19	19	21	0	0	0	0	21	21
18:30	12	2	1	0	0	15	15.5	12	2	0	0	0	14	14
18:45	15	0	0	0	0	15	15	25	1	0	0	0	26	26
H/TOT	54	5	1	0	0	60	60.5	63	4	0	0	0	67	67
19:00	5	0	0	0	0	5	5	13	0	0	0	0	13	13
19:15	13	0	0	0	0	13	13	10	0	0	0	0	10	10
19:30	14	3	0	0	0	17	17	14	0	0	0	0	14	14
19:45	7	0	0	0	0	7	7	11	1	0	0	0	12	12
H/TOT	39	3	0	0	0	42	42	48	1	0	0	0	49	49
20:00	12	2	1	0	0	15	15.5	5	1	1	0	0	7	7.5
20:15	12	2	0	0	0	14	14	8	0	1	0	0	9	9.5
20:30	8	0	0	0	0	8	8	5	1	0	0	0	6	6
20:45	8	2	0	0	0	10	10	10	2	0	0	0	12	12
H/TOT	40	6	1	0	0	47	47.5	28	4	2	0	0	34	35
21:00	11	0	0	0	0	11	11	3	0	0	0	0	3	3
21:15	10	1	0	0	0	11	11	3	0	0	0	0	3	3
21:30	6	2	0	0	0	8	8	4	0	0	0	0	4	4
21:45	5	1	0	0	0	6	6	5	0	0	0	0	5	5
H/TOT	32	4	0	0	0	36	36	15	0	0	0	0	15	15
22:00	1	0	1	0	0	2	2.5	4	0	0	0	0	4	4
22:15	8	1	0	0	0	9	9	7	0	0	0	0	7	7
22:30	4	0	0	0	0	4	4	4	1	0	0	0	5	5
22:45	2	0	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	15	1	1	0	0	17	17.5	19	1	0	0	0	20	20
23:00	5	0	0	0	0	5	5	3	0	0	0	0	3	3
23:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2
23:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
23:45	2	0	0	0	0	2	2	3	1	0	0	0	4	4
H/TOT	11	0	0	0	0	11	11	10	1	0	0	0	11	11
24 TOT	814	111	18	3	0	946	958.9	945	92	36	1	0	1074	1093

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 10/11/17
Location : R116



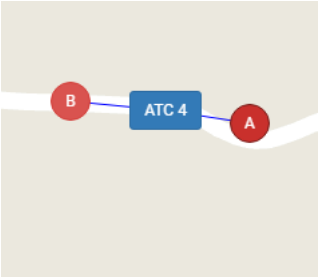
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
00:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
00:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
00:45	3	1	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	6	1	0	0	0	7	7	5	0	0	0	0	5	5
01:00	0	1	0	0	0	1	1	0	1	0	0	0	1	1
01:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	3	1	0	0	0	4	4	4	1	0	0	0	5	5
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	2	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:30	0	1	0	0	0	1	1	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	1	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:15	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
05:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:45	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
H/TOT	2	0	0	0	0	2	2	4	0	2	0	0	6	7
06:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	2	1	0	0	0	3	3
06:30	1	0	1	0	0	2	2.5	5	0	0	0	0	5	5
06:45	6	0	0	1	0	7	8.3	11	0	0	0	0	11	11
H/TOT	8	0	1	1	0	10	11.8	19	1	0	0	0	20	20
07:00	1	1	1	1	0	4	5.8	11	1	1	0	0	13	13.5
07:15	2	6	0	0	0	8	8	13	3	1	1	0	18	19.8
07:30	4	0	0	0	0	4	4	14	3	1	0	0	18	18.5
07:45	10	0	0	0	0	10	10	16	4	1	0	0	21	21.5

H/TOT	17	7	1	1	0	26	27.8	54	11	4	1	0	70	73.3
08:00	9	2	0	0	0	11	11	23	1	0	0	0	24	24
08:15	18	1	0	0	0	19	19	24	2	1	0	0	27	27.5
08:30	18	2	1	0	0	21	21.5	22	3	0	0	0	25	25
08:45	38	1	0	0	0	39	39	25	2	0	0	0	27	27
H/TOT	83	6	1	0	0	90	90.5	94	8	1	0	0	103	103.5
09:00	26	4	0	0	0	30	30	24	1	0	0	0	25	25
09:15	24	1	0	0	0	25	25	20	4	0	0	0	24	24
09:30	8	1	0	0	0	9	9	33	1	0	0	0	34	34
09:45	14	1	1	0	0	16	16.5	14	1	2	0	0	17	18
H/TOT	72	7	1	0	0	80	80.5	91	7	2	0	0	100	101
10:00	7	3	1	0	0	11	11.5	11	1	1	0	0	13	13.5
10:15	11	1	0	0	0	12	12	9	5	0	0	0	14	14
10:30	12	3	0	0	0	15	15	9	0	1	0	0	10	10.5
10:45	10	2	1	0	0	13	13.5	14	1	2	0	0	17	18
H/TOT	40	9	2	0	0	51	52	43	7	4	0	0	54	56
11:00	14	0	1	0	0	15	15.5	9	3	0	0	0	12	12
11:15	13	2	0	0	0	15	15	7	0	0	0	0	7	7
11:30	8	2	2	0	0	12	13	16	1	1	0	0	18	18.5
11:45	13	4	0	0	0	17	17	6	3	1	0	0	10	10.5
H/TOT	48	8	3	0	0	59	60.5	38	7	2	0	0	47	48
12:00	10	2	2	0	0	14	15	15	2	0	1	0	18	19.3
12:15	10	2	0	0	0	12	12	13	7	0	0	0	20	20
12:30	13	1	0	0	0	14	14	11	0	1	0	0	12	12.5
12:45	4	4	0	0	0	8	8	13	2	0	0	0	15	15
H/TOT	37	9	2	0	0	48	49	52	11	1	1	0	65	66.8
13:00	13	0	0	0	0	13	13	14	0	1	0	0	15	15.5
13:15	15	1	0	0	0	16	16	12	0	0	0	0	12	12
13:30	15	3	1	1	0	20	21.8	21	4	0	0	0	25	25
13:45	9	2	0	0	0	11	11	12	2	1	0	0	15	15.5
H/TOT	52	6	1	1	0	60	61.8	59	6	2	0	0	67	68
14:00	8	1	0	0	0	9	9	10	5	0	1	0	16	17.3
14:15	21	0	0	0	0	21	21	12	0	0	0	0	12	12
14:30	26	1	0	0	0	27	27	16	2	0	0	0	18	18
14:45	34	2	1	0	0	37	37.5	10	0	2	0	0	12	13
H/TOT	89	4	1	0	0	94	94.5	48	7	2	1	0	58	60.3
15:00	11	1	0	0	0	12	12	28	2	0	0	0	30	30
15:15	16	3	0	0	0	19	19	25	2	0	0	0	27	27
15:30	26	1	0	0	0	27	27	23	0	0	0	0	23	23
15:45	10	3	1	0	0	14	14.5	16	1	0	0	0	17	17
H/TOT	63	8	1	0	0	72	72.5	92	5	0	0	0	97	97
16:00	30	2	0	0	0	32	32	11	3	0	0	0	14	14
16:15	27	2	0	0	0	29	29	20	0	0	0	0	20	20
16:30	22	4	1	0	0	27	27.5	21	6	0	0	0	27	27
16:45	18	2	1	0	0	21	21.5	14	3	0	0	0	17	17
H/TOT	97	10	2	0	0	109	110	66	12	0	0	0	78	78
17:00	18	1	0	0	0	19	19	16	0	0	0	0	16	16
17:15	21	3	0	0	0	24	24	24	0	0	0	0	24	24
17:30	18	3	1	0	0	22	22.5	12	1	0	0	0	13	13

17:45	15	4	1	0	0	20	20.5	10	3	0	0	0	13	13
H/TOT	72	11	2	0	0	85	86	62	4	0	0	0	66	66
18:00	18	3	1	0	0	22	22.5	11	2	0	0	0	13	13
18:15	17	0	0	0	0	17	17	8	0	0	0	0	8	8
18:30	24	3	0	0	0	27	27	13	0	1	0	0	14	14.5
18:45	15	2	0	0	0	17	17	16	0	1	0	0	17	17.5
H/TOT	74	8	1	0	0	83	83.5	48	2	2	0	0	52	53
19:00	12	1	1	1	0	15	16.8	19	0	0	0	0	19	19
19:15	16	3	0	0	0	19	19	12	2	1	0	0	15	15.5
19:30	6	2	1	0	0	9	9.5	13	2	0	0	0	15	15
19:45	9	2	1	0	0	12	12.5	15	4	0	0	0	19	19
H/TOT	43	8	3	1	0	55	57.8	59	8	1	0	0	68	68.5
20:00	14	1	0	0	0	15	15	2	0	1	0	0	3	3.5
20:15	11	0	0	0	0	11	11	8	0	0	0	0	8	8
20:30	3	1	0	0	0	4	4	9	1	0	0	0	10	10
20:45	8	0	0	0	0	8	8	6	0	0	0	0	6	6
H/TOT	36	2	0	0	0	38	38	25	1	1	0	0	27	27.5
21:00	9	0	0	0	0	9	9	3	0	0	0	0	3	3
21:15	6	0	0	0	0	6	6	6	0	0	0	0	6	6
21:30	12	0	0	0	0	12	12	6	0	0	0	0	6	6
21:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	29	0	0	0	0	29	29	18	0	0	0	0	18	18
22:00	7	1	0	0	0	8	8	0	0	0	0	0	0	0
22:15	5	0	1	0	0	6	6.5	1	0	0	0	0	1	1
22:30	8	1	1	0	0	10	10.5	2	0	0	0	0	2	2
22:45	4	1	0	0	0	5	5	0	0	0	0	0	0	0
H/TOT	24	3	2	0	0	29	30	3	0	0	0	0	3	3
23:00	3	0	0	0	0	3	3	1	0	0	0	0	1	1
23:15	5	1	0	0	0	6	6	2	0	0	0	0	2	2
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	2	1	0	0	0	3	3	0	1	0	0	0	1	1
H/TOT	10	2	0	0	0	12	12	3	1	0	0	0	4	4
24 TOT	907	111	24	4	0	1046	1063	892	99	24	3	0	1018	1034

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 11/11/17
Location : R116



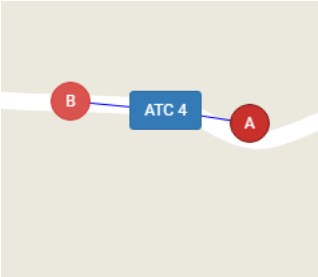
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	4	1	0	0	0	5	5	0	0	0	0	0	0	0
00:15	5	0	0	0	0	5	5	2	0	0	0	0	2	2
00:30	3	0	0	0	0	3	3	1	0	0	0	0	1	1
00:45	3	0	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	15	1	0	0	0	16	16	6	0	0	0	0	6	6
01:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
01:15	4	0	0	0	0	4	4	2	0	0	0	0	2	2
01:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	9	0	0	0	0	9	9	5	0	0	0	0	5	5
02:00	2	0	0	0	0	2	2	5	0	0	0	0	5	5
02:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	6	0	0	0	0	6	6
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	0	0	0	0	0	0	2	0	0	2	3
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:30	2	0	0	0	0	2	2	4	0	0	0	0	4	4
06:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	5	0	0	0	0	5	5	4	0	0	0	0	4	4
07:00	3	0	0	0	0	3	3	2	0	0	0	0	2	2
07:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:30	2	1	0	0	0	3	3	1	0	0	0	0	1	1
07:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4

H/TOT	6	1	0	0	0	7	7	7	0	0	0	0	7	7
08:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
08:15	2	1	0	0	0	3	3	2	0	0	0	0	2	2
08:30	1	1	0	0	0	2	2	6	0	0	0	0	6	6
08:45	2	0	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	7	2	0	0	0	9	9	13	0	0	0	0	13	13
09:00	3	1	2	0	0	6	7	9	0	0	0	0	9	9
09:15	3	1	1	0	0	5	5.5	10	0	0	0	0	10	10
09:30	6	1	0	0	0	7	7	13	0	1	0	0	14	14.5
09:45	13	2	1	0	0	16	16.5	13	1	0	0	0	14	14
H/TOT	25	5	4	0	0	34	36	45	1	1	0	0	47	47.5
10:00	20	0	0	0	0	20	20	12	2	1	0	0	15	15.5
10:15	12	0	2	0	0	14	15	11	0	0	0	0	11	11
10:30	20	3	0	0	0	23	23	15	0	2	0	0	17	18
10:45	16	2	1	0	0	19	19.5	25	1	1	0	0	27	27.5
H/TOT	68	5	3	0	0	76	77.5	63	3	4	0	0	70	72
11:00	12	2	0	0	0	14	14	14	0	0	0	0	14	14
11:15	15	5	0	0	0	20	20	15	0	0	0	0	15	15
11:30	11	1	0	1	0	13	14.3	14	0	0	0	0	14	14
11:45	15	2	2	0	0	19	20	15	2	0	0	0	17	17
H/TOT	53	10	2	1	0	66	68.3	58	2	0	0	0	60	60
12:00	24	1	0	1	0	26	27.3	10	1	0	0	0	11	11
12:15	17	0	0	0	0	17	17	13	0	0	0	0	13	13
12:30	11	2	1	0	0	14	14.5	13	0	0	1	0	14	15.3
12:45	28	0	1	0	0	29	29.5	20	3	0	0	0	23	23
H/TOT	80	3	2	1	0	86	88.3	56	4	0	1	0	61	62.3
13:00	18	2	0	0	0	20	20	21	1	1	0	0	23	23.5
13:15	25	2	0	0	0	27	27	21	1	0	0	0	22	22
13:30	19	1	0	0	0	20	20	14	0	1	0	0	15	15.5
13:45	17	1	1	0	0	19	19.5	19	1	0	0	0	20	20
H/TOT	79	6	1	0	0	86	86.5	75	3	2	0	0	80	81
14:00	30	0	2	0	0	32	33	19	2	0	0	0	21	21
14:15	23	0	0	0	0	23	23	20	3	2	0	0	25	26
14:30	14	2	1	0	0	17	17.5	21	3	0	0	0	24	24
14:45	17	2	0	0	0	19	19	15	1	1	0	0	17	17.5
H/TOT	84	4	3	0	0	91	92.5	75	9	3	0	0	87	88.5
15:00	12	2	1	0	0	15	15.5	16	0	0	0	0	16	16
15:15	16	3	0	0	0	19	19	27	2	0	0	0	29	29
15:30	12	1	1	0	0	14	14.5	25	1	0	0	0	26	26
15:45	13	1	0	0	0	14	14	28	0	0	0	0	28	28
H/TOT	53	7	2	0	0	62	63	96	3	0	0	0	99	99
16:00	18	0	0	0	0	18	18	17	0	0	0	0	17	17
16:15	16	2	0	0	0	18	18	14	0	0	0	0	14	14
16:30	10	0	0	0	0	10	10	16	0	0	0	0	16	16
16:45	14	2	0	0	0	16	16	7	0	0	0	0	7	7
H/TOT	58	4	0	0	0	62	62	54	0	0	0	0	54	54
17:00	18	0	0	0	0	18	18	8	0	0	0	0	8	8
17:15	13	1	0	0	0	14	14	15	0	0	0	0	15	15
17:30	9	0	0	0	0	9	9	14	0	0	0	0	14	14

17:45	9	0	0	0	0	9	9	6	1	0	0	0	7	7
H/TOT	49	1	0	0	0	50	50	43	1	0	0	0	44	44
18:00	9	0	0	0	0	9	9	7	0	0	0	0	7	7
18:15	3	0	0	0	0	3	3	12	0	0	0	0	12	12
18:30	13	0	0	0	0	13	13	12	0	0	0	0	12	12
18:45	13	0	1	0	0	14	14.5	11	0	0	0	0	11	11
H/TOT	38	0	1	0	0	39	39.5	42	0	0	0	0	42	42
19:00	7	0	0	0	0	7	7	12	0	0	0	0	12	12
19:15	15	1	0	0	0	16	16	6	0	0	0	0	6	6
19:30	6	0	0	0	0	6	6	10	0	1	0	0	11	11.5
19:45	7	0	0	0	0	7	7	9	0	0	0	0	9	9
H/TOT	35	1	0	0	0	36	36	37	0	1	0	0	38	38.5
20:00	7	0	0	0	0	7	7	2	0	0	0	0	2	2
20:15	5	1	0	0	0	6	6	4	0	0	0	0	4	4
20:30	4	0	0	0	0	4	4	6	0	0	0	0	6	6
20:45	6	1	0	0	0	7	7	4	0	0	0	0	4	4
H/TOT	22	2	0	0	0	24	24	16	0	0	0	0	16	16
21:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
21:15	3	1	0	0	0	4	4	3	0	0	0	0	3	3
21:30	6	0	0	0	0	6	6	3	0	0	0	0	3	3
21:45	9	1	0	0	0	10	10	4	0	0	0	0	4	4
H/TOT	20	2	0	0	0	22	22	12	0	0	0	0	12	12
22:00	7	0	1	0	0	8	8.5	4	0	0	0	0	4	4
22:15	5	0	0	0	0	5	5	3	0	0	0	0	3	3
22:30	1	1	0	0	0	2	2	2	0	0	0	0	2	2
22:45	4	1	0	0	0	5	5	4	0	0	0	0	4	4
H/TOT	17	2	1	0	0	20	20.5	13	0	0	0	0	13	13
23:00	4	0	0	0	0	4	4	1	0	0	0	0	1	1
23:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
23:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
23:45	2	0	0	0	0	2	2	3	0	0	1	0	4	5.3
H/TOT	8	0	0	0	0	8	8	7	0	0	1	0	8	9.3
24 TOT	734	56	19	2	0	811	823.1	734	26	13	2	0	775	784.1

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 4
Date : 12/11/17
Location : R116



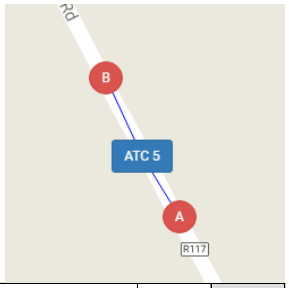
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	5	0	0	0	0	5	5	4	0	0	0	0	4	4
00:15	2	1	0	0	0	3	3	2	0	0	0	0	2	2
00:30	4	0	0	0	0	4	4	4	0	0	0	0	4	4
00:45	3	0	0	0	0	3	3	4	0	1	0	0	5	5.5
H/TOT	14	1	0	0	0	15	15	14	0	1	0	0	15	15.5
01:00	3	1	0	0	0	4	4	1	0	0	0	0	1	1
01:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	7	1	0	0	0	8	8	6	0	0	0	0	6	6
02:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
02:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	3	0	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	6	0	0	0	0	6	6	5	0	0	0	0	5	5
03:00	0	0	0	0	0	0	0	3	0	0	0	0	3	3
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	3	0	0	0	0	3	3
04:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:15	3	0	0	0	0	3	3	1	0	0	0	0	1	1
04:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	6	0	0	0	0	6	6	4	0	0	0	0	4	4
05:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3
05:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	4	0	0	0	0	4	4
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
06:45	1	1	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	2	0	0	0	0	2	2
07:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
07:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3
07:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1

H/TOT	6	0	0	0	0	6	6	6	0	0	0	0	6	6
08:00	3	1	0	0	0	4	4	2	0	0	0	0	2	2
08:15	7	0	0	0	0	7	7	4	0	0	0	0	4	4
08:30	1	0	0	0	0	1	1	4	1	0	0	0	5	5
08:45	1	0	0	0	0	1	1	2	0	1	0	0	3	3.5
H/TOT	12	1	0	0	0	13	13	12	1	1	0	0	14	14.5
09:00	6	0	0	0	0	6	6	6	0	0	0	0	6	6
09:15	13	0	0	0	0	13	13	7	0	0	0	0	7	7
09:30	20	2	1	0	0	23	23.5	7	0	0	0	0	7	7
09:45	29	3	0	0	0	32	32	14	0	0	0	0	14	14
H/TOT	68	5	1	0	0	74	74.5	34	0	0	0	0	34	34
10:00	11	2	1	0	0	14	14.5	14	0	0	0	0	14	14
10:15	6	0	0	0	0	6	6	16	1	0	0	0	17	17
10:30	12	3	0	0	0	15	15	17	1	0	0	0	18	18
10:45	17	0	0	0	0	17	17	28	3	0	0	0	31	31
H/TOT	46	5	1	0	0	52	52.5	75	5	0	0	0	80	80
11:00	6	1	0	0	0	7	7	19	0	0	0	0	19	19
11:15	21	1	0	0	0	22	22	19	1	1	0	0	21	21.5
11:30	14	1	0	0	0	15	15	11	4	0	0	0	15	15
11:45	26	0	0	0	0	26	26	15	1	1	0	0	17	17.5
H/TOT	67	3	0	0	0	70	70	64	6	2	0	0	72	73
12:00	23	1	0	0	0	24	24	18	2	0	0	0	20	20
12:15	33	2	0	0	0	35	35	22	1	0	0	0	23	23
12:30	26	2	0	0	0	28	28	33	1	0	0	0	34	34
12:45	34	1	0	0	0	35	35	24	4	0	0	0	28	28
H/TOT	116	6	0	0	0	122	122	97	8	0	0	0	105	105
13:00	23	5	0	0	0	28	28	23	1	1	0	0	25	25.5
13:15	26	2	0	0	0	28	28	25	1	0	0	0	26	26
13:30	11	0	0	0	0	11	11	35	4	0	0	0	39	39
13:45	14	2	1	0	0	17	17.5	21	1	0	0	0	22	22
H/TOT	74	9	1	0	0	84	84.5	104	7	1	0	0	112	112.5
14:00	25	0	0	0	0	25	25	18	1	0	0	0	19	19
14:15	30	4	0	0	0	34	34	22	0	0	0	0	22	22
14:30	22	1	0	0	0	23	23	22	0	0	0	0	22	22
14:45	26	1	1	0	0	28	28.5	20	2	0	0	0	22	22
H/TOT	103	6	1	0	0	110	110.5	82	3	0	0	0	85	85
15:00	25	0	0	0	0	25	25	17	1	0	0	0	18	18
15:15	24	3	0	0	0	27	27	35	2	0	0	0	37	37
15:30	21	0	0	0	0	21	21	22	1	0	0	0	23	23
15:45	28	6	0	0	0	34	34	29	0	0	0	0	29	29
H/TOT	98	9	0	0	0	107	107	103	4	0	0	0	107	107
16:00	20	2	1	0	0	23	23.5	18	4	1	0	0	23	23.5
16:15	23	0	1	0	0	24	24.5	19	1	0	0	0	20	20
16:30	18	0	0	0	0	18	18	29	0	0	0	0	29	29
16:45	18	1	0	0	0	19	19	24	1	0	0	0	25	25
H/TOT	79	3	2	0	0	84	85	90	6	1	0	0	97	97.5
17:00	14	0	0	0	0	14	14	20	2	0	0	0	22	22
17:15	15	1	1	0	0	17	17.5	16	0	0	1	0	17	18.3
17:30	16	1	0	0	0	17	17	29	1	0	0	0	30	30

17:45	13	0	1	0	0	14	14.5	23	0	0	0	0	23	23
H/TOT	58	2	2	0	0	62	63	88	3	0	1	0	92	93.3
18:00	9	0	0	0	0	9	9	19	1	0	0	0	20	20
18:15	16	1	0	0	0	17	17	16	0	0	0	0	16	16
18:30	12	0	0	0	0	12	12	10	0	0	0	0	10	10
18:45	13	1	0	0	0	14	14	10	1	0	0	0	11	11
H/TOT	50	2	0	0	0	52	52	55	2	0	0	0	57	57
19:00	11	0	0	0	0	11	11	7	0	0	0	0	7	7
19:15	4	1	0	0	0	5	5	7	1	0	0	0	8	8
19:30	6	0	0	0	0	6	6	16	0	1	0	0	17	17.5
19:45	6	1	0	0	0	7	7	5	1	0	0	0	6	6
H/TOT	27	2	0	0	0	29	29	35	2	1	0	0	38	38.5
20:00	8	1	0	0	0	9	9	4	0	0	0	0	4	4
20:15	5	0	0	0	0	5	5	11	2	0	0	0	13	13
20:30	9	0	0	0	0	9	9	7	1	0	0	0	8	8
20:45	11	0	0	0	0	11	11	5	0	0	0	0	5	5
H/TOT	33	1	0	0	0	34	34	27	3	0	0	0	30	30
21:00	5	1	1	0	0	7	7.5	12	2	0	0	0	14	14
21:15	5	0	0	0	0	5	5	4	1	0	0	0	5	5
21:30	6	0	0	0	0	6	6	4	1	0	0	0	5	5
21:45	2	0	0	0	0	2	2	7	0	0	0	0	7	7
H/TOT	18	1	1	0	0	20	20.5	27	4	0	0	0	31	31
22:00	4	0	0	0	0	4	4	2	1	0	0	0	3	3
22:15	3	1	0	0	0	4	4	5	0	0	0	0	5	5
22:30	3	1	0	0	0	4	4	5	0	0	0	0	5	5
22:45	2	0	1	0	0	3	3.5	6	2	0	0	0	8	8
H/TOT	12	2	1	0	0	15	15.5	18	3	0	0	0	21	21
23:00	1	1	0	0	0	2	2	5	0	0	0	0	5	5
23:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
23:30	0	0	0	0	0	0	0	1	1	0	0	0	2	2
23:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	3	1	0	0	0	4	4	9	1	0	0	0	10	10
24 TOT	912	61	10	0	0	983	988	964	58	7	1	0	1030	1035

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 06/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

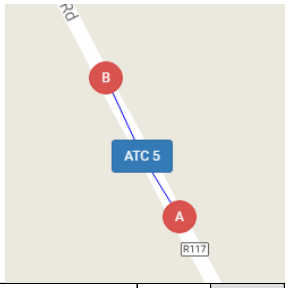


	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	1	0	0	0	0	1	1	2	1	1	0	0	4	4.5
00:15	0	0	1	0	0	1	1.5	2	0	0	0	0	2	2
00:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	1	0	0	2	2.5	6	1	1	0	0	8	8.5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:30	1	1	0	0	0	2	2	0	0	0	0	0	0	0
04:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	4	4	0	1	0	0	0	1	1
05:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
05:15	1	0	0	0	0	1	1	1	0	1	0	0	2	2.5
05:30	2	0	1	0	0	3	3.5	0	0	2	0	0	2	3
05:45	2	0	1	0	0	3	3.5	3	0	0	0	0	3	3
H/TOT	7	0	2	0	0	9	10	5	0	3	0	0	8	9.5
06:00	4	0	0	0	0	4	4	2	1	0	0	0	3	3
06:15	10	1	0	0	0	11	11	5	0	2	0	0	7	8
06:30	16	2	1	0	0	19	19.5	8	1	0	0	0	9	9
06:45	14	3	1	0	0	18	18.5	4	2	0	0	0	6	6
H/TOT	44	6	2	0	0	52	53	19	4	2	0	0	25	26
07:00	29	5	1	0	0	35	35.5	20	6	1	1	0	28	29.8
07:15	63	14	2	0	0	79	80	24	5	2	0	0	31	32
07:30	81	8	3	0	0	92	93.5	16	7	1	0	0	24	24.5
07:45	76	10	1	3	0	90	94.4	27	4	3	0	0	34	35.5

H/TOT	249	37	7	3	0	296	303.4	87	22	7	1	0	117	121.8
08:00	99	12	3	0	0	114	115.5	23	9	0	0	0	32	32
08:15	58	8	2	0	0	68	69	25	5	1	0	0	31	31.5
08:30	48	11	0	1	0	60	61.3	18	5	2	0	0	25	26
08:45	48	7	0	0	0	55	55	24	6	5	0	0	35	37.5
H/TOT	253	38	5	1	0	297	300.8	90	25	8	0	0	123	127
09:00	36	4	2	0	0	42	43	29	6	1	1	0	37	38.8
09:15	40	6	3	0	1	50	52.5	16	5	1	0	0	22	22.5
09:30	30	6	2	0	0	38	39	20	6	2	0	0	28	29
09:45	23	3	1	1	0	28	29.8	19	2	3	0	0	24	25.5
H/TOT	129	19	8	1	1	158	164.3	84	19	7	1	0	111	115.8
10:00	22	7	2	0	0	31	32	24	3	4	0	0	31	33
10:15	23	0	1	0	0	24	24.5	27	7	2	0	0	36	37
10:30	19	4	1	2	0	26	29.1	27	2	3	0	0	32	33.5
10:45	14	3	2	0	0	19	20	16	4	2	1	0	23	25.3
H/TOT	78	14	6	2	0	100	105.6	94	16	11	1	0	122	128.8
11:00	24	1	2	0	0	27	28	23	6	3	1	0	33	35.8
11:15	23	5	2	0	0	30	31	18	5	1	0	0	24	24.5
11:30	19	4	2	0	0	25	26	25	4	3	0	0	32	33.5
11:45	37	4	1	1	0	43	44.8	31	9	4	0	0	44	46
H/TOT	103	14	7	1	0	125	129.8	97	24	11	1	0	133	139.8
12:00	19	5	1	0	0	25	25.5	24	6	1	0	0	31	31.5
12:15	22	6	3	1	0	32	34.8	28	6	5	1	0	40	43.8
12:30	28	2	1	0	0	31	31.5	25	4	0	0	0	29	29
12:45	21	3	1	0	0	25	25.5	36	11	3	0	0	50	51.5
H/TOT	90	16	6	1	0	113	117.3	113	27	9	1	0	150	155.8
13:00	25	4	3	0	0	32	33.5	24	5	0	0	0	29	29
13:15	30	0	0	0	0	30	30	29	4	2	0	0	35	36
13:30	33	6	2	1	0	42	44.3	27	6	8	0	0	41	45
13:45	36	3	0	0	0	39	39	37	6	2	0	0	45	46
H/TOT	124	13	5	1	0	143	146.8	117	21	12	0	0	150	156
14:00	36	2	2	0	0	40	41	31	10	0	1	0	42	43.3
14:15	27	3	2	0	0	32	33	20	6	0	0	0	26	26
14:30	27	5	2	0	0	34	35	39	4	0	0	0	43	43
14:45	29	7	3	0	0	39	40.5	31	6	5	0	1	43	46.5
H/TOT	119	17	9	0	0	145	149.5	121	26	5	1	1	154	158.8
15:00	34	4	1	0	0	39	39.5	38	5	3	0	0	46	47.5
15:15	28	2	1	0	0	31	31.5	31	3	1	0	0	35	35.5
15:30	26	4	2	1	0	33	35.3	42	10	1	0	0	53	53.5
15:45	33	9	1	0	0	43	43.5	36	6	6	1	0	49	53.3
H/TOT	121	19	5	1	0	146	149.8	147	24	11	1	0	183	189.8
16:00	34	3	2	0	0	39	40	50	6	5	0	0	61	63.5
16:15	30	2	0	0	0	32	32	41	14	3	0	0	58	59.5
16:30	21	3	2	0	0	26	27	85	16	5	1	0	107	110.8
16:45	22	5	0	0	0	27	27	117	25	8	0	0	150	154
H/TOT	107	13	4	0	0	124	126	293	61	21	1	0	376	387.8
17:00	39	2	0	1	0	42	43.3	136	28	8	0	0	172	176
17:15	30	3	0	0	0	33	33	136	30	5	0	0	171	173.5
17:30	30	1	0	0	0	31	31	162	27	3	0	0	192	193.5

17:45	25	4	1	0	0	30	30.5	139	19	3	0	0	161	162.5
H/TOT	124	10	1	1	0	136	137.8	573	104	19	0	0	696	705.5
18:00	27	1	2	0	0	30	31	128	24	3	0	0	155	156.5
18:15	28	5	0	0	0	33	33	97	25	6	0	0	128	131
18:30	40	2	1	0	0	43	43.5	94	19	1	0	0	114	114.5
18:45	25	2	0	0	0	27	27	64	20	0	0	0	84	84
H/TOT	120	10	3	0	0	133	134.5	383	88	10	0	0	481	486
19:00	37	3	0	0	0	40	40	41	9	0	0	0	50	50
19:15	13	1	0	0	0	14	14	31	9	3	0	0	43	44.5
19:30	12	2	1	0	0	15	15.5	28	4	1	1	0	34	35.8
19:45	15	1	0	0	0	16	16	20	6	1	0	0	27	27.5
H/TOT	77	7	1	0	0	85	85.5	120	28	5	1	0	154	157.8
20:00	9	2	1	0	0	12	12.5	22	1	0	0	0	23	23
20:15	8	1	0	0	0	9	9	17	0	2	0	0	19	20
20:30	11	0	0	0	0	11	11	12	1	0	0	0	13	13
20:45	5	1	1	0	0	7	7.5	10	2	0	0	0	12	12
H/TOT	33	4	2	0	0	39	40	61	4	2	0	0	67	68
21:00	12	1	0	0	0	13	13	20	4	0	0	0	24	24
21:15	3	1	0	0	0	4	4	12	3	1	0	0	16	16.5
21:30	7	0	1	0	0	8	8.5	9	1	1	0	0	11	11.5
21:45	6	0	0	0	0	6	6	12	1	0	0	0	13	13
H/TOT	28	2	1	0	0	31	31.5	53	9	2	0	0	64	65
22:00	14	2	0	0	0	16	16	7	3	1	0	0	11	11.5
22:15	8	0	0	0	0	8	8	6	0	0	0	0	6	6
22:30	9	0	1	0	0	10	10.5	6	0	0	0	0	6	6
22:45	2	0	0	0	0	2	2	5	1	0	0	0	6	6
H/TOT	33	2	1	0	0	36	36.5	24	4	1	0	0	29	29.5
23:00	3	1	0	0	0	4	4	3	0	1	0	0	4	4.5
23:15	1	0	0	0	0	1	1	5	0	0	0	0	5	5
23:30	1	0	1	0	0	2	2.5	2	0	0	0	0	2	2
23:45	0	1	0	0	0	1	1	3	1	0	0	0	4	4
H/TOT	5	2	1	0	0	8	8.5	13	1	1	0	0	15	15.5
24 TOT	1850	244	77	12	1	2184	2239	2503	509	148	9	1	3170	3257

IDASO



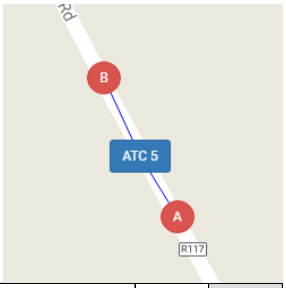
Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 07/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
00:15	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0
00:30	0	1	0	0	0	1	1	2	0	0	0	0	2	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	1	1	0	0	4	4.5	3	0	1	0	0	4	4.5
01:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
H/TOT	3	0	0	0	0	3	3	1	0	1	0	0	2	2.5
02:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	0	1	1	0	0	0	0	0	0	0
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	1	0	0	0	3	3	2	0	0	0	0	2	2
03:00	0	1	0	0	0	1	1	1	0	0	0	0	1	1
03:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	1	0	0	0	3	3	2	0	0	0	0	2	2
04:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45	0	1	0	0	0	1	1	0	0	1	0	0	1	1.5
H/TOT	1	1	0	0	0	2	2	0	2	1	0	0	3	3.5
05:00	0	1	1	0	0	2	2.5	0	0	1	0	0	1	1.5
05:15	1	1	1	0	0	3	3.5	1	0	0	0	0	1	1
05:30	0	0	1	0	0	1	1.5	1	0	1	0	0	2	2.5
05:45	2	0	1	0	0	3	3.5	2	0	0	0	0	2	2
H/TOT	3	2	4	0	0	9	11	4	0	2	0	0	6	7
06:00	4	0	0	0	0	4	4	2	0	1	0	0	3	3.5
06:15	6	2	1	0	0	9	9.5	7	1	1	0	0	9	9.5
06:30	17	1	0	0	0	18	18	4	0	1	0	0	5	5.5
06:45	19	3	3	1	0	26	28.8	9	2	0	0	0	11	11
H/TOT	46	6	4	1	0	57	60.3	22	3	3	0	0	28	29.5
07:00	37	5	1	1	0	44	45.8	11	3	1	0	0	15	15.5
07:15	74	15	4	1	0	94	97.3	17	5	4	0	0	26	28
07:30	83	10	3	0	0	96	97.5	27	6	2	0	0	35	36
07:45	106	14	2	0	0	122	123	21	5	3	0	0	29	30.5

H/TOT	300	44	10	2	0	356	363.6	76	19	10	0	0	105	110
08:00	100	9	3	1	0	113	115.8	27	5	4	1	0	37	40.3
08:15	85	10	6	0	0	101	104	28	6	0	0	0	34	34
08:30	77	19	0	1	0	97	98.3	13	5	1	0	0	19	19.5
08:45	57	9	1	0	0	67	67.5	33	9	1	0	0	43	43.5
H/TOT	319	47	10	2	0	378	385.6	101	25	6	1	0	133	137.3
09:00	43	4	1	0	0	48	48.5	41	10	1	1	0	53	54.8
09:15	53	7	3	0	0	63	64.5	22	8	1	0	0	31	31.5
09:30	31	7	1	0	1	40	41.5	27	0	2	1	0	30	32.3
09:45	30	3	1	0	0	34	34.5	30	5	0	0	0	35	35
H/TOT	157	21	6	0	1	185	189	120	23	4	2	0	149	153.6
10:00	21	2	0	1	0	24	25.3	25	2	1	0	0	28	28.5
10:15	22	5	1	0	0	28	28.5	25	4	3	1	0	33	35.8
10:30	18	5	3	0	0	26	27.5	18	4	3	0	0	25	26.5
10:45	18	6	1	0	0	25	25.5	28	8	4	0	0	40	42
H/TOT	79	18	5	1	0	103	106.8	96	18	11	1	0	126	132.8
11:00	24	2	3	0	0	29	30.5	10	3	5	1	0	19	22.8
11:15	13	2	2	0	0	17	18	25	4	6	0	0	35	38
11:30	15	6	4	0	0	25	27	21	1	1	0	1	24	25.5
11:45	27	6	1	0	1	35	36.5	26	5	4	0	0	35	37
H/TOT	79	16	10	0	1	106	112	82	13	16	1	1	113	123.3
12:00	21	2	1	0	0	24	24.5	15	5	2	0	0	22	23
12:15	22	4	3	0	0	29	30.5	30	8	1	0	0	39	39.5
12:30	36	4	2	0	0	42	43	31	7	3	0	0	41	42.5
12:45	31	5	1	0	0	37	37.5	27	6	2	0	0	35	36
H/TOT	110	15	7	0	0	132	135.5	103	26	8	0	0	137	141
13:00	30	8	0	0	0	38	38	23	7	0	0	0	30	30
13:15	26	3	2	0	0	31	32	25	7	0	0	0	32	32
13:30	24	4	1	0	0	29	29.5	41	11	1	0	0	53	53.5
13:45	27	3	1	0	0	31	31.5	42	2	2	0	0	46	47
H/TOT	107	18	4	0	0	129	131	131	27	3	0	0	161	162.5
14:00	34	0	0	1	0	35	36.3	40	5	3	1	0	49	51.8
14:15	26	1	3	0	0	30	31.5	31	9	0	0	0	40	40
14:30	24	3	2	0	0	29	30	38	6	2	0	0	46	47
14:45	35	2	1	0	0	38	38.5	36	9	5	3	0	53	59.4
H/TOT	119	6	6	1	0	132	136.3	145	29	10	4	0	188	198.2
15:00	33	3	1	1	0	38	39.8	32	7	1	1	0	41	42.8
15:15	38	6	0	0	0	44	44	29	6	1	0	0	36	36.5
15:30	41	5	2	0	0	48	49	34	12	3	1	0	50	52.8
15:45	20	6	0	0	0	26	26	31	5	3	0	1	40	42.5
H/TOT	132	20	3	1	0	156	158.8	126	30	8	2	1	167	174.6
16:00	29	4	1	0	0	34	34.5	53	11	3	1	0	68	70.8
16:15	45	6	1	0	0	52	52.5	72	11	5	0	0	88	90.5
16:30	35	4	2	0	0	41	42	101	19	6	0	0	126	129
16:45	32	7	0	0	0	39	39	136	27	3	0	0	166	167.5
H/TOT	141	21	4	0	0	166	168	362	68	17	1	0	448	457.8
17:00	45	3	2	0	0	50	51	126	30	8	1	0	165	170.3
17:15	39	3	1	0	0	43	43.5	153	28	5	0	0	186	188.5
17:30	22	4	1	0	0	27	27.5	158	37	4	1	0	200	203.3

17:45	33	1	0	0	0	34	34	155	24	8	0	0	187	191
H/TOT	139	11	4	0	0	154	156	592	119	25	2	0	738	753.1
18:00	37	4	0	0	0	41	41	158	28	4	0	0	190	192
18:15	35	6	1	0	0	42	42.5	121	25	1	0	0	147	147.5
18:30	35	3	1	0	0	39	39.5	111	25	2	0	0	138	139
18:45	23	2	2	0	0	27	28	90	19	1	0	0	110	110.5
H/TOT	130	15	4	0	0	149	151	480	97	8	0	0	585	589
19:00	24	6	0	0	0	30	30	69	16	2	1	0	88	90.3
19:15	23	2	1	0	0	26	26.5	41	9	3	0	1	54	56.5
19:30	21	1	0	0	0	22	22	38	6	1	0	0	45	45.5
19:45	11	1	0	0	0	12	12	26	11	1	0	0	38	38.5
H/TOT	79	10	1	0	0	90	90.5	174	42	7	1	1	225	230.8
20:00	13	3	1	0	0	17	17.5	24	3	0	0	0	27	27
20:15	13	0	0	0	0	13	13	17	2	1	0	0	20	20.5
20:30	10	2	0	0	0	12	12	11	7	1	0	0	19	19.5
20:45	11	2	0	1	0	14	15.3	14	4	1	0	0	19	19.5
H/TOT	47	7	1	1	0	56	57.8	66	16	3	0	0	85	86.5
21:00	8	0	1	0	0	9	9.5	18	0	0	0	0	18	18
21:15	6	0	0	0	0	6	6	18	2	1	0	0	21	21.5
21:30	9	0	1	0	0	10	10.5	10	4	0	0	0	14	14
21:45	11	3	0	0	0	14	14	17	1	0	0	0	18	18
H/TOT	34	3	2	0	0	39	40	63	7	1	0	0	71	71.5
22:00	23	0	0	0	0	23	23	16	4	1	0	0	21	21.5
22:15	18	1	2	0	0	21	22	11	0	1	0	0	12	12.5
22:30	13	0	1	0	0	14	14.5	10	0	0	0	0	10	10
22:45	4	0	0	0	0	4	4	5	0	0	0	0	5	5
H/TOT	58	1	3	0	0	62	63.5	42	4	2	0	0	48	49
23:00	1	0	0	0	0	1	1	3	0	2	0	0	5	6
23:15	3	0	0	0	0	3	3	7	0	0	0	0	7	7
23:30	3	0	1	0	0	4	4.5	10	0	0	0	0	10	10
23:45	1	0	0	0	0	1	1	5	1	0	0	0	6	6
H/TOT	8	0	1	0	0	9	9.5	25	1	2	0	0	28	29
24 TOT	2097	285	90	9	2	2483	2542	2818	569	149	15	3	3554	3651

IDASO



Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 08/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	PSV (BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	PSV (BUS	TOT	PCU
00:00	0	0	0	0	0	0	0	3	0	1	0	0	4	4.5
00:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	2	1	0	0	0	3	3
H/TOT	1	0	0	0	0	1	1	8	1	1	0	0	10	10.5
01:00	2	1	0	0	0	3	3	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	1	0	0	0	3	3	1	0	0	0	0	1	1
02:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:15	1	0	0	0	0	1	1	0	1	0	0	0	1	1
03:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	1	1	0	0	0	2	2
04:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
04:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	1	0	1	0	0	2	2.5
05:00	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
05:15	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0
05:30	1	2	1	0	0	4	4.5	1	1	1	0	0	3	3.5
05:45	4	0	2	0	0	6	7	2	0	0	0	1	3	4
H/TOT	6	2	4	0	0	12	14	3	1	2	0	1	7	9
06:00	4	0	0	0	0	4	4	5	0	1	0	0	6	6.5
06:15	2	2	0	0	0	4	4	3	2	1	0	0	6	6.5
06:30	13	3	1	0	0	17	17.5	4	0	0	0	0	4	4
06:45	15	3	1	0	0	19	19.5	5	5	1	0	0	11	11.5
H/TOT	34	8	2	0	0	44	45	17	7	3	0	0	27	28.5
07:00	31	4	1	0	0	36	36.5	11	4	2	0	0	17	18
07:15	60	16	4	1	1	82	86.3	28	2	0	0	0	30	30
07:30	81	10	5	2	0	98	103.1	21	7	1	0	0	29	29.5
07:45	78	4	3	0	0	85	86.5	29	6	2	0	0	37	38

H/TOT	250	34	13	3	1	301	312.4	89	19	5	0	0	113	115.5
08:00	69	9	0	1	0	79	80.3	28	5	2	1	0	36	38.3
08:15	66	13	3	0	0	82	83.5	21	8	2	0	0	31	32
08:30	60	9	0	0	0	69	69	22	4	1	0	0	27	27.5
08:45	50	7	1	0	0	58	58.5	24	6	6	1	0	37	41.3
H/TOT	245	38	4	1	0	288	291.3	95	23	11	2	0	131	139.1
09:00	45	7	0	0	0	52	52	25	5	1	0	0	31	31.5
09:15	37	9	0	0	0	46	46	23	5	2	0	0	30	31
09:30	38	2	1	0	0	41	41.5	26	6	1	0	0	33	33.5
09:45	27	8	2	0	1	38	40	32	6	2	1	0	41	43.3
H/TOT	147	26	3	0	1	177	179.5	106	22	6	1	0	135	139.3
10:00	18	0	1	1	0	20	21.8	19	8	1	1	2	31	34.8
10:15	23	3	1	0	0	27	27.5	20	8	5	0	0	33	35.5
10:30	17	4	2	0	0	23	24	31	6	2	0	0	39	40
10:45	22	5	4	0	0	31	33	32	7	0	0	0	39	39
H/TOT	80	12	8	1	0	101	106.3	102	29	8	1	2	142	149.3
11:00	18	5	1	0	0	24	24.5	18	9	3	0	0	30	31.5
11:15	27	2	1	0	0	30	30.5	32	6	1	0	0	39	39.5
11:30	26	5	1	0	0	32	32.5	29	7	3	0	0	39	40.5
11:45	38	6	0	0	0	44	44	23	8	2	0	0	33	34
H/TOT	109	18	3	0	0	130	131.5	102	30	9	0	0	141	145.5
12:00	27	2	0	0	0	29	29	22	4	2	0	0	28	29
12:15	18	2	2	1	0	23	25.3	16	5	1	0	1	23	24.5
12:30	31	1	0	0	0	32	32	38	5	1	0	0	44	44.5
12:45	47	5	0	0	0	52	52	27	4	1	0	0	32	32.5
H/TOT	123	10	2	1	0	136	138.3	103	18	5	0	1	127	130.5
13:00	29	6	2	0	0	37	38	33	6	3	0	0	42	43.5
13:15	33	2	1	0	0	36	36.5	20	3	4	0	0	27	29
13:30	40	7	2	0	0	49	50	34	11	0	0	0	45	45
13:45	25	4	0	0	0	29	29	40	7	3	0	0	50	51.5
H/TOT	127	19	5	0	0	151	153.5	127	27	10	0	0	164	169
14:00	35	5	2	0	0	42	43	30	7	3	0	0	40	41.5
14:15	32	4	3	0	0	39	40.5	28	5	2	2	0	37	40.6
14:30	32	4	4	1	0	41	44.3	28	3	3	1	0	35	37.8
14:45	31	2	4	0	0	37	39	35	8	0	0	0	43	43
H/TOT	130	15	13	1	0	159	166.8	121	23	8	3	0	155	162.9
15:00	50	6	1	0	0	57	57.5	30	5	3	0	0	38	39.5
15:15	33	5	2	0	0	40	41	26	7	5	0	0	38	40.5
15:30	37	8	3	0	0	48	49.5	37	17	3	0	0	57	58.5
15:45	38	5	1	1	0	45	46.8	45	6	3	1	0	55	57.8
H/TOT	158	24	7	1	0	190	194.8	138	35	14	1	0	188	196.3
16:00	30	7	2	0	0	39	40	44	7	6	0	0	57	60
16:15	34	4	3	0	0	41	42.5	72	18	5	0	0	95	97.5
16:30	28	5	1	0	0	34	34.5	80	19	8	0	0	107	111
16:45	26	5	0	0	0	31	31	142	33	7	1	0	183	187.8
H/TOT	118	21	6	0	0	145	148	338	77	26	1	0	442	456.3
17:00	39	3	0	0	0	42	42	149	29	6	1	0	185	189.3
17:15	24	2	0	0	0	26	26	158	38	6	0	0	202	205
17:30	31	2	2	0	0	35	36	160	21	7	0	0	188	191.5

17:45	26	2	0	0	0	28	28	159	26	3	2	0	190	194.1
H/TOT	120	9	2	0	0	131	132	626	114	22	3	0	765	779.9
18:00	26	5	1	0	0	32	32.5	131	25	1	1	0	158	159.8
18:15	42	8	1	0	0	51	51.5	139	33	2	0	0	174	175
18:30	41	3	1	0	0	45	45.5	124	23	1	1	0	149	150.8
18:45	29	3	0	0	0	32	32	116	29	2	0	0	147	148
H/TOT	138	19	3	0	0	160	161.5	510	110	6	2	0	628	633.6
19:00	36	5	0	0	0	41	41	93	26	1	0	0	120	120.5
19:15	24	1	0	0	0	25	25	58	12	1	0	0	71	71.5
19:30	20	1	1	0	0	22	22.5	40	6	2	0	0	48	49
19:45	17	1	0	0	0	18	18	28	2	0	0	0	30	30
H/TOT	97	8	1	0	0	106	106.5	219	46	4	0	0	269	271
20:00	7	2	0	0	0	9	9	17	7	2	0	0	26	27
20:15	14	0	0	0	0	14	14	25	3	0	0	0	28	28
20:30	6	1	0	0	0	7	7	16	1	0	0	0	17	17
20:45	6	1	0	0	0	7	7	24	2	1	0	0	27	27.5
H/TOT	33	4	0	0	0	37	37	82	13	3	0	0	98	99.5
21:00	9	2	0	0	0	11	11	11	1	1	0	0	13	13.5
21:15	12	0	0	0	0	12	12	19	4	2	0	0	25	26
21:30	2	1	1	0	0	4	4.5	15	7	0	0	0	22	22
21:45	5	1	0	0	0	6	6	11	0	0	0	0	11	11
H/TOT	28	4	1	0	0	33	33.5	56	12	3	0	0	71	72.5
22:00	12	0	1	0	0	13	13.5	10	2	0	0	0	12	12
22:15	11	1	1	0	0	13	13.5	8	0	1	0	0	9	9.5
22:30	23	4	1	0	0	28	28.5	9	0	1	0	0	10	10.5
22:45	2	0	0	0	0	2	2	7	0	0	1	0	8	9.3
H/TOT	48	5	3	0	0	56	57.5	34	2	2	1	0	39	41.3
23:00	2	0	0	0	0	2	2	3	2	1	0	0	6	6.5
23:15	2	0	0	0	0	2	2	7	0	0	0	0	7	7
23:30	4	0	2	0	0	6	7	2	0	0	0	0	2	2
23:45	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	8	0	2	0	0	10	11	15	2	1	0	0	18	18.5
24 TOT	2007	277	82	8	2	2376	2429	2896	612	150	15	4	3677	3776

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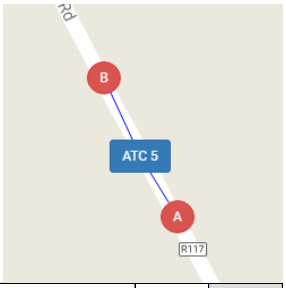


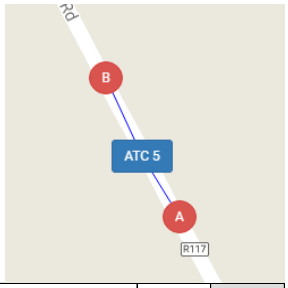
Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 09/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	PSV (BUS	TOT	PCU	CAR	LGV	OGV1	OGV2	PSV (BUS	TOT	PCU
00:00	2	0	0	0	0	2	2	2	1	1	0	0	4	4.5
00:15	1	1	0	0	0	2	2	3	0	0	0	0	3	3
00:30	4	0	0	0	0	4	4	1	0	0	0	0	1	1
00:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	8	1	0	0	0	9	9	7	1	1	0	0	9	9.5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	2	0	0	0	2	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45	0	0	0	0	0	0	0	0	0	2	0	0	2	3
H/TOT	0	0	0	0	0	0	0	0	1	2	0	0	3	4
05:00	2	0	1	0	0	3	3.5	1	0	0	0	0	1	1
05:15	1	0	1	0	0	2	2.5	0	0	1	0	0	1	1.5
05:30	2	0	1	0	0	3	3.5	1	0	1	0	0	2	2.5
05:45	2	1	1	0	0	4	4.5	1	0	1	0	0	2	2.5
H/TOT	7	1	4	0	0	12	14	3	0	3	0	0	6	7.5
06:00	7	0	0	0	0	7	7	2	0	0	0	0	2	2
06:15	4	0	1	0	0	5	5.5	4	0	0	0	0	4	4
06:30	11	6	0	0	0	17	17	7	1	2	0	0	10	11
06:45	17	3	1	0	0	21	21.5	9	2	1	0	0	12	12.5
H/TOT	39	9	2	0	0	50	51	22	3	3	0	0	28	29.5
07:00	38	3	1	0	0	42	42.5	14	4	0	0	0	18	18
07:15	59	9	3	0	0	71	72.5	22	6	1	0	0	29	29.5
07:30	78	11	4	1	0	94	97.3	24	4	2	0	0	30	31
07:45	96	11	2	1	0	110	112.3	31	9	1	0	0	41	41.5

H/TOT	271	34	10	2	0	317	324.6	91	23	4	0	0	118	120
08:00	83	7	3	0	0	93	94.5	28	3	2	0	0	33	34
08:15	65	12	1	0	0	78	78.5	20	8	2	0	0	30	31
08:30	65	9	1	0	0	75	75.5	34	9	0	1	0	44	45.3
08:45	45	3	2	0	0	50	51	33	7	1	1	0	42	43.8
H/TOT	258	31	7	0	0	296	299.5	115	27	5	2	0	149	154.1
09:00	43	8	2	0	0	53	54	35	5	1	0	0	41	41.5
09:15	47	6	1	1	0	55	56.8	31	4	3	0	0	38	39.5
09:30	44	6	1	0	0	51	51.5	29	7	3	0	0	39	40.5
09:45	34	4	1	0	0	39	39.5	39	8	1	0	0	48	48.5
H/TOT	168	24	5	1	0	198	201.8	134	24	8	0	0	166	170
10:00	19	4	0	0	0	23	23	38	11	3	0	0	52	53.5
10:15	25	2	1	0	0	28	28.5	32	5	3	0	1	41	43.5
10:30	18	2	5	0	0	25	27.5	16	2	0	1	0	19	20.3
10:45	18	1	0	0	0	19	19	31	3	2	0	0	36	37
H/TOT	80	9	6	0	0	95	98	117	21	8	1	1	148	154.3
11:00	35	2	1	0	0	38	38.5	17	5	3	0	0	25	26.5
11:15	17	2	0	0	0	19	19	21	9	1	0	0	31	31.5
11:30	27	5	3	0	0	35	36.5	22	7	3	0	0	32	33.5
11:45	32	6	2	0	0	40	41	29	10	3	0	0	42	43.5
H/TOT	111	15	6	0	0	132	135	89	31	10	0	0	130	135
12:00	41	4	2	0	0	47	48	26	8	1	0	0	35	35.5
12:15	63	5	9	0	0	77	81.5	29	7	3	0	0	39	40.5
12:30	25	3	2	0	0	30	31	21	3	2	1	0	27	29.3
12:45	26	3	0	0	0	29	29	25	8	0	0	0	33	33
H/TOT	155	15	13	0	0	183	189.5	101	26	6	1	0	134	138.3
13:00	25	5	3	0	0	33	34.5	28	6	3	0	0	37	38.5
13:15	32	3	2	0	0	37	38	40	10	1	0	0	51	51.5
13:30	31	3	2	0	0	36	37	41	7	3	0	0	51	52.5
13:45	27	2	1	0	0	30	30.5	46	7	2	0	1	56	58
H/TOT	115	13	8	0	0	136	140	155	30	9	0	1	195	200.5
14:00	36	5	0	0	0	41	41	29	9	2	0	0	40	41
14:15	29	6	1	0	0	36	36.5	33	5	1	0	0	39	39.5
14:30	26	2	2	0	0	30	31	24	7	3	0	0	34	35.5
14:45	28	1	3	0	1	33	35.5	42	7	3	1	0	53	55.8
H/TOT	119	14	6	0	1	140	144	128	28	9	1	0	166	171.8
15:00	27	4	2	0	0	33	34	29	4	2	0	0	35	36
15:15	35	10	1	2	0	48	51.1	38	15	0	0	0	53	53
15:30	45	1	3	0	0	49	50.5	44	9	6	0	0	59	62
15:45	39	2	4	1	0	46	49.3	32	11	4	0	0	47	49
H/TOT	146	17	10	3	0	176	184.9	143	39	12	0	0	194	200
16:00	32	5	3	0	0	40	41.5	48	6	2	0	0	56	57
16:15	34	3	0	0	0	37	37	73	11	3	0	1	88	90.5
16:30	40	5	1	0	0	46	46.5	113	24	11	0	0	148	153.5
16:45	33	3	2	0	0	38	39	139	37	3	0	0	179	180.5
H/TOT	139	16	6	0	0	161	164	373	78	19	0	1	471	481.5
17:00	47	2	0	0	0	49	49	125	22	7	0	0	154	157.5
17:15	42	4	1	0	0	47	47.5	164	26	7	0	0	197	200.5
17:30	35	1	1	0	0	37	37.5	154	28	6	1	0	189	193.3

17:45	24	4	2	0	0	30	31	139	28	6	1	0	174	178.3
H/TOT	148	11	4	0	0	163	165	582	104	26	2	0	714	729.6
18:00	33	3	0	0	0	36	36	158	22	2	0	0	182	183
18:15	40	4	1	0	0	45	45.5	141	24	3	0	0	168	169.5
18:30	37	7	0	0	0	44	44	98	28	2	0	0	128	129
18:45	32	1	2	0	0	35	36	77	15	0	0	0	92	92
H/TOT	142	15	3	0	0	160	161.5	474	89	7	0	0	570	573.5
19:00	32	3	0	0	0	35	35	80	10	0	0	0	90	90
19:15	23	5	0	0	0	28	28	76	16	0	0	0	92	92
19:30	29	3	0	0	0	32	32	55	10	1	0	0	66	66.5
19:45	19	1	1	1	0	22	23.8	55	11	1	0	0	67	67.5
H/TOT	103	12	1	1	0	117	118.8	266	47	2	0	0	315	316
20:00	23	0	1	0	0	24	24.5	52	3	1	0	0	56	56.5
20:15	15	5	0	0	0	20	20	28	6	1	0	0	35	35.5
20:30	16	2	1	0	0	19	19.5	23	4	0	0	0	27	27
20:45	6	3	0	0	0	9	9	18	1	1	0	0	20	20.5
H/TOT	60	10	2	0	0	72	73	121	14	3	0	0	138	139.5
21:00	10	0	0	0	0	10	10	10	1	0	0	0	11	11
21:15	16	0	0	0	0	16	16	23	5	3	0	0	31	32.5
21:30	10	0	1	0	0	11	11.5	15	1	0	0	0	16	16
21:45	11	2	0	0	0	13	13	20	1	1	0	0	22	22.5
H/TOT	47	2	1	0	0	50	50.5	68	8	4	0	0	80	82
22:00	15	1	0	0	0	16	16	17	2	1	0	0	20	20.5
22:15	18	1	0	0	0	19	19	15	1	0	0	0	16	16
22:30	14	3	1	0	0	18	18.5	4	1	0	0	0	5	5
22:45	11	3	0	0	0	14	14	6	2	0	0	0	8	8
H/TOT	58	8	1	0	0	67	67.5	42	6	1	0	0	49	49.5
23:00	12	0	0	0	0	12	12	10	2	1	0	0	13	13.5
23:15	2	0	0	0	0	2	2	10	0	0	0	0	10	10
23:30	2	0	1	0	0	3	3.5	6	1	0	0	0	7	7
23:45	9	0	0	0	0	9	9	2	1	0	0	0	3	3
H/TOT	25	0	1	0	0	26	26.5	28	4	1	0	0	33	33.5
24 TOT	2199	257	96	7	1	2560	2618	3062	606	143	7	3	3821	3905

IDASO



Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 10/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	4	1	0	0	0	5	5	7	0	1	0	0	8	8.5
00:15	2	0	1	0	0	3	3.5	6	0	0	0	0	6	6
00:30	2	0	0	0	0	2	2	3	3	0	0	0	6	6
00:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	10	1	1	0	0	12	12.5	17	3	1	0	0	21	21.5
01:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
01:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
01:30	1	0	0	0	0	1	1	2	1	0	0	0	3	3
01:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	4	0	0	0	0	4	4	6	1	0	0	0	7	7
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	2	1	0	0	0	3	3
03:00	0	0	0	0	0	0	0	3	0	0	0	0	3	3
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	0	1	1	2	0	0	0	0	2	2
03:45	6	0	0	0	0	6	6	1	1	0	0	0	2	2
H/TOT	6	1	0	0	0	7	7	6	1	0	0	0	7	7
04:00	1	0	0	0	0	1	1	0	0	1	0	0	1	1.5
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	2	0	1	0	0	3	3.5
05:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:15	3	0	1	0	0	4	4.5	0	0	2	0	0	2	3
05:30	3	0	1	0	0	4	4.5	4	0	0	0	0	4	4
05:45	2	0	1	0	0	3	3.5	5	0	2	0	0	7	8
H/TOT	9	0	3	0	0	12	13.5	10	0	4	0	0	14	16
06:00	5	0	0	0	0	5	5	6	2	0	0	0	8	8
06:15	8	1	1	0	0	10	10.5	11	1	1	0	0	13	13.5
06:30	16	3	3	0	0	22	23.5	18	3	1	0	0	22	22.5
06:45	17	1	1	0	0	19	19.5	23	2	1	0	0	26	26.5
H/TOT	46	5	5	0	0	56	58.5	58	8	3	0	0	69	70.5
07:00	27	4	2	1	0	34	36.3	30	4	0	0	0	34	34
07:15	42	11	2	1	0	56	58.3	28	8	1	0	0	37	37.5
07:30	68	11	2	0	0	81	82	25	7	2	0	0	34	35
07:45	56	4	5	0	0	65	67.5	33	5	2	0	0	40	41

H/TOT	193	30	11	2	0	236	244.1	116	24	5	0	0	145	147.5
08:00	67	6	2	0	0	75	76	22	5	0	0	0	27	27
08:15	47	10	2	0	0	59	60	23	9	2	0	0	34	35
08:30	46	6	0	0	0	52	52	29	4	1	0	0	34	34.5
08:45	43	10	0	0	0	53	53	29	4	2	1	0	36	38.3
H/TOT	203	32	4	0	0	239	241	103	22	5	1	0	131	134.8
09:00	33	5	2	0	0	40	41	30	11	2	0	0	43	44
09:15	42	5	1	0	0	48	48.5	24	4	0	0	0	28	28
09:30	43	5	2	0	0	50	51	37	4	3	0	0	44	45.5
09:45	29	5	1	1	0	36	37.8	22	3	3	0	1	29	31.5
H/TOT	147	20	6	1	0	174	178.3	113	22	8	0	1	144	149
10:00	29	2	4	1	0	36	39.3	20	6	3	0	0	29	30.5
10:15	30	2	1	0	0	33	33.5	32	3	2	1	0	38	40.3
10:30	19	3	2	0	1	25	27	33	9	1	0	0	43	43.5
10:45	25	4	1	0	0	30	30.5	34	3	2	0	0	39	40
H/TOT	103	11	8	1	1	124	130.3	119	21	8	1	0	149	154.3
11:00	25	6	0	0	0	31	31	23	8	1	0	0	32	32.5
11:15	22	1	0	0	0	23	23	18	6	1	0	0	25	25.5
11:30	16	4	2	0	1	23	25	36	5	4	1	0	46	49.3
11:45	30	2	3	1	0	36	38.8	36	4	2	0	0	42	43
H/TOT	93	13	5	1	1	113	117.8	113	23	8	1	0	145	150.3
12:00	30	2	1	0	0	33	33.5	26	7	5	0	0	38	40.5
12:15	38	7	0	0	0	45	45	33	7	1	2	0	43	46.1
12:30	41	6	2	0	0	49	50	32	9	4	1	0	46	49.3
12:45	32	7	1	0	0	40	40.5	38	5	4	0	0	47	49
H/TOT	141	22	4	0	0	167	169	129	28	14	3	0	174	184.9
13:00	39	5	1	2	0	47	50.1	35	5	0	0	0	40	40
13:15	24	3	3	0	0	30	31.5	22	6	1	2	0	31	34.1
13:30	32	4	2	0	0	38	39	21	7	2	1	0	31	33.3
13:45	35	3	0	0	0	38	38	41	8	3	0	0	52	53.5
H/TOT	130	15	6	2	0	153	158.6	119	26	6	3	0	154	160.9
14:00	23	5	0	0	0	28	28	38	13	1	1	0	53	54.8
14:15	40	5	3	0	0	48	49.5	31	12	2	0	1	46	48
14:30	34	5	1	0	1	41	42.5	57	14	6	1	1	79	84.3
14:45	38	2	1	0	0	41	41.5	46	4	2	0	0	52	53
H/TOT	135	17	5	0	1	158	161.5	172	43	11	2	2	230	240.1
15:00	44	2	1	0	0	47	47.5	38	6	2	0	0	46	47
15:15	39	7	4	1	0	51	54.3	45	10	3	2	1	61	66.1
15:30	40	3	3	0	0	46	47.5	55	13	4	1	0	73	76.3
15:45	51	8	3	0	0	62	63.5	68	22	3	1	0	94	96.8
H/TOT	174	20	11	1	0	206	212.8	206	51	12	4	1	274	286.2
16:00	53	5	0	0	0	58	58	77	19	5	0	0	101	103.5
16:15	43	5	0	0	0	48	48	105	25	3	2	0	135	139.1
16:30	36	4	1	0	0	41	41.5	129	25	4	0	0	158	160
16:45	14	6	0	0	0	20	20	126	29	5	0	0	160	162.5
H/TOT	146	20	1	0	0	167	167.5	437	98	17	2	0	554	565.1
17:00	32	5	2	1	0	40	42.3	144	25	7	0	0	176	179.5
17:15	50	6	1	0	0	57	57.5	137	35	9	0	0	181	185.5
17:30	64	4	3	0	0	71	72.5	143	25	2	0	0	170	171

17:45	46	3	2	0	0	51	52	154	29	2	0	0	185	186
H/TOT	192	18	8	1	0	219	224.3	578	114	20	0	0	712	722
18:00	51	7	1	0	0	59	59.5	111	17	2	0	0	130	131
18:15	41	2	0	0	0	43	43	114	27	4	0	0	145	147
18:30	29	0	0	0	0	29	29	109	19	6	0	0	134	137
18:45	30	1	1	0	0	32	32.5	78	16	1	0	0	95	95.5
H/TOT	151	10	2	0	0	163	164	412	79	13	0	0	504	510.5
19:00	27	2	0	0	0	29	29	58	10	3	0	0	71	72.5
19:15	29	1	0	0	0	30	30	45	7	2	0	0	54	55
19:30	20	1	1	0	0	22	22.5	26	7	0	0	0	33	33
19:45	16	1	0	0	0	17	17	31	9	0	0	0	40	40
H/TOT	92	5	1	0	0	98	98.5	160	33	5	0	0	198	200.5
20:00	12	3	0	0	0	15	15	24	6	1	0	0	31	31.5
20:15	10	1	0	0	0	11	11	17	4	0	0	1	22	23
20:30	7	1	0	0	0	8	8	20	4	2	0	0	26	27
20:45	10	0	0	0	0	10	10	9	0	2	0	0	11	12
H/TOT	39	5	0	0	0	44	44	70	14	5	0	1	90	93.5
21:00	5	1	0	0	0	6	6	13	0	0	0	0	13	13
21:15	11	0	0	0	0	11	11	13	3	1	0	0	17	17.5
21:30	10	0	1	0	0	11	11.5	14	1	0	0	0	15	15
21:45	7	3	0	0	0	10	10	13	1	0	0	0	14	14
H/TOT	33	4	1	0	0	38	38.5	53	5	1	0	0	59	59.5
22:00	9	0	0	0	0	9	9	8	3	0	0	0	11	11
22:15	13	2	1	0	0	16	16.5	17	0	0	0	0	17	17
22:30	16	0	1	0	0	17	17.5	12	3	0	0	0	15	15
22:45	7	0	0	0	0	7	7	3	0	0	0	0	3	3
H/TOT	45	2	2	0	0	49	50	40	6	0	0	0	46	46
23:00	3	0	0	0	0	3	3	13	0	1	0	0	14	14.5
23:15	5	0	0	0	0	5	5	3	0	0	0	0	3	3
23:30	4	0	1	0	0	5	5.5	4	0	0	0	0	4	4
23:45	0	1	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	12	1	1	0	0	14	14.5	23	0	1	0	0	24	24.5
24 TOT	2105	252	85	9	3	2454	2511	3064	623	148	17	5	3857	3958

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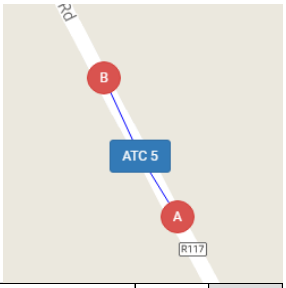


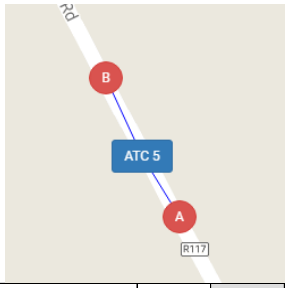
Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 11/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	1	0	0	0	1	1	5	2	0	0	0	7	7
00:15	1	1	0	0	0	2	2	3	1	1	0	0	5	5.5
00:30	4	1	0	0	0	5	5	1	0	0	0	0	1	1
00:45	1	0	0	0	0	1	1	5	0	0	0	0	5	5
H/TOT	6	3	0	0	0	9	9	14	3	1	0	0	18	18.5
01:00	4	0	0	0	0	4	4	6	1	0	0	0	7	7
01:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0
01:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
01:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	9	0	0	0	0	9	9	10	1	0	0	0	11	11
02:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
02:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	1	1	0	0	0	2	2
02:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	3	1	0	0	0	4	4
03:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2
03:30	1	0	0	0	0	1	1	0	1	0	0	0	1	1
03:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	4	0	0	0	0	4	4	3	2	0	0	0	5	5
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3
04:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
04:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	5	0	0	0	0	5	5
05:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1
05:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:45	1	0	0	0	0	1	1	1	1	1	0	0	3	3.5
H/TOT	3	0	0	0	0	3	3	2	2	1	0	0	5	5.5
06:00	0	0	0	0	0	0	0	3	1	1	0	0	5	5.5
06:15	3	1	1	0	0	5	5.5	1	0	0	0	0	1	1
06:30	1	0	0	0	0	1	1	2	1	1	0	0	4	4.5
06:45	3	2	0	0	0	5	5	2	3	1	0	0	6	6.5
H/TOT	7	3	1	0	0	11	11.5	8	5	3	0	0	16	17.5
07:00	4	0	1	0	0	5	5.5	4	2	0	0	0	6	6
07:15	8	0	0	0	0	8	8	9	2	0	0	0	11	11
07:30	2	2	1	0	0	5	5.5	8	6	2	0	0	16	17
07:45	8	2	1	0	0	11	11.5	10	2	2	0	0	14	15

H/TOT	22	4	3	0	0	29	30.5	31	12	4	0	0	47	49
08:00	13	1	2	0	0	16	17	3	1	1	0	0	5	5.5
08:15	17	5	0	2	0	24	26.6	9	1	1	0	0	11	11.5
08:30	14	2	0	0	0	16	16	9	5	0	0	0	14	14
08:45	21	3	1	0	0	25	25.5	17	7	1	0	0	25	25.5
H/TOT	65	11	3	2	0	81	85.1	38	14	3	0	0	55	56.5
09:00	22	2	5	0	0	29	31.5	25	6	0	0	0	31	31
09:15	29	2	0	0	0	31	31	24	7	0	0	0	31	31
09:30	12	3	0	0	0	15	15	43	10	1	0	0	54	54.5
09:45	25	0	0	0	0	25	25	30	12	2	2	0	46	49.6
H/TOT	88	7	5	0	0	100	102.5	122	35	3	2	0	162	166.1
10:00	28	4	0	0	0	32	32	37	6	2	0	0	45	46
10:15	38	2	1	0	0	41	41.5	31	10	0	0	0	41	41
10:30	31	0	1	1	0	33	34.8	39	9	1	0	0	49	49.5
10:45	28	3	1	0	0	32	32.5	46	8	1	0	0	55	55.5
H/TOT	125	9	3	1	0	138	140.8	153	33	4	0	0	190	192
11:00	36	4	1	0	1	42	43.5	38	3	0	0	0	41	41
11:15	38	4	0	1	0	43	44.3	40	5	1	0	0	46	46.5
11:30	39	5	1	0	0	45	45.5	48	6	1	0	0	55	55.5
11:45	39	2	0	0	0	41	41	26	10	0	1	1	38	40.3
H/TOT	152	15	2	1	1	171	174.3	152	24	2	1	1	180	183.3
12:00	35	4	2	0	0	41	42	50	12	1	0	0	63	63.5
12:15	49	7	0	1	0	57	58.3	35	13	0	0	0	48	48
12:30	50	4	1	0	0	55	55.5	54	12	3	0	0	69	70.5
12:45	58	5	0	0	0	63	63	56	10	0	0	0	66	66
H/TOT	192	20	3	1	0	216	218.8	195	47	4	0	0	246	248
13:00	50	8	1	1	0	60	61.8	47	9	0	0	0	56	56
13:15	52	10	1	0	0	63	63.5	37	12	1	1	0	51	52.8
13:30	48	3	2	1	0	54	56.3	43	6	1	0	0	50	50.5
13:45	60	0	0	0	0	60	60	52	11	2	1	0	66	68.3
H/TOT	210	21	4	2	0	237	241.6	179	38	4	2	0	223	227.6
14:00	48	6	0	0	0	54	54	44	6	1	0	0	51	51.5
14:15	47	3	1	0	0	51	51.5	39	12	0	0	0	51	51
14:30	55	2	0	0	0	57	57	43	8	0	1	0	52	53.3
14:45	58	3	2	1	0	64	66.3	36	4	0	0	0	40	40
H/TOT	208	14	3	1	0	226	228.8	162	30	1	1	0	194	195.8
15:00	48	5	1	0	0	54	54.5	29	5	2	0	0	36	37
15:15	55	10	2	0	0	67	68	37	11	0	0	0	48	48
15:30	44	8	1	0	0	53	53.5	33	11	0	0	0	44	44
15:45	34	6	0	0	0	40	40	35	9	1	1	0	46	47.8
H/TOT	181	29	4	0	0	214	216	134	36	3	1	0	174	176.8
16:00	43	3	0	0	0	46	46	31	3	2	0	0	36	37
16:15	45	3	2	0	0	50	51	24	4	0	0	1	29	30
16:30	37	1	0	0	0	38	38	38	8	1	1	0	48	49.8
16:45	29	2	1	0	0	32	32.5	37	4	1	0	0	42	42.5
H/TOT	154	9	3	0	0	166	167.5	130	19	4	1	1	155	159.3
17:00	42	2	1	0	0	45	45.5	23	8	2	0	0	33	34
17:15	30	3	1	0	0	34	34.5	21	4	2	0	1	28	30
17:30	19	2	0	0	0	21	21	28	1	0	0	0	29	29

17:45	26	2	0	0	0	28	28	31	5	1	0	0	37	37.5
H/TOT	117	9	2	0	0	128	129	103	18	5	0	1	127	130.5
18:00	20	2	0	0	0	22	22	27	4	0	0	0	31	31
18:15	24	3	1	0	0	28	28.5	18	2	0	0	0	20	20
18:30	12	1	0	0	0	13	13	23	4	0	0	0	27	27
18:45	13	2	0	0	0	15	15	16	2	1	0	0	19	19.5
H/TOT	69	8	1	0	0	78	78.5	84	12	1	0	0	97	97.5
19:00	5	0	0	0	0	5	5	15	2	0	0	0	17	17
19:15	12	2	0	0	0	14	14	16	3	1	0	0	20	20.5
19:30	6	1	0	0	0	7	7	16	4	0	0	0	20	20
19:45	9	1	1	0	0	11	11.5	17	5	1	0	0	23	23.5
H/TOT	32	4	1	0	0	37	37.5	64	14	2	0	0	80	81
20:00	13	1	0	0	0	14	14	13	3	1	0	0	17	17.5
20:15	6	1	0	0	0	7	7	7	4	0	0	0	11	11
20:30	6	2	1	0	0	9	9.5	5	1	0	0	0	6	6
20:45	8	1	0	0	0	9	9	10	0	0	0	0	10	10
H/TOT	33	5	1	0	0	39	39.5	35	8	1	0	0	44	44.5
21:00	4	0	0	0	0	4	4	8	0	0	0	0	8	8
21:15	8	0	0	0	0	8	8	7	0	0	0	0	7	7
21:30	12	1	1	0	0	14	14.5	5	0	0	0	0	5	5
21:45	1	0	0	0	0	1	1	1	1	0	0	0	2	2
H/TOT	25	1	1	0	0	27	27.5	21	1	0	0	0	22	22
22:00	4	1	0	0	0	5	5	8	2	1	0	0	11	11.5
22:15	3	0	0	0	0	3	3	10	1	0	0	0	11	11
22:30	4	1	1	0	0	6	6.5	12	1	0	0	0	13	13
22:45	6	0	0	0	0	6	6	8	0	1	0	0	9	9.5
H/TOT	17	2	1	0	0	20	20.5	38	4	2	0	0	44	45
23:00	5	0	0	0	0	5	5	5	1	0	0	0	6	6
23:15	0	1	0	0	0	1	1	5	2	0	0	0	7	7
23:30	5	1	1	0	0	7	7.5	7	1	0	0	0	8	8
23:45	12	0	0	0	0	12	12	11	1	0	0	0	12	12
H/TOT	22	2	1	0	0	25	25.5	28	5	0	0	0	33	33
24 TOT	1748	176	42	8	1	1975	2007	1714	364	48	8	3	2137	2174

IDASO



Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 5
Date : 12/11/17
Location : Enniskerry Road (South of Barnaslingan junction)

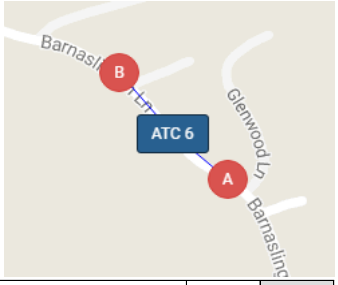
	NORTHBOUND							SOUTHBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	5	0	0	0	0	5	5	4	4	1	0	0	9	9.5
00:15	2	1	1	0	0	4	4.5	7	0	1	0	0	8	8.5
00:30	4	1	0	0	0	5	5	5	0	0	0	0	5	5
00:45	3	0	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	14	2	1	0	0	17	17.5	18	4	2	0	0	24	25
01:00	0	0	0	0	0	0	0	4	0	0	0	0	4	4
01:15	2	0	0	0	0	2	2	1	1	0	0	0	2	2
01:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
01:45	1	0	1	0	0	2	2.5	4	0	0	0	0	4	4
H/TOT	4	0	1	0	0	5	5.5	11	1	0	0	0	12	12
02:00	2	0	0	0	0	2	2	4	0	0	0	0	4	4
02:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	4	0	0	0	0	4	4	8	0	0	0	0	8	8
03:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
03:15	2	0	0	0	0	2	2	0	1	0	0	0	1	1
03:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	5	0	0	0	0	5	5	4	1	0	0	0	5	5
04:00	2	0	0	0	0	2	2	1	1	0	0	0	2	2
04:15	3	0	0	0	0	3	3	1	0	0	0	0	1	1
04:30	3	0	0	0	0	3	3	1	0	0	0	0	1	1
04:45	0	0	0	0	0	0	0	3	1	0	0	0	4	4
H/TOT	8	0	0	0	0	8	8	6	2	0	0	0	8	8
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2
05:30	0	1	0	0	0	1	1	1	0	0	0	0	1	1
05:45	1	0	0	0	0	1	1	1	0	1	0	0	2	2.5
H/TOT	1	1	0	0	0	2	2	3	1	1	0	0	5	5.5
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	1	0	0	1	0	2	3.3
06:30	3	0	0	0	0	3	3	1	2	0	0	0	3	3
06:45	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0
H/TOT	3	0	1	0	0	4	4.5	2	2	0	1	0	5	6.3
07:00	2	0	0	1	0	3	4.3	4	1	0	0	0	5	5
07:15	3	0	0	0	0	3	3	2	1	0	0	0	3	3
07:30	0	0	0	0	0	0	0	2	2	0	0	0	4	4
07:45	5	1	0	0	0	6	6	12	5	0	0	0	17	17

H/TOT	10	1	0	1	0	12	13.3	20	9	0	0	0	29	29
08:00	0	2	0	0	0	2	2	9	2	0	0	0	11	11
08:15	10	0	0	0	0	10	10	13	1	0	0	0	14	14
08:30	5	0	1	0	0	6	6.5	15	3	0	0	0	18	18
08:45	11	2	1	0	0	14	14.5	20	2	0	0	0	22	22
H/TOT	26	4	2	0	0	32	33	57	8	0	0	0	65	65
09:00	17	2	0	0	0	19	19	14	5	2	0	0	21	22
09:15	13	1	1	0	0	15	15.5	28	5	0	0	0	33	33
09:30	26	0	1	0	0	27	27.5	32	5	1	0	0	38	38.5
09:45	24	5	0	0	0	29	29	37	6	2	1	0	46	48.3
H/TOT	80	8	2	0	0	90	91	111	21	5	1	0	138	141.8
10:00	22	0	1	0	0	23	23.5	38	6	0	0	0	44	44
10:15	35	3	1	0	0	39	39.5	55	5	0	0	0	60	60
10:30	22	2	1	0	0	25	25.5	62	10	1	0	0	73	73.5
10:45	26	0	1	0	0	27	27.5	42	4	0	1	0	47	48.3
H/TOT	105	5	4	0	0	114	116	197	25	1	1	0	224	225.8
11:00	37	4	2	1	0	44	46.3	39	7	0	1	0	47	48.3
11:15	35	0	0	0	0	35	35	57	6	1	0	0	64	64.5
11:30	54	4	0	0	0	58	58	58	5	1	0	0	64	64.5
11:45	38	6	0	0	0	44	44	48	7	3	1	1	60	63.8
H/TOT	164	14	2	1	0	181	183.3	202	25	5	2	1	235	241.1
12:00	43	3	2	0	0	48	49	55	9	1	0	0	65	65.5
12:15	52	3	0	0	0	55	55	57	12	0	0	0	69	69
12:30	48	6	1	1	0	56	57.8	56	12	1	0	0	69	69.5
12:45	64	6	0	0	0	70	70	52	3	1	0	0	56	56.5
H/TOT	207	18	3	1	0	229	231.8	220	36	3	0	0	259	260.5
13:00	45	3	3	0	0	51	52.5	55	7	0	0	0	62	62
13:15	60	4	0	0	0	64	64	50	12	1	0	0	63	63.5
13:30	52	8	0	0	0	60	60	46	15	0	1	0	62	63.3
13:45	54	1	1	0	0	56	56.5	63	11	2	0	0	76	77
H/TOT	211	16	4	0	0	231	233	214	45	3	1	0	263	265.8
14:00	69	4	0	1	0	74	75.3	54	3	0	0	0	57	57
14:15	66	4	0	0	0	70	70	56	4	1	0	0	61	61.5
14:30	69	6	2	0	0	77	78	55	18	1	0	0	74	74.5
14:45	75	7	0	0	0	82	82	60	9	2	1	0	72	74.3
H/TOT	279	21	2	1	0	303	305.3	225	34	4	1	0	264	267.3
15:00	79	6	2	0	0	87	88	60	9	0	1	0	70	71.3
15:15	63	4	0	0	0	67	67	48	10	0	2	0	60	62.6
15:30	67	5	0	0	0	72	72	41	8	0	0	0	49	49
15:45	75	4	0	0	0	79	79	34	9	1	0	0	44	44.5
H/TOT	284	19	2	0	0	305	306	183	36	1	3	0	223	227.4
16:00	87	8	0	0	0	95	95	40	9	1	0	0	50	50.5
16:15	83	8	0	1	0	92	93.3	40	10	0	0	0	50	50
16:30	63	6	0	1	0	70	71.3	36	12	0	0	0	48	48
16:45	62	4	0	0	0	66	66	30	2	1	0	0	33	33.5
H/TOT	295	26	0	2	0	323	325.6	146	33	2	0	0	181	182
17:00	54	6	1	0	0	61	61.5	26	4	0	1	0	31	32.3
17:15	52	3	0	0	0	55	55	29	3	1	0	0	33	33.5
17:30	41	2	0	0	0	43	43	26	2	0	0	0	28	28

17:45	31	2	0	0	0	33	33	34	5	1	0	0	40	40.5
H/TOT	178	13	1	0	0	192	192.5	115	14	2	1	0	132	134.3
18:00	26	4	0	0	0	30	30	28	5	2	0	0	35	36
18:15	19	1	2	0	0	22	23	27	4	1	0	0	32	32.5
18:30	20	3	1	0	0	24	24.5	21	5	1	0	0	27	27.5
18:45	14	1	0	0	0	15	15	20	1	0	0	0	21	21
H/TOT	79	9	3	0	0	91	92.5	96	15	4	0	0	115	117
19:00	13	2	0	0	0	15	15	15	1	1	0	0	17	17.5
19:15	13	1	0	0	0	14	14	11	2	0	0	0	13	13
19:30	12	1	1	0	0	14	14.5	17	3	0	0	0	20	20
19:45	12	0	1	0	0	13	13.5	5	0	0	0	0	5	5
H/TOT	50	4	2	0	0	56	57	48	6	1	0	0	55	55.5
20:00	8	1	0	0	0	9	9	7	3	0	0	0	10	10
20:15	10	1	0	0	0	11	11	12	0	1	0	0	13	13.5
20:30	14	0	1	0	0	15	15.5	11	1	0	0	0	12	12
20:45	9	0	0	0	0	9	9	8	1	1	0	0	10	10.5
H/TOT	41	2	1	0	0	44	44.5	38	5	2	0	0	45	46
21:00	4	0	0	0	0	4	4	5	2	1	0	0	8	8.5
21:15	4	0	0	0	0	4	4	9	2	1	0	0	12	12.5
21:30	7	0	1	0	0	8	8.5	4	0	0	0	0	4	4
21:45	4	0	0	0	0	4	4	4	1	0	0	0	5	5
H/TOT	19	0	1	0	0	20	20.5	22	5	2	0	0	29	30
22:00	5	0	0	0	0	5	5	6	0	1	0	0	7	7.5
22:15	6	1	0	0	0	7	7	11	1	0	0	0	12	12
22:30	2	1	1	0	0	4	4.5	8	1	0	0	0	9	9
22:45	3	1	2	0	0	6	7	4	0	2	0	0	6	7
H/TOT	16	3	3	0	0	22	23.5	29	2	3	0	0	34	35.5
23:00	1	0	0	0	0	1	1	4	0	0	0	0	4	4
23:15	4	0	0	0	0	4	4	5	2	0	0	0	7	7
23:30	2	0	1	0	0	3	3.5	2	1	1	0	0	4	4.5
23:45	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	7	0	1	0	0	8	8.5	12	4	1	0	0	17	17.5
24 TOT	2090	166	36	6	0	2298	2324	1987	334	42	11	1	2375	2411

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 06/11/17
Location : Barnaslingan Lane



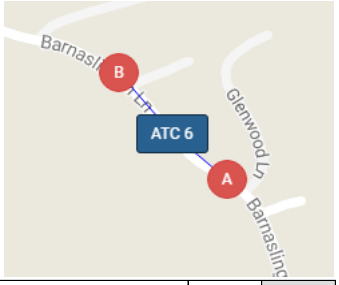
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
07:00	3	1	0	0	0	4	4	0	0	0	0	0	0	0
07:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:30	3	2	0	0	0	5	5	0	0	0	0	0	0	0
07:45	1	1	0	0	0	2	2	1	0	0	0	0	1	1

H/TOT	8	4	0	0	0	12	12	1	0	0	0	0	1	1
08:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
08:15	3	2	0	0	0	5	5	0	0	0	0	0	0	0
08:30	3	1	0	0	0	4	4	1	0	0	0	0	1	1
08:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	9	3	0	0	0	12	12	7	0	0	0	0	7	7
09:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:15	2	1	0	0	0	3	3	3	0	0	0	0	3	3
09:30	0	1	0	0	0	1	1	4	0	0	0	0	4	4
09:45	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	2	2	0	0	0	4	4	11	0	0	0	0	11	11
10:00	2	1	0	0	0	3	3	3	0	0	0	0	3	3
10:15	3	0	0	0	0	3	3	1	0	0	0	0	1	1
10:30	2	3	0	0	0	5	5	1	0	0	0	0	1	1
10:45	4	0	0	0	0	4	4	1	1	0	0	0	2	2
H/TOT	11	4	0	0	0	15	15	6	1	0	0	0	7	7
11:00	1	1	0	0	0	2	2	5	1	1	0	0	7	7.5
11:15	1	2	0	1	0	4	5.3	0	0	0	0	0	0	0
11:30	2	1	0	0	0	3	3	0	0	0	0	0	0	0
11:45	3	2	0	0	0	5	5	0	0	0	0	0	0	0
H/TOT	7	6	0	1	0	14	15.3	5	1	1	0	0	7	7.5
12:00	4	0	0	0	0	4	4	4	0	0	0	0	4	4
12:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3
12:30	2	0	0	0	0	2	2	5	1	0	0	0	6	6
12:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	8	0	0	0	0	8	8	15	1	0	0	0	16	16
13:00	5	0	0	0	0	5	5	3	1	0	0	0	4	4
13:15	2	1	0	0	0	3	3	4	1	0	0	0	5	5
13:30	2	0	1	0	0	3	3.5	2	1	1	0	0	4	4.5
13:45	3	2	0	0	0	5	5	2	0	0	0	0	2	2
H/TOT	12	3	1	0	0	16	16.5	11	3	1	0	0	15	15.5
14:00	3	1	0	0	0	4	4	4	2	0	0	0	6	6
14:15	3	0	0	0	0	3	3	3	1	0	0	0	4	4
14:30	2	0	0	0	0	2	2	3	0	0	0	0	3	3
14:45	0	1	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	8	2	0	0	0	10	10	14	3	0	0	0	17	17
15:00	4	1	0	0	0	5	5	4	0	0	0	0	4	4
15:15	1	0	0	0	0	1	1	4	0	0	0	0	4	4
15:30	3	1	0	0	0	4	4	4	0	0	0	0	4	4
15:45	3	0	1	0	0	4	4.5	6	1	0	0	0	7	7
H/TOT	11	2	1	0	0	14	14.5	18	1	0	0	0	19	19
16:00	2	1	0	0	0	3	3	1	1	0	0	0	2	2
16:15	2	0	0	0	0	2	2	4	1	0	0	0	5	5
16:30	3	2	0	0	0	5	5	1	0	0	0	0	1	1
16:45	2	0	0	0	0	2	2	0	1	0	0	0	1	1
H/TOT	9	3	0	0	0	12	12	6	3	0	0	0	9	9
17:00	1	0	0	0	0	1	1	3	0	0	0	0	3	3
17:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
17:30	0	1	0	0	0	1	1	2	2	0	0	0	4	4

17:45	2	0	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	5	1	0	0	0	6	6	8	2	0	0	0	10	10
18:00	1	0	0	0	0	1	1	5	0	0	0	0	5	5
18:15	0	0	0	0	0	0	0	4	0	0	0	0	4	4
18:30	2	0	0	0	0	2	2	3	1	0	0	0	4	4
18:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	13	1	0	0	0	14	14
19:00	0	0	0	0	0	0	0	3	0	0	0	0	3	3
19:15	1	0	0	0	0	1	1	2	1	0	0	0	3	3
19:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
19:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	8	1	0	0	0	9	9
20:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2
20:15	2	1	0	0	0	3	3	2	0	0	0	0	2	2
20:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
20:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	4	1	0	0	0	5	5	7	1	0	0	0	8	8
21:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
21:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	4	0	0	0	0	4	4	2	0	0	0	0	2	2
22:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
22:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	1	0	0	0	0	1	1	3	1	0	0	0	4	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24 TOT	107	31	2	1	0	141	143.3	137	19	2	0	0	158	159

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 07/11/17
Location : Barnaslingan Lane



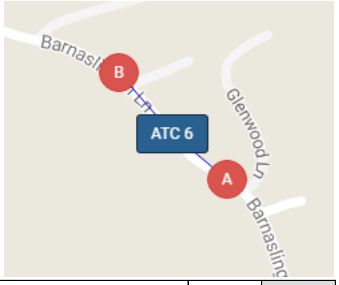
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	0	0	0	0	0	0	0
07:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
07:15	2	1	0	0	0	3	3	0	0	0	0	0	0	0
07:30	4	1	0	0	0	5	5	0	0	0	0	0	0	0
07:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4

H/TOT	9	2	0	0	0	11	11	4	0	0	0	0	4	4
08:00	3	1	0	0	0	4	4	0	0	0	0	0	0	0
08:15	0	1	0	0	0	1	1	2	0	0	0	0	2	2
08:30	3	2	0	0	0	5	5	2	0	0	0	0	2	2
08:45	1	0	0	0	0	1	1	4	1	0	0	0	5	5
H/TOT	7	4	0	0	0	11	11	8	1	0	0	0	9	9
09:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
09:15	2	2	0	0	0	4	4	3	0	0	0	0	3	3
09:30	4	0	0	0	0	4	4	1	0	0	0	0	1	1
09:45	0	1	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	8	3	0	0	0	11	11	6	0	0	0	0	6	6
10:00	2	1	0	0	0	3	3	2	2	0	0	0	4	4
10:15	0	2	0	0	0	2	2	1	0	0	0	0	1	1
10:30	1	2	1	0	0	4	4.5	0	0	0	0	0	0	0
10:45	1	1	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	4	6	1	0	0	11	11.5	5	2	0	0	0	7	7
11:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:15	0	1	0	0	0	1	1	2	0	1	0	0	3	3.5
11:30	2	1	1	0	0	4	4.5	1	1	0	0	0	2	2
11:45	3	1	0	0	0	4	4	0	0	0	0	0	0	0
H/TOT	5	3	1	0	0	9	9.5	4	1	1	0	0	6	6.5
12:00	1	1	0	0	0	2	2	2	0	0	0	0	2	2
12:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
12:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:45	4	1	0	0	0	5	5	1	2	0	0	0	3	3
H/TOT	6	2	0	0	0	8	8	7	2	0	0	0	9	9
13:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
13:15	3	0	0	0	0	3	3	1	1	0	0	0	2	2
13:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
13:45	3	2	0	0	0	5	5	7	0	1	0	0	8	8.5
H/TOT	10	2	0	0	0	12	12	11	1	1	0	0	13	13.5
14:00	3	3	0	0	0	6	6	2	1	0	0	0	3	3
14:15	5	1	0	0	0	6	6	5	0	0	0	0	5	5
14:30	2	1	0	0	0	3	3	8	0	0	0	0	8	8
14:45	3	0	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	13	5	0	0	0	18	18	17	1	0	0	0	18	18
15:00	4	0	0	0	0	4	4	1	0	0	0	0	1	1
15:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
15:30	2	0	0	0	0	2	2	7	0	0	0	0	7	7
15:45	2	2	0	0	0	4	4	3	0	0	0	0	3	3
H/TOT	9	2	0	0	0	11	11	12	0	0	0	0	12	12
16:00	3	0	0	0	0	3	3	5	2	0	0	0	7	7
16:15	1	1	0	0	0	2	2	4	0	1	0	0	5	5.5
16:30	4	1	1	0	0	6	6.5	4	1	0	0	0	5	5
16:45	2	0	0	0	0	2	2	2	1	0	0	0	3	3
H/TOT	10	2	1	0	0	13	13.5	15	4	1	0	0	20	20.5
17:00	3	0	0	0	0	3	3	4	0	0	0	0	4	4
17:15	7	1	0	0	0	8	8	1	0	0	0	0	1	1
17:30	0	0	1	0	0	1	1.5	0	1	0	0	0	1	1

17:45	2	1	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	12	2	1	0	0	15	15.5	8	1	0	0	0	9	9
18:00	1	0	0	0	0	1	1	4	0	0	0	0	4	4
18:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3
18:30	2	1	0	0	0	3	3	3	0	0	0	0	3	3
18:45	2	0	0	0	0	2	2	4	1	0	0	0	5	5
H/TOT	5	1	0	0	0	6	6	14	1	0	0	0	15	15
19:00	1	0	0	0	0	1	1	3	0	0	0	0	3	3
19:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
19:30	0	1	0	0	0	1	1	0	1	0	0	0	1	1
19:45	2	0	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	4	1	0	0	0	5	5	9	1	0	0	0	10	10
20:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
20:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0
20:30	1	0	0	0	0	1	1	1	1	0	0	0	2	2
20:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	4	4	1	1	0	0	0	2	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
21:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
21:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	2	0	0	0	0	2	2
22:00	3	0	0	0	0	3	3	0	0	1	0	0	1	1.5
22:15	0	0	1	0	0	1	1.5	2	0	0	0	0	2	2
22:30	0	0	0	0	0	0	0	1	2	0	0	0	3	3
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	1	0	0	4	4.5	3	2	1	0	0	6	6.5
23:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	1	0	0	0	0	1	1	3	0	0	0	0	3	3
24 TOT	114	37	5	0	0	156	158.5	130	18	4	0	0	152	154

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 08/11/17
Location : Barnaslingan Lane



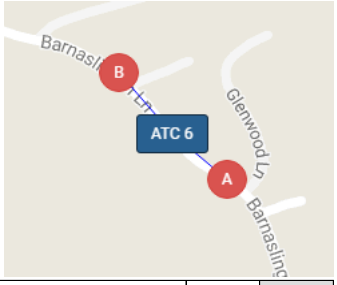
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	0	0	0	0	0	0	0
06:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
06:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	2	0	0	0	0	2	2
07:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:15	3	1	0	0	0	4	4	0	0	0	0	0	0	0
07:30	3	2	0	0	0	5	5	0	1	0	0	0	1	1
07:45	4	0	1	0	0	5	5.5	1	0	0	0	0	1	1

H/TOT	11	3	1	0	0	15	15.5	1	1	0	0	0	2	2
08:00	0	1	0	0	0	1	1	3	0	0	0	0	3	3
08:15	1	1	0	0	0	2	2	0	0	0	0	0	0	0
08:30	6	0	0	0	0	6	6	3	0	0	0	0	3	3
08:45	1	2	0	0	0	3	3	3	1	0	0	0	4	4
H/TOT	8	4	0	0	0	12	12	9	1	0	0	0	10	10
09:00	3	1	1	0	0	5	5.5	4	0	0	0	0	4	4
09:15	2	1	0	0	0	3	3	4	0	0	0	0	4	4
09:30	2	0	0	0	0	2	2	1	1	0	0	0	2	2
09:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	9	2	1	0	0	12	12.5	10	1	0	0	0	11	11
10:00	2	1	0	0	0	3	3	0	0	0	0	0	0	0
10:15	1	1	0	0	0	2	2	3	0	0	0	0	3	3
10:30	2	0	0	0	0	2	2	1	1	0	0	0	2	2
10:45	0	1	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	5	3	0	0	0	8	8	7	1	0	0	0	8	8
11:00	1	2	0	0	0	3	3	1	1	0	0	0	2	2
11:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
11:30	2	1	0	0	0	3	3	3	0	0	0	0	3	3
11:45	2	1	0	0	0	3	3	4	0	0	0	0	4	4
H/TOT	5	4	0	0	0	9	9	10	1	0	0	0	11	11
12:00	3	2	0	0	0	5	5	2	1	0	0	0	3	3
12:15	1	0	1	0	0	2	2.5	1	0	0	0	0	1	1
12:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
12:45	5	1	0	0	0	6	6	3	0	0	0	0	3	3
H/TOT	10	3	1	0	0	14	14.5	7	1	0	0	0	8	8
13:00	0	1	0	0	0	1	1	2	0	0	0	0	2	2
13:15	3	0	0	0	0	3	3	3	0	0	0	0	3	3
13:30	1	1	0	0	0	2	2	2	0	0	0	0	2	2
13:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	5	2	0	0	0	7	7	10	0	0	0	0	10	10
14:00	2	0	0	0	0	2	2	2	1	0	0	0	3	3
14:15	6	3	0	0	0	9	9	4	0	0	0	0	4	4
14:30	3	0	0	0	0	3	3	4	1	0	0	0	5	5
14:45	3	0	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	14	3	0	0	0	17	17	13	2	0	0	0	15	15
15:00	2	1	0	0	0	3	3	1	0	0	0	0	1	1
15:15	3	0	0	0	0	3	3	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3
15:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	6	1	0	0	0	7	7	8	0	0	0	0	8	8
16:00	3	1	0	0	0	4	4	4	2	0	0	0	6	6
16:15	3	0	0	0	0	3	3	3	0	0	0	0	3	3
16:30	0	1	0	0	0	1	1	6	0	0	0	0	6	6
16:45	1	0	0	0	0	1	1	3	1	0	0	0	4	4
H/TOT	7	2	0	0	0	9	9	16	3	0	0	0	19	19
17:00	4	0	0	0	0	4	4	7	0	0	0	0	7	7
17:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2
17:30	6	0	0	0	0	6	6	2	0	0	0	0	2	2

17:45	2	1	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	15	1	0	0	0	16	16	13	0	0	0	0	13	13
18:00	1	0	0	0	0	1	1	0	1	0	0	0	1	1
18:15	1	2	0	0	0	3	3	5	0	0	0	0	5	5
18:30	1	1	0	0	0	2	2	1	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	3	3	0	0	0	6	6	10	1	0	0	0	11	11
19:00	1	0	0	0	0	1	1	3	0	0	0	0	3	3
19:15	0	0	0	0	0	0	0	5	0	0	0	0	5	5
19:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	9	0	0	0	0	9	9
20:00	2	0	0	0	0	2	2	2	1	0	0	0	3	3
20:15	2	1	0	0	0	3	3	1	0	0	0	0	1	1
20:30	1	1	0	0	0	2	2	4	1	0	0	0	5	5
20:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	6	2	0	0	0	8	8	7	2	0	0	0	9	9
21:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
21:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2
21:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
21:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	4	0	0	0	0	4	4	6	0	0	0	0	6	6
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
22:30	0	2	0	0	0	2	2	1	0	0	0	0	1	1
22:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	2	0	0	0	2	2	2	1	0	0	0	3	3
23:00	1	0	0	0	0	1	1	0	1	0	0	0	1	1
23:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
23:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	3	1	0	0	0	4	4
24 TOT	116	36	3	0	0	155	156.5	144	16	0	0	0	160	160

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 09/11/17
Location : Barnaslingan Lane



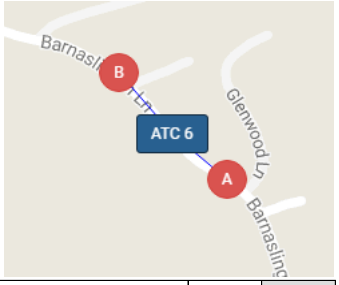
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	0	0	0	0	0	0	0
07:00	1	1	0	0	0	2	2	0	0	0	0	0	0	0
07:15	2	0	0	0	0	2	2	0	0	0	0	0	0	0
07:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
07:45	4	1	0	0	0	5	5	1	0	1	0	0	2	2.5

H/TOT	9	2	0	0	0	11	11	2	0	1	0	0	3	3.5
08:00	1	2	0	0	0	3	3	1	0	0	0	0	1	1
08:15	0	2	1	0	0	3	3.5	1	0	0	0	0	1	1
08:30	4	1	0	0	0	5	5	1	0	1	0	0	2	2.5
08:45	3	1	1	0	0	5	5.5	2	0	0	0	0	2	2
H/TOT	8	6	2	0	0	16	17	5	0	1	0	0	6	6.5
09:00	1	1	0	0	0	2	2	4	1	0	0	0	5	5
09:15	2	1	0	0	0	3	3	3	1	0	0	0	4	4
09:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
09:45	3	0	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	7	2	0	0	0	9	9	10	2	0	0	0	12	12
10:00	3	2	0	0	0	5	5	6	0	0	0	0	6	6
10:15	3	0	0	1	0	4	5.3	3	0	0	0	0	3	3
10:30	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:45	3	0	0	0	0	3	3	4	0	0	0	0	4	4
H/TOT	9	2	0	1	0	12	13.3	17	0	0	0	0	17	17
11:00	2	2	0	0	0	4	4	3	0	0	0	0	3	3
11:15	4	1	0	0	0	5	5	5	0	0	0	0	5	5
11:30	3	0	0	0	0	3	3	4	0	0	0	0	4	4
11:45	1	2	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	10	5	0	0	0	15	15	13	0	0	0	0	13	13
12:00	4	1	0	0	0	5	5	4	0	0	0	0	4	4
12:15	3	0	0	0	0	3	3	5	0	0	0	0	5	5
12:30	2	1	0	0	0	3	3	0	0	0	0	0	0	0
12:45	3	0	0	0	0	3	3	2	0	0	0	0	2	2
H/TOT	12	2	0	0	0	14	14	11	0	0	0	0	11	11
13:00	4	1	0	0	0	5	5	2	0	0	0	0	2	2
13:15	5	0	0	0	0	5	5	5	0	0	0	0	5	5
13:30	1	1	0	0	0	2	2	0	0	0	0	0	0	0
13:45	2	0	0	0	0	2	2	3	1	0	0	0	4	4
H/TOT	12	2	0	0	0	14	14	10	1	0	0	0	11	11
14:00	7	0	0	0	0	7	7	4	1	0	0	0	5	5
14:15	1	3	0	0	0	4	4	3	3	0	0	0	6	6
14:30	2	1	0	0	0	3	3	2	0	0	0	0	2	2
14:45	2	2	1	0	0	5	5.5	1	0	1	0	0	2	2.5
H/TOT	12	6	1	0	0	19	19.5	10	4	1	0	0	15	15.5
15:00	2	1	0	0	0	3	3	3	0	0	0	0	3	3
15:15	1	1	0	0	0	2	2	1	1	0	0	0	2	2
15:30	3	1	0	0	0	4	4	4	0	0	0	0	4	4
15:45	5	1	0	0	0	6	6	2	1	0	0	0	3	3
H/TOT	11	4	0	0	0	15	15	10	2	0	0	0	12	12
16:00	1	2	0	0	0	3	3	7	0	0	0	0	7	7
16:15	4	1	0	0	0	5	5	5	0	0	0	0	5	5
16:30	4	0	0	0	0	4	4	2	1	0	0	0	3	3
16:45	5	0	0	0	0	5	5	2	0	0	0	0	2	2
H/TOT	14	3	0	0	0	17	17	16	1	0	0	0	17	17
17:00	3	1	0	0	0	4	4	4	2	0	0	0	6	6
17:15	1	1	0	0	0	2	2	3	1	0	0	0	4	4
17:30	0	2	0	0	0	2	2	4	1	0	0	0	5	5

17:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	6	4	0	0	0	10	10	12	4	0	0	0	16	16
18:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3
18:15	1	1	0	0	0	2	2	3	0	0	0	0	3	3
18:30	0	0	0	0	0	0	0	4	0	0	0	0	4	4
18:45	1	0	0	0	0	1	1	3	0	0	0	0	3	3
H/TOT	4	1	0	0	0	5	5	13	0	0	0	0	13	13
19:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:15	2	2	0	0	0	4	4	3	0	0	0	0	3	3
19:30	2	0	0	0	0	2	2	4	0	0	0	0	4	4
19:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	6	2	0	0	0	8	8	11	0	0	0	0	11	11
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	7	0	0	0	0	7	7	3	0	0	0	0	3	3
20:30	3	0	0	0	0	3	3	3	0	0	0	0	3	3
20:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	10	0	0	0	0	10	10	8	0	0	0	0	8	8
21:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
21:15	0	1	0	0	0	1	1	1	0	0	0	0	1	1
21:30	0	0	0	0	0	0	0	3	0	0	0	0	3	3
21:45	2	0	0	0	0	2	2	1	2	0	0	0	3	3
H/TOT	3	1	0	0	0	4	4	6	2	0	0	0	8	8
22:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
22:15	3	0	0	0	0	3	3	1	1	0	0	0	2	2
22:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
22:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	5	1	0	0	0	6	6
23:00	0	0	0	0	0	0	0	1	1	0	0	0	2	2
23:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	1	1	0	0	0	2	2
24 TOT	138	43	3	1	0	185	187.8	162	18	3	0	0	183	184.5

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 10/11/17
Location : Barnaslingan Lane



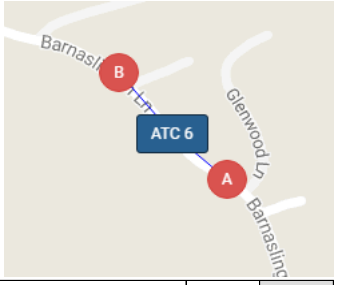
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	1	0	0	0	1	1
00:45	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	0	1	0	0	0	1	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
01:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	3	0	0	0	0	3	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	1	1	0	0	0	2	2	0	0	0	0	0	0	0
06:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	2	1	0	0	0	3	3	1	0	0	0	0	1	1
07:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:15	3	2	0	0	0	5	5	0	0	0	0	0	0	0
07:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
07:45	3	0	0	0	0	3	3	2	0	0	0	0	2	2

H/TOT	9	2	0	0	0	11	11	4	0	0	0	0	4	4
08:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
08:15	3	2	0	0	0	5	5	1	0	0	0	0	1	1
08:30	2	2	0	0	0	4	4	2	0	0	0	0	2	2
08:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	8	4	0	0	0	12	12	5	0	0	0	0	5	5
09:00	0	1	0	0	0	1	1	5	0	0	0	0	5	5
09:15	0	1	0	0	0	1	1	3	1	0	0	0	4	4
09:30	5	2	0	0	0	7	7	0	0	0	0	0	0	0
09:45	5	0	0	0	0	5	5	0	1	0	0	0	1	1
H/TOT	10	4	0	0	0	14	14	8	2	0	0	0	10	10
10:00	1	1	0	0	0	2	2	2	0	0	0	0	2	2
10:15	3	1	0	0	0	4	4	4	0	0	0	0	4	4
10:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
10:45	1	1	0	0	0	2	2	2	0	0	0	0	2	2
H/TOT	7	3	0	0	0	10	10	10	0	0	0	0	10	10
11:00	0	1	0	0	0	1	1	5	0	1	0	0	6	6.5
11:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
11:30	2	1	0	0	0	3	3	7	1	0	0	0	8	8
11:45	5	1	0	0	0	6	6	6	0	0	0	0	6	6
H/TOT	9	3	0	0	0	12	12	19	1	1	0	0	21	21.5
12:00	1	0	0	1	0	2	3.3	4	2	0	0	0	6	6
12:15	3	0	0	0	0	3	3	3	0	0	0	0	3	3
12:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
12:45	2	4	0	0	0	6	6	3	0	0	0	0	3	3
H/TOT	8	4	0	1	0	13	14.3	11	2	0	0	0	13	13
13:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
13:15	2	1	0	0	0	3	3	3	0	0	0	0	3	3
13:30	1	0	0	0	0	1	1	1	2	0	0	0	3	3
13:45	3	0	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	8	1	0	0	0	9	9	7	2	0	0	0	9	9
14:00	3	0	0	0	0	3	3	2	0	1	0	0	3	3.5
14:15	4	0	0	0	0	4	4	0	0	0	0	0	0	0
14:30	3	2	0	0	0	5	5	3	0	0	0	0	3	3
14:45	3	1	0	0	0	4	4	5	1	0	0	0	6	6
H/TOT	13	3	0	0	0	16	16	10	1	1	0	0	12	12.5
15:00	3	1	0	0	0	4	4	3	0	0	0	0	3	3
15:15	0	2	0	0	0	2	2	1	0	0	0	0	1	1
15:30	1	0	1	0	0	2	2.5	2	2	0	0	0	4	4
15:45	2	2	0	0	0	4	4	2	1	0	0	0	3	3
H/TOT	6	5	1	0	0	12	12.5	8	3	0	0	0	11	11
16:00	0	1	0	0	0	1	1	5	1	0	0	0	6	6
16:15	0	0	0	0	0	0	0	3	1	0	0	0	4	4
16:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
16:45	5	2	0	0	0	7	7	4	1	0	0	0	5	5
H/TOT	6	3	0	0	0	9	9	13	3	0	0	0	16	16
17:00	3	2	0	0	0	5	5	8	0	0	0	0	8	8
17:15	2	1	0	0	0	3	3	3	0	0	0	0	3	3
17:30	0	1	0	0	0	1	1	1	0	1	0	0	2	2.5

17:45	1	0	0	0	0	1	1	3	2	0	0	0	5	5
H/TOT	6	4	0	0	0	10	10	15	2	1	0	0	18	18.5
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	1	2	0	0	0	3	3	5	0	0	0	0	5	5
18:30	1	0	0	0	0	1	1	4	0	0	0	0	4	4
18:45	2	0	0	0	0	2	2	1	1	0	0	0	2	2
H/TOT	4	2	0	0	0	6	6	10	1	0	0	0	11	11
19:00	2	0	0	0	0	2	2	5	0	0	0	0	5	5
19:15	1	1	0	0	0	2	2	4	1	0	0	0	5	5
19:30	0	2	0	0	0	2	2	2	0	0	0	0	2	2
19:45	1	0	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	4	3	0	0	0	7	7	13	1	0	0	0	14	14
20:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
20:15	1	1	0	0	0	2	2	2	1	0	0	0	3	3
20:30	4	1	0	0	0	5	5	1	0	0	0	0	1	1
20:45	1	1	0	0	0	2	2	4	0	0	0	0	4	4
H/TOT	8	3	0	0	0	11	11	9	1	0	0	0	10	10
21:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
21:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
21:45	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	1	0	0	0	0	1	1	5	1	0	0	0	6	6
22:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0
22:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	1	0	0	0	2	2	2	0	0	0	0	2	2
23:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
24 TOT	112	47	1	1	0	161	162.8	155	21	3	0	0	179	180.5

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 11/11/17
Location : Barnaslingan Lane



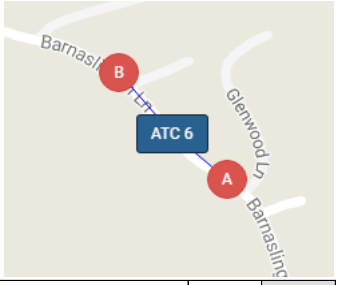
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
00:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	1	0	0	0	3	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:45	0	2	0	0	0	2	2	0	1	0	0	0	1	1
H/TOT	1	2	0	0	0	3	3	1	1	0	0	0	2	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0

H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
08:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
08:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0
08:30	0	1	0	0	0	1	1	1	0	0	0	0	1	1
08:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	4	2	0	0	0	6	6	5	0	0	0	0	5	5
09:00	2	1	0	0	0	3	3	0	0	0	0	0	0	0
09:15	3	0	0	0	0	3	3	2	1	0	0	0	3	3
09:30	3	1	0	0	0	4	4	2	0	0	0	0	2	2
09:45	4	1	0	0	0	5	5	2	0	0	0	0	2	2
H/TOT	12	3	0	0	0	15	15	6	1	0	0	0	7	7
10:00	4	0	0	0	0	4	4	0	0	0	0	0	0	0
10:15	4	1	0	0	0	5	5	8	0	0	0	0	8	8
10:30	3	1	1	0	0	5	5.5	6	0	1	0	0	7	7.5
10:45	3	1	0	0	0	4	4	1	0	0	0	0	1	1
H/TOT	14	3	1	0	0	18	18.5	15	0	1	0	0	16	16.5
11:00	3	0	0	1	0	4	5.3	6	0	0	0	0	6	6
11:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3
11:30	3	0	0	0	0	3	3	6	2	1	0	0	9	9.5
11:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	7	0	0	1	0	8	9.3	19	2	1	0	0	22	22.5
12:00	5	0	0	0	0	5	5	10	0	0	0	0	10	10
12:15	4	3	0	0	0	7	7	4	2	0	0	0	6	6
12:30	3	2	1	0	0	6	6.5	3	2	0	0	0	5	5
12:45	4	0	0	0	0	4	4	2	1	0	0	0	3	3
H/TOT	16	5	1	0	0	22	22.5	19	5	0	0	0	24	24
13:00	4	2	0	0	0	6	6	3	1	0	0	0	4	4
13:15	3	0	0	0	0	3	3	4	2	0	0	0	6	6
13:30	4	2	0	0	0	6	6	4	1	0	0	0	5	5
13:45	6	1	0	0	0	7	7	2	1	0	0	0	3	3
H/TOT	17	5	0	0	0	22	22	13	5	0	0	0	18	18
14:00	4	0	1	0	0	5	5.5	1	0	0	0	0	1	1
14:15	3	2	1	0	0	6	6.5	2	1	0	0	0	3	3
14:30	3	1	0	0	0	4	4	5	0	0	0	0	5	5
14:45	2	1	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	12	4	2	0	0	18	19	11	1	0	0	0	12	12
15:00	10	2	0	0	0	12	12	6	1	0	0	0	7	7
15:15	7	1	0	0	0	8	8	5	1	0	0	0	6	6
15:30	1	1	0	0	0	2	2	2	0	0	0	0	2	2
15:45	3	2	0	0	0	5	5	6	0	0	0	0	6	6
H/TOT	21	6	0	0	0	27	27	19	2	0	0	0	21	21
16:00	2	1	0	0	0	3	3	0	0	0	0	0	0	0
16:15	4	1	0	0	0	5	5	3	0	0	0	0	3	3
16:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
16:45	2	1	0	0	0	3	3	4	1	0	0	0	5	5
H/TOT	10	3	0	0	0	13	13	8	1	0	0	0	9	9
17:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
17:15	3	0	0	0	0	3	3	2	0	0	0	0	2	2
17:30	3	0	0	0	0	3	3	3	0	0	0	0	3	3

17:45	2	0	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	9	0	0	0	0	9	9	8	0	0	0	0	8	8
18:00	3	1	0	0	0	4	4	2	0	0	0	0	2	2
18:15	0	1	0	0	0	1	1	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	2	1	0	0	0	3	3
18:45	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	3	2	0	0	0	5	5	5	2	0	0	0	7	7
19:00	2	0	0	0	0	2	2	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
19:30	0	1	0	0	0	1	1	0	0	0	0	0	0	0
19:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	3	0	0	0	0	3	3
20:00	1	1	0	0	0	2	2	0	0	0	0	0	0	0
20:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
20:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
20:45	1	1	0	0	0	2	2	3	0	0	0	0	3	3
H/TOT	3	2	0	0	0	5	5	5	0	0	0	0	5	5
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
21:30	1	0	0	0	0	1	1	1	1	0	0	0	2	2
21:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	3	1	0	0	0	4	4
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
23:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
23:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	3	1	0	0	0	4	4
24 TOT	138	38	4	1	0	181	184.3	148	23	2	0	0	173	174

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 6
Date : 12/11/17
Location : Barnaslingan Lane



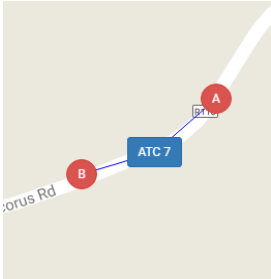
	NORTHWEST BOUND							SOUTHEAST BOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	3	0	0	0	0	3	3
01:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	1	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	2	0	0	0	0	2	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0

H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
08:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2
08:45	2	1	0	0	0	3	3	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	5	5	2	0	0	0	0	2	2
09:00	1	0	0	0	0	1	1	4	0	0	0	0	4	4
09:15	0	1	0	0	0	1	1	8	0	0	0	0	8	8
09:30	2	3	0	0	0	5	5	2	0	0	0	0	2	2
09:45	6	0	0	0	0	6	6	2	1	0	0	0	3	3
H/TOT	9	4	0	0	0	13	13	16	1	0	0	0	17	17
10:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
10:15	2	0	0	0	0	2	2	3	0	0	0	0	3	3
10:30	6	2	0	0	0	8	8	6	0	0	0	0	6	6
10:45	5	0	0	0	0	5	5	5	2	0	0	0	7	7
H/TOT	15	2	0	0	0	17	17	15	2	0	0	0	17	17
11:00	7	2	0	0	0	9	9	4	0	0	0	0	4	4
11:15	1	1	0	0	0	2	2	5	1	0	0	0	6	6
11:30	2	1	0	0	0	3	3	9	0	0	0	0	9	9
11:45	2	2	0	0	0	4	4	11	1	0	0	0	12	12
H/TOT	12	6	0	0	0	18	18	29	2	0	0	0	31	31
12:00	3	2	0	0	0	5	5	5	0	0	0	0	5	5
12:15	7	3	0	0	0	10	10	4	0	0	0	0	4	4
12:30	7	0	0	0	0	7	7	12	1	0	0	0	13	13
12:45	8	2	0	0	0	10	10	10	0	0	0	0	10	10
H/TOT	25	7	0	0	0	32	32	31	1	0	0	0	32	32
13:00	5	1	0	0	0	6	6	5	1	0	0	0	6	6
13:15	5	1	0	0	0	6	6	8	1	0	0	0	9	9
13:30	4	1	0	0	0	5	5	5	1	0	0	0	6	6
13:45	5	1	0	0	0	6	6	25	4	0	0	0	29	29
H/TOT	19	4	0	0	0	23	23	43	7	0	0	0	50	50
14:00	14	3	0	0	0	17	17	10	4	0	0	0	14	14
14:15	10	5	1	0	0	16	16.5	6	0	0	0	0	6	6
14:30	9	2	0	0	0	11	11	6	0	0	0	0	6	6
14:45	14	1	0	0	0	15	15	4	0	0	0	0	4	4
H/TOT	47	11	1	0	0	59	59.5	26	4	0	0	0	30	30
15:00	6	1	0	0	0	7	7	7	1	0	0	0	8	8
15:15	5	1	0	0	0	6	6	11	1	0	0	0	12	12
15:30	9	2	0	0	0	11	11	6	2	0	0	0	8	8
15:45	10	1	0	0	0	11	11	7	2	0	0	0	9	9
H/TOT	30	5	0	0	0	35	35	31	6	0	0	0	37	37
16:00	13	1	0	0	0	14	14	5	0	0	0	0	5	5
16:15	9	2	0	0	0	11	11	2	0	0	0	0	2	2
16:30	8	2	0	0	0	10	10	2	2	0	0	0	4	4
16:45	6	0	0	0	0	6	6	1	0	0	0	0	1	1
H/TOT	36	5	0	0	0	41	41	10	2	0	0	0	12	12
17:00	4	1	0	0	0	5	5	2	0	0	0	0	2	2
17:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
17:30	2	1	0	0	0	3	3	2	0	0	0	0	2	2

17:45	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	7	2	0	0	0	9	9	10	1	0	0	0	11	11
18:00	1	1	0	0	0	2	2	1	0	0	0	0	1	1
18:15	1	1	0	0	0	2	2	0	0	0	0	0	0	0
18:30	1	1	0	0	0	2	2	2	0	0	0	0	2	2
18:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	5	3	0	0	0	8	8	4	0	0	0	0	4	4
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
19:45	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	2	2	1	0	0	0	0	1	1
20:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3
20:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
20:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
20:45	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	5	1	0	0	0	6	6
21:00	0	1	0	0	0	1	1	0	1	0	0	0	1	1
21:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
21:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
21:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	4	4	2	1	0	0	0	3	3
22:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2
22:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
22:30	0	0	1	0	0	1	1.5	1	0	1	0	0	2	2.5
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	1	1.5	4	0	1	0	0	5	5.5
23:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:15	1	0	0	0	0	1	1	1	1	0	0	0	2	2
23:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	2	1	0	0	0	3	3
24 TOT	226	52	2	0	0	280	281	240	29	1	0	0	270	270.5

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 06/11/17
Location : Ballycorus Road



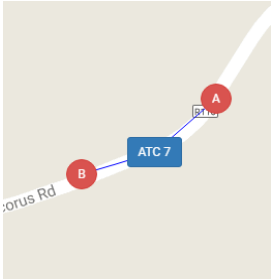
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
00:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	3	0	0	0	0	3	3
01:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
02:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:00	1	1	0	0	0	2	2	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	2	0	0	0	0	2	2	2	2	0	0	0	4	4
06:45	3	0	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	6	1	0	0	0	7	7	6	2	0	0	0	8	8
07:00	10	2	2	0	0	14	15	10	2	0	0	0	12	12
07:15	9	0	1	0	0	10	10.5	10	0	0	0	0	10	10
07:30	15	4	0	0	0	19	19	17	2	0	0	0	19	19
07:45	9	3	1	0	0	13	13.5	18	2	1	0	1	22	23.5

H/TOT	43	9	4	0	0	56	58	55	6	1	0	1	63	64.5
08:00	18	0	0	0	0	18	18	25	1	1	1	0	28	29.8
08:15	18	1	1	0	0	20	20.5	32	2	1	0	0	35	35.5
08:30	20	3	0	0	0	23	23	25	5	0	0	0	30	30
08:45	12	5	1	0	0	18	18.5	21	3	0	0	0	24	24
H/TOT	68	9	2	0	0	79	80	103	11	2	1	0	117	119.3
09:00	20	5	0	0	0	25	25	15	4	1	0	0	20	20.5
09:15	16	5	2	0	0	23	24	14	2	0	0	0	16	16
09:30	13	5	0	0	0	18	18	15	3	0	0	0	18	18
09:45	14	2	0	0	0	16	16	12	1	0	0	0	13	13
H/TOT	63	17	2	0	0	82	83	56	10	1	0	0	67	67.5
10:00	10	0	0	0	0	10	10	11	1	0	0	0	12	12
10:15	17	1	0	0	0	18	18	9	2	1	0	0	12	12.5
10:30	11	0	0	0	0	11	11	3	1	0	0	0	4	4
10:45	9	1	1	0	0	11	11.5	11	0	1	0	0	12	12.5
H/TOT	47	2	1	0	0	50	50.5	34	4	2	0	0	40	41
11:00	6	2	2	0	0	10	11	15	0	1	0	0	16	16.5
11:15	12	2	1	0	0	15	15.5	17	2	0	0	0	19	19
11:30	13	4	3	0	0	20	21.5	11	4	2	0	0	17	18
11:45	11	0	0	0	0	11	11	12	2	0	0	1	15	16
H/TOT	42	8	6	0	0	56	59	55	8	3	0	1	67	69.5
12:00	10	0	1	0	0	11	11.5	13	2	0	0	0	15	15
12:15	14	4	0	2	0	20	22.6	15	4	1	0	0	20	20.5
12:30	14	2	1	0	0	17	17.5	22	1	0	0	0	23	23
12:45	13	6	1	0	0	20	20.5	16	1	1	0	0	18	18.5
H/TOT	51	12	3	2	0	68	72.1	66	8	2	0	0	76	77
13:00	18	3	0	0	0	21	21	13	2	0	0	0	15	15
13:15	14	2	1	0	0	17	17.5	18	3	0	0	0	21	21
13:30	12	3	1	0	0	16	16.5	16	2	1	0	0	19	19.5
13:45	14	3	0	0	0	17	17	19	4	1	0	0	24	24.5
H/TOT	58	11	2	0	0	71	72	66	11	2	0	0	79	80
14:00	15	6	1	0	0	22	22.5	28	0	0	0	0	28	28
14:15	8	2	0	0	1	11	12	17	2	0	0	0	19	19
14:30	12	2	2	0	0	16	17	17	4	0	0	0	21	21
14:45	11	2	0	0	0	13	13	13	1	0	0	0	14	14
H/TOT	46	12	3	0	1	62	64.5	75	7	0	0	0	82	82
15:00	15	2	1	0	0	18	18.5	17	1	0	0	0	18	18
15:15	11	7	0	0	0	18	18	22	6	0	0	0	28	28
15:30	12	3	1	0	0	16	16.5	17	5	0	0	0	22	22
15:45	22	1	0	0	0	23	23	18	6	1	0	0	25	25.5
H/TOT	60	13	2	0	0	75	76	74	18	1	0	0	93	93.5
16:00	17	3	1	1	0	22	23.8	26	3	1	1	0	31	32.8
16:15	12	3	0	0	0	15	15	21	2	0	0	0	23	23
16:30	16	4	0	1	0	21	22.3	23	6	1	0	0	30	30.5
16:45	18	1	0	0	0	19	19	20	3	0	0	0	23	23
H/TOT	63	11	1	2	0	77	80.1	90	14	2	1	0	107	109.3
17:00	21	5	0	0	0	26	26	32	2	1	0	0	35	35.5
17:15	22	5	0	0	0	27	27	42	2	0	0	0	44	44
17:30	16	4	2	0	0	22	23	36	0	0	0	0	36	36

17:45	18	3	2	0	0	23	24	40	0	0	0	0	40	40
H/TOT	77	17	4	0	0	98	100	150	4	1	0	0	155	155.5
18:00	12	2	0	0	0	14	14	37	3	1	0	0	41	41.5
18:15	18	4	0	0	0	22	22	45	2	0	0	0	47	47
18:30	10	4	2	0	0	16	17	29	6	0	0	0	35	35
18:45	13	3	0	0	0	16	16	20	5	1	0	0	26	26.5
H/TOT	53	13	2	0	0	68	69	131	16	2	0	0	149	150
19:00	9	1	1	0	0	11	11.5	15	4	0	1	0	20	21.3
19:15	5	1	0	0	0	6	6	12	1	0	0	0	13	13
19:30	8	1	0	0	0	9	9	13	2	0	0	0	15	15
19:45	14	1	0	0	0	15	15	12	1	0	0	0	13	13
H/TOT	36	4	1	0	0	41	41.5	52	8	0	1	0	61	62.3
20:00	7	2	0	0	0	9	9	5	2	0	0	0	7	7
20:15	9	0	0	0	0	9	9	4	1	0	0	0	5	5
20:30	1	2	0	0	0	3	3	13	0	0	0	0	13	13
20:45	3	0	0	0	0	3	3	7	1	0	0	0	8	8
H/TOT	20	4	0	0	0	24	24	29	4	0	0	0	33	33
21:00	7	0	0	0	0	7	7	7	0	0	0	0	7	7
21:15	5	0	0	0	0	5	5	3	0	0	0	0	3	3
21:30	4	1	0	0	0	5	5	3	0	0	0	0	3	3
21:45	1	1	0	0	0	2	2	8	1	0	0	0	9	9
H/TOT	17	2	0	0	0	19	19	21	1	0	0	0	22	22
22:00	5	0	0	0	0	5	5	13	1	0	0	0	14	14
22:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
22:30	2	0	0	0	0	2	2	5	0	0	0	0	5	5
22:45	4	0	0	0	0	4	4	3	0	0	0	0	3	3
H/TOT	12	0	0	0	0	12	12	22	1	0	0	0	23	23
23:00	2	0	0	0	0	2	2	2	0	0	0	0	2	2
23:15	1	0	0	0	0	1	1	2	1	0	0	0	3	3
23:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
23:45	4	0	0	0	0	4	4	1	0	0	0	0	1	1
H/TOT	8	0	0	0	0	8	8	6	1	0	0	0	7	7
24 TOT	776	145	33	4	1	959	981.7	1096	134	19	3	2	1254	1269

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 07/11/17
Location : Ballycorus Road



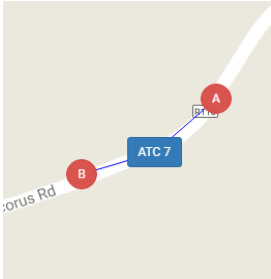
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2
00:45	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	2	0	0	0	0	2	2	6	0	0	0	0	6	6
01:00	3	0	0	0	0	3	3	1	0	0	0	0	1	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	1	0	0	0	0	1	1
02:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	0	1	1	2	0	0	0	0	2	2
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	2	0	0	0	0	2	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:15	3	0	0	0	0	3	3	0	0	0	0	0	0	0
06:30	1	0	0	0	0	1	1	5	0	0	0	0	5	5
06:45	4	0	1	0	0	5	5.5	4	0	0	0	0	4	4
H/TOT	9	0	1	0	0	10	10.5	9	0	0	0	0	9	9
07:00	10	2	1	0	0	13	13.5	6	2	0	0	0	8	8
07:15	9	2	1	0	0	12	12.5	7	0	3	0	0	10	11.5
07:30	15	5	0	0	0	20	20	13	3	1	0	0	17	17.5
07:45	12	2	4	0	0	18	20	21	3	1	0	0	25	25.5

H/TOT	46	11	6	0	0	63	66	47	8	5	0	0	60	62.5
08:00	11	3	0	0	0	14	14	34	3	1	0	0	38	38.5
08:15	18	1	1	1	0	21	22.8	32	11	1	1	0	45	46.8
08:30	12	6	0	0	0	18	18	26	3	0	0	0	29	29
08:45	23	2	0	0	0	25	25	20	3	0	0	0	23	23
H/TOT	64	12	1	1	0	78	79.8	112	20	2	1	0	135	137.3
09:00	30	1	0	0	0	31	31	20	6	0	0	0	26	26
09:15	16	4	1	0	0	21	21.5	13	1	0	0	0	14	14
09:30	12	2	1	0	0	15	15.5	20	1	0	0	0	21	21
09:45	11	1	1	1	0	14	15.8	8	1	0	1	0	10	11.3
H/TOT	69	8	3	1	0	81	83.8	61	9	0	1	0	71	72.3
10:00	8	2	0	0	0	10	10	12	2	1	0	0	15	15.5
10:15	12	0	0	1	0	13	14.3	12	0	0	0	0	12	12
10:30	14	1	1	1	0	17	18.8	13	1	1	0	0	15	15.5
10:45	10	2	1	0	0	13	13.5	14	1	0	0	0	15	15
H/TOT	44	5	2	2	0	53	56.6	51	4	2	0	0	57	58
11:00	8	2	0	0	0	10	10	11	1	0	0	0	12	12
11:15	6	3	2	0	0	11	12	14	4	1	0	0	19	19.5
11:30	8	4	2	0	0	14	15	7	2	0	0	0	9	9
11:45	17	2	1	0	0	20	20.5	10	4	0	0	1	15	16
H/TOT	39	11	5	0	0	55	57.5	42	11	1	0	1	55	56.5
12:00	20	2	1	1	0	24	25.8	11	2	1	0	0	14	14.5
12:15	8	1	1	0	0	10	10.5	19	2	0	0	0	21	21
12:30	10	3	0	0	0	13	13	21	1	0	0	0	22	22
12:45	13	3	1	0	0	17	17.5	16	1	0	0	0	17	17
H/TOT	51	9	3	1	0	64	66.8	67	6	1	0	0	74	74.5
13:00	16	2	2	0	0	20	21	12	0	1	1	0	14	15.8
13:15	13	1	0	0	0	14	14	14	1	1	1	0	17	18.8
13:30	14	1	2	0	0	17	18	15	3	0	0	0	18	18
13:45	15	3	0	0	0	18	18	8	2	0	0	0	10	10
H/TOT	58	7	4	0	0	69	71	49	6	2	2	0	59	62.6
14:00	16	4	0	0	0	20	20	20	3	1	0	0	24	24.5
14:15	10	1	0	0	0	11	11	6	1	1	0	0	8	8.5
14:30	11	2	0	0	0	13	13	16	2	1	0	0	19	19.5
14:45	17	3	1	0	0	21	21.5	20	0	0	0	0	20	20
H/TOT	54	10	1	0	0	65	65.5	62	6	3	0	0	71	72.5
15:00	13	0	0	0	0	13	13	19	0	0	0	0	19	19
15:15	23	5	0	0	0	28	28	25	2	0	0	0	27	27
15:30	15	2	0	0	0	17	17	26	5	0	0	0	31	31
15:45	19	3	0	0	0	22	22	15	3	0	0	0	18	18
H/TOT	70	10	0	0	0	80	80	85	10	0	0	0	95	95
16:00	26	3	0	0	0	29	29	23	3	1	0	0	27	27.5
16:15	17	4	0	0	0	21	21	20	0	0	0	0	20	20
16:30	25	6	0	0	0	31	31	30	2	0	1	0	33	34.3
16:45	25	3	0	0	0	28	28	42	8	1	0	0	51	51.5
H/TOT	93	16	0	0	0	109	109	115	13	2	1	0	131	133.3
17:00	18	3	0	0	0	21	21	43	5	1	0	0	49	49.5
17:15	26	4	2	0	0	32	33	43	7	0	0	0	50	50
17:30	26	2	3	0	0	31	32.5	52	2	0	0	0	54	54

17:45	17	2	2	0	0	21	22	42	1	0	0	0	43	43
H/TOT	87	11	7	0	0	105	108.5	180	15	1	0	0	196	196.5
18:00	24	5	0	0	0	29	29	34	3	1	0	0	38	38.5
18:15	15	1	0	0	0	16	16	47	4	0	0	0	51	51
18:30	19	3	0	0	0	22	22	36	6	0	1	0	43	44.3
18:45	20	2	0	0	0	22	22	32	2	1	0	0	35	35.5
H/TOT	78	11	0	0	0	89	89	149	15	2	1	0	167	169.3
19:00	7	1	0	0	0	8	8	23	3	0	0	0	26	26
19:15	11	3	0	0	0	14	14	20	2	0	0	0	22	22
19:30	11	2	0	0	0	13	13	14	1	0	0	0	15	15
19:45	9	3	0	0	0	12	12	9	1	0	0	0	10	10
H/TOT	38	9	0	0	0	47	47	66	7	0	0	0	73	73
20:00	5	0	0	0	0	5	5	16	3	0	0	0	19	19
20:15	12	3	0	0	0	15	15	15	1	0	0	0	16	16
20:30	4	1	0	0	0	5	5	9	0	0	0	0	9	9
20:45	9	0	0	0	0	9	9	8	1	0	0	0	9	9
H/TOT	30	4	0	0	0	34	34	48	5	0	0	0	53	53
21:00	4	0	0	0	1	5	6	13	0	0	0	0	13	13
21:15	6	1	1	0	0	8	8.5	4	0	0	0	0	4	4
21:30	5	0	0	0	0	5	5	5	0	0	0	0	5	5
21:45	4	0	0	0	0	4	4	5	0	0	0	0	5	5
H/TOT	19	1	1	0	1	22	23.5	27	0	0	0	0	27	27
22:00	5	0	0	0	0	5	5	13	0	0	0	0	13	13
22:15	2	1	0	0	0	3	3	5	0	1	0	0	6	6.5
22:30	5	0	0	0	0	5	5	6	0	0	0	0	6	6
22:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	13	1	0	0	0	14	14	25	0	1	0	0	26	26.5
23:00	4	0	0	0	0	4	4	1	0	0	0	0	1	1
23:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
23:30	4	0	0	0	0	4	4	4	0	0	0	0	4	4
23:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	8	0	0	0	0	8	8	7	0	0	0	0	7	7
24 TOT	877	137	34	5	1	1054	1079	1212	136	22	6	1	1377	1397

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 08/11/17
Location : Ballycorus Road



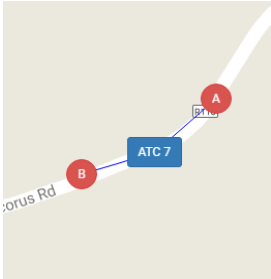
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
00:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	4	0	0	0	0	4	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	0	1	0	0	0	1	1
01:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	1	1	0	0	0	2	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	0	0	0	0	1	1	1	0	0	0	0	1	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
05:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	1	1	0	0	0	2	2	1	0	0	0	0	1	1
06:00	3	0	0	0	0	3	3	0	1	0	0	0	1	1
06:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
06:30	2	1	0	0	0	3	3	1	1	0	0	0	2	2
06:45	3	0	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	8	1	0	0	0	9	9	6	2	0	0	0	8	8
07:00	5	1	2	0	0	8	9	6	0	1	0	0	7	7.5
07:15	12	0	1	0	0	13	13.5	6	4	0	0	0	10	10
07:30	12	3	0	0	0	15	15	9	1	0	0	0	10	10
07:45	11	2	1	0	0	14	14.5	24	2	2	0	0	28	29

H/TOT	40	6	4	0	0	50	52	45	7	3	0	0	55	56.5
08:00	12	1	0	0	0	13	13	22	1	3	0	0	26	27.5
08:15	21	3	0	0	0	24	24	36	2	0	0	1	39	40
08:30	17	5	0	0	0	22	22	27	4	0	0	0	31	31
08:45	19	2	1	0	0	22	22.5	20	1	0	0	0	21	21
H/TOT	69	11	1	0	0	81	81.5	105	8	3	0	1	117	119.5
09:00	24	1	0	0	0	25	25	20	3	0	0	0	23	23
09:15	22	5	0	0	0	27	27	17	2	0	0	0	19	19
09:30	11	4	1	0	0	16	16.5	15	2	0	0	0	17	17
09:45	10	1	0	0	0	11	11	13	2	1	0	0	16	16.5
H/TOT	67	11	1	0	0	79	79.5	65	9	1	0	0	75	75.5
10:00	13	2	3	0	0	18	19.5	8	0	0	0	0	8	8
10:15	11	1	0	0	0	12	12	8	0	0	0	0	8	8
10:30	22	1	1	0	0	24	24.5	13	6	0	0	0	19	19
10:45	13	2	0	0	0	15	15	15	2	0	0	0	17	17
H/TOT	59	6	4	0	0	69	71	44	8	0	0	0	52	52
11:00	17	4	0	0	0	21	21	12	2	0	0	0	14	14
11:15	11	2	1	0	0	14	14.5	20	1	2	0	0	23	24
11:30	11	2	2	0	0	15	16	18	0	1	0	0	19	19.5
11:45	15	2	0	1	0	18	19.3	17	1	0	0	0	18	18
H/TOT	54	10	3	1	0	68	70.8	67	4	3	0	0	74	75.5
12:00	16	2	0	0	0	18	18	19	2	0	0	0	21	21
12:15	9	1	0	0	0	10	10	10	2	0	1	0	13	14.3
12:30	10	0	1	0	0	11	11.5	24	4	1	0	0	29	29.5
12:45	14	2	2	0	0	18	19	25	0	2	0	0	27	28
H/TOT	49	5	3	0	0	57	58.5	78	8	3	1	0	90	92.8
13:00	18	1	1	0	0	20	20.5	20	2	1	0	0	23	23.5
13:15	13	0	2	0	0	15	16	17	4	0	0	0	21	21
13:30	11	2	0	0	0	13	13	16	1	0	0	0	17	17
13:45	17	3	0	0	0	20	20	19	1	1	0	0	21	21.5
H/TOT	59	6	3	0	0	68	69.5	72	8	2	0	0	82	83
14:00	12	6	0	0	0	18	18	26	1	1	0	0	28	28.5
14:15	17	2	0	0	0	19	19	24	0	1	0	0	25	25.5
14:30	11	0	3	0	0	14	15.5	18	4	0	0	0	22	22
14:45	21	4	1	0	0	26	26.5	12	1	1	0	0	14	14.5
H/TOT	61	12	4	0	0	77	79	80	6	3	0	0	89	90.5
15:00	16	5	2	0	0	23	24	24	5	0	0	0	29	29
15:15	13	1	1	0	0	15	15.5	20	5	0	0	0	25	25
15:30	16	3	3	0	0	22	23.5	21	8	0	0	0	29	29
15:45	21	4	0	0	0	25	25	15	3	2	0	0	20	21
H/TOT	66	13	6	0	0	85	88	80	21	2	0	0	103	104
16:00	21	3	1	0	0	25	25.5	21	2	0	0	0	23	23
16:15	19	6	1	0	0	26	26.5	23	4	1	0	0	28	28.5
16:30	18	3	1	0	0	22	22.5	18	0	2	1	0	21	23.3
16:45	24	2	0	1	0	27	28.3	31	2	2	0	0	35	36
H/TOT	82	14	3	1	0	100	102.8	93	8	5	1	0	107	110.8
17:00	22	1	1	0	0	24	24.5	36	6	0	0	0	42	42
17:15	20	3	1	0	0	24	24.5	39	3	0	0	0	42	42
17:30	27	5	1	0	0	33	33.5	33	1	0	0	0	34	34

17:45	18	0	1	0	1	20	21.5	40	6	0	0	0	46	46
H/TOT	87	9	4	0	1	101	104	148	16	0	0	0	164	164
18:00	29	4	0	0	0	33	33	38	1	0	0	0	39	39
18:15	13	4	0	0	0	17	17	41	5	0	0	0	46	46
18:30	17	0	1	0	0	18	18.5	40	5	1	0	0	46	46.5
18:45	11	6	0	0	0	17	17	35	2	1	0	0	38	38.5
H/TOT	70	14	1	0	0	85	85.5	154	13	2	0	0	169	170
19:00	8	2	0	0	0	10	10	31	3	0	0	0	34	34
19:15	9	1	0	0	0	10	10	14	1	0	0	0	15	15
19:30	13	2	0	0	0	15	15	16	0	0	0	0	16	16
19:45	15	0	0	0	0	15	15	10	1	0	0	0	11	11
H/TOT	45	5	0	0	0	50	50	71	5	0	0	0	76	76
20:00	11	1	0	0	0	12	12	20	4	0	0	0	24	24
20:15	8	1	0	0	0	9	9	17	0	0	0	0	17	17
20:30	7	1	0	0	0	8	8	6	2	0	0	0	8	8
20:45	8	1	0	0	0	9	9	9	0	0	0	0	9	9
H/TOT	34	4	0	0	0	38	38	52	6	0	0	0	58	58
21:00	3	1	0	0	0	4	4	7	0	0	0	0	7	7
21:15	6	1	1	0	0	8	8.5	5	0	0	0	0	5	5
21:30	4	0	0	0	0	4	4	6	1	0	0	0	7	7
21:45	5	0	0	0	0	5	5	7	0	0	0	0	7	7
H/TOT	18	2	1	0	0	21	21.5	25	1	0	0	0	26	26
22:00	5	0	0	0	0	5	5	7	0	1	0	0	8	8.5
22:15	3	0	0	0	0	3	3	6	0	0	0	0	6	6
22:30	3	2	0	0	0	5	5	5	1	0	0	0	6	6
22:45	5	1	0	0	0	6	6	1	0	0	0	0	1	1
H/TOT	16	3	0	0	0	19	19	19	1	1	0	0	21	21.5
23:00	2	0	0	0	0	2	2	7	0	0	0	0	7	7
23:15	2	0	0	0	0	2	2	3	0	0	0	0	3	3
23:30	4	0	0	0	0	4	4	2	0	0	0	0	2	2
23:45	0	0	1	0	0	1	1.5	1	0	0	0	0	1	1
H/TOT	8	0	1	0	0	9	9.5	13	0	0	0	0	13	13
24 TOT	898	133	39	2	1	1073	1096	1224	132	28	2	1	1387	1405

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 09/11/17
Location : Ballycorus Road



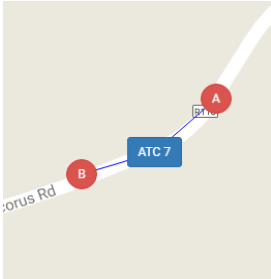
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	1	0	0	0	0	1	1	3	0	0	0	0	3	3
00:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
00:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:45	2	0	0	0	0	2	2	0	0	1	0	0	1	1.5
H/TOT	4	0	0	0	0	4	4	6	0	1	0	0	7	7.5
01:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2
05:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	3	0	0	0	0	3	3
06:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	1	1	0	0	0	2	2
06:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
06:45	5	0	1	0	0	6	6.5	4	0	0	0	0	4	4
H/TOT	8	0	1	0	0	9	9.5	8	1	0	0	0	9	9
07:00	7	1	0	0	0	8	8	5	1	0	0	0	6	6
07:15	9	0	2	0	0	11	12	8	0	3	0	0	11	12.5
07:30	11	1	0	0	0	12	12	12	1	0	1	0	14	15.3
07:45	12	4	2	0	0	18	19	25	3	2	0	0	30	31

H/TOT	39	6	4	0	0	49	51	50	5	5	1	0	61	64.8
08:00	13	2	0	0	0	15	15	26	5	0	0	0	31	31
08:15	17	5	1	0	0	23	23.5	24	3	0	0	0	27	27
08:30	15	6	0	0	0	21	21	29	5	0	0	0	34	34
08:45	22	1	0	0	0	23	23	28	1	0	0	0	29	29
H/TOT	67	14	1	0	0	82	82.5	107	14	0	0	0	121	121
09:00	32	4	0	0	0	36	36	27	4	2	0	1	34	36
09:15	26	4	1	0	0	31	31.5	18	1	0	0	0	19	19
09:30	18	3	0	0	0	21	21	26	4	0	0	0	30	30
09:45	14	4	0	0	0	18	18	12	0	0	0	0	12	12
H/TOT	90	15	1	0	0	106	106.5	83	9	2	0	1	95	97
10:00	12	4	2	0	0	18	19	11	2	1	0	0	14	14.5
10:15	10	1	1	0	0	12	12.5	11	1	2	0	0	14	15
10:30	13	2	0	0	0	15	15	12	1	0	0	0	13	13
10:45	12	1	1	1	0	15	16.8	17	1	0	0	0	18	18
H/TOT	47	8	4	1	0	60	63.3	51	5	3	0	0	59	60.5
11:00	4	1	0	0	0	5	5	8	1	2	0	0	11	12
11:15	11	1	1	0	0	13	13.5	12	2	0	0	0	14	14
11:30	11	1	0	0	0	12	12	14	1	0	0	0	15	15
11:45	7	3	1	0	0	11	11.5	18	4	1	0	0	23	23.5
H/TOT	33	6	2	0	0	41	42	52	8	3	0	0	63	64.5
12:00	17	3	0	0	0	20	20	14	2	1	0	0	17	17.5
12:15	13	3	1	0	0	17	17.5	14	3	2	0	0	19	20
12:30	14	3	0	0	0	17	17	12	1	1	0	0	14	14.5
12:45	11	2	1	0	0	14	14.5	19	2	1	0	0	22	22.5
H/TOT	55	11	2	0	0	68	69	59	8	5	0	0	72	74.5
13:00	16	6	0	0	0	22	22	15	2	1	0	0	18	18.5
13:15	10	0	1	0	0	11	11.5	14	6	1	0	0	21	21.5
13:30	18	3	0	0	0	21	21	25	0	0	0	0	25	25
13:45	18	3	0	0	0	21	21	16	5	0	0	0	21	21
H/TOT	62	12	1	0	0	75	75.5	70	13	2	0	0	85	86
14:00	19	3	1	0	0	23	23.5	12	0	0	0	0	12	12
14:15	9	2	1	0	0	12	12.5	22	5	1	0	0	28	28.5
14:30	24	2	1	0	0	27	27.5	20	6	1	0	0	27	27.5
14:45	14	7	0	1	0	22	23.3	15	1	2	0	0	18	19
H/TOT	66	14	3	1	0	84	86.8	69	12	4	0	0	85	87
15:00	18	3	0	0	0	21	21	23	1	1	0	0	25	25.5
15:15	14	4	0	0	0	18	18	17	3	1	0	0	21	21.5
15:30	12	2	0	0	0	14	14	28	1	0	0	0	29	29
15:45	10	1	0	0	0	11	11	23	1	0	1	0	25	26.3
H/TOT	54	10	0	0	0	64	64	91	6	2	1	0	100	102.3
16:00	21	6	2	0	0	29	30	22	3	2	0	0	27	28
16:15	18	4	0	0	0	22	22	22	3	0	0	0	25	25
16:30	16	4	1	1	0	22	23.8	36	2	1	0	0	39	39.5
16:45	15	5	0	0	0	20	20	40	7	1	0	0	48	48.5
H/TOT	70	19	3	1	0	93	95.8	120	15	4	0	0	139	141
17:00	19	2	0	0	0	21	21	45	2	0	0	0	47	47
17:15	24	7	0	0	0	31	31	41	2	1	0	0	44	44.5
17:30	24	5	0	1	0	30	31.3	40	4	0	0	0	44	44

17:45	20	0	1	0	1	22	23.5	40	5	0	0	0	45	45
H/TOT	87	14	1	1	1	104	106.8	166	13	1	0	0	180	180.5
18:00	20	0	0	0	0	20	20	30	5	2	1	0	38	40.3
18:15	21	0	0	0	0	21	21	31	2	0	0	0	33	33
18:30	19	2	0	0	0	21	21	36	2	0	0	0	38	38
18:45	16	2	0	0	0	18	18	21	1	0	0	0	22	22
H/TOT	76	4	0	0	0	80	80	118	10	2	1	0	131	133.3
19:00	8	1	1	0	0	10	10.5	25	3	0	0	0	28	28
19:15	15	2	1	0	0	18	18.5	23	3	0	0	0	26	26
19:30	11	2	1	0	0	14	14.5	10	2	0	0	0	12	12
19:45	10	2	0	0	0	12	12	15	1	2	0	0	18	19
H/TOT	44	7	3	0	0	54	55.5	73	9	2	0	0	84	85
20:00	8	1	0	0	0	9	9	17	0	0	0	0	17	17
20:15	11	0	0	0	0	11	11	14	1	1	0	0	16	16.5
20:30	4	0	0	0	0	4	4	11	1	0	0	0	12	12
20:45	7	2	0	0	0	9	9	8	0	0	0	0	8	8
H/TOT	30	3	0	0	0	33	33	50	2	1	0	0	53	53.5
21:00	4	0	0	0	0	4	4	8	0	0	0	0	8	8
21:15	5	0	0	0	0	5	5	5	0	0	0	0	5	5
21:30	3	1	0	0	0	4	4	2	0	0	0	0	2	2
21:45	1	0	0	0	0	1	1	6	0	0	0	0	6	6
H/TOT	13	1	0	0	0	14	14	21	0	0	0	0	21	21
22:00	2	1	0	0	0	3	3	8	0	0	0	0	8	8
22:15	4	0	0	0	0	4	4	6	0	0	0	0	6	6
22:30	4	1	0	0	0	5	5	4	0	0	0	0	4	4
22:45	3	0	0	0	0	3	3	4	0	0	0	0	4	4
H/TOT	13	2	0	0	0	15	15	22	0	0	0	0	22	22
23:00	3	0	0	0	0	3	3	5	0	0	0	0	5	5
23:15	2	0	1	0	0	3	3.5	4	1	0	0	0	5	5
23:30	2	0	0	0	0	2	2	3	0	0	0	0	3	3
23:45	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	7	0	1	0	0	8	8.5	13	2	0	0	0	15	15
24 TOT	869	146	27	4	1	1047	1067	1234	132	37	3	1	1407	1430

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 10/11/17
Location : Ballycorus Road



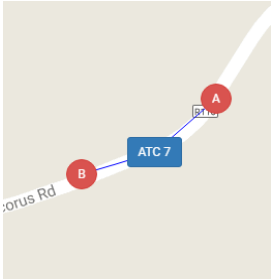
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	0	0	0	0	0	0	0	4	0	0	0	0	4	4
00:15	1	0	0	0	0	1	1	1	1	0	0	0	2	2
00:30	1	1	0	0	0	2	2	1	0	0	0	0	1	1
00:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	2	1	0	0	0	3	3	7	1	0	0	0	8	8
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	2	0	0	0	0	2	2
06:00	2	0	0	0	0	2	2	1	0	0	0	0	1	1
06:15	1	0	1	0	0	2	2.5	2	1	0	0	0	3	3
06:30	4	0	0	0	0	4	4	2	0	0	0	0	2	2
06:45	5	0	1	0	0	6	6.5	5	0	0	0	0	5	5
H/TOT	12	0	2	0	0	14	15	10	1	0	0	0	11	11
07:00	10	1	1	0	0	12	12.5	8	0	0	0	0	8	8
07:15	11	1	1	0	0	13	13.5	4	1	0	0	0	5	5
07:30	12	3	0	0	0	15	15	16	2	1	0	0	19	19.5
07:45	12	3	1	0	0	16	16.5	24	4	3	0	0	31	32.5

H/TOT	45	8	3	0	0	56	57.5	52	7	4	0	0	63	65
08:00	10	3	0	0	0	13	13	22	1	0	0	0	23	23
08:15	12	1	1	0	0	14	14.5	34	7	1	0	0	42	42.5
08:30	20	3	0	0	0	23	23	20	6	0	0	0	26	26
08:45	22	4	0	0	0	26	26	23	5	0	0	0	28	28
H/TOT	64	11	1	0	0	76	76.5	99	19	1	0	0	119	119.5
09:00	28	3	3	0	0	34	35.5	23	5	1	0	0	29	29.5
09:15	27	3	0	0	0	30	30	17	1	0	0	0	18	18
09:30	10	2	0	0	0	12	12	22	1	0	0	0	23	23
09:45	13	1	0	0	0	14	14	12	0	0	0	0	12	12
H/TOT	78	9	3	0	0	90	91.5	74	7	1	0	0	82	82.5
10:00	8	3	0	0	0	11	11	14	4	1	0	0	19	19.5
10:15	20	2	2	1	0	25	27.3	15	2	1	1	0	19	20.8
10:30	15	3	1	0	0	19	19.5	11	3	1	0	0	15	15.5
10:45	13	1	0	0	0	14	14	9	3	0	0	0	12	12
H/TOT	56	9	3	1	0	69	71.8	49	12	3	1	0	65	67.8
11:00	9	4	1	1	0	15	16.8	12	1	2	1	0	16	18.3
11:15	11	0	2	0	0	13	14	11	1	1	0	0	13	13.5
11:30	8	2	3	0	0	13	14.5	13	0	0	0	0	13	13
11:45	20	1	3	1	0	25	27.8	20	3	2	1	0	26	28.3
H/TOT	48	7	9	2	0	66	73.1	56	5	5	2	0	68	73.1
12:00	18	5	0	0	0	23	23	18	1	1	0	0	20	20.5
12:15	15	2	2	0	0	19	20	16	1	0	1	0	18	19.3
12:30	21	2	1	0	0	24	24.5	14	0	0	0	0	14	14
12:45	8	2	0	0	0	10	10	16	1	1	0	0	18	18.5
H/TOT	62	11	3	0	0	76	77.5	64	3	2	1	0	70	72.3
13:00	9	0	2	0	0	11	12	13	3	0	0	0	16	16
13:15	18	1	1	0	0	20	20.5	11	1	0	0	0	12	12
13:30	17	2	0	0	0	19	19	14	4	0	0	0	18	18
13:45	17	0	2	1	0	20	22.3	24	2	1	0	0	27	27.5
H/TOT	61	3	5	1	0	70	73.8	62	10	1	0	0	73	73.5
14:00	15	1	0	0	0	16	16	19	2	0	0	0	21	21
14:15	14	4	0	0	0	18	18	16	3	0	0	0	19	19
14:30	21	1	1	0	0	23	23.5	20	2	0	0	0	22	22
14:45	18	0	1	0	0	19	19.5	20	1	0	0	0	21	21
H/TOT	68	6	2	0	0	76	77	75	8	0	0	0	83	83
15:00	23	3	0	0	0	26	26	29	1	0	0	0	30	30
15:15	11	2	1	0	0	14	14.5	28	2	0	0	0	30	30
15:30	17	2	0	0	0	19	19	20	1	0	0	0	21	21
15:45	16	3	0	0	0	19	19	27	3	3	0	0	33	34.5
H/TOT	67	10	1	0	0	78	78.5	104	7	3	0	0	114	115.5
16:00	26	3	1	0	0	30	30.5	27	5	1	0	0	33	33.5
16:15	16	2	1	0	0	19	19.5	34	6	1	0	0	41	41.5
16:30	23	4	1	0	0	28	28.5	23	4	1	0	0	28	28.5
16:45	17	2	0	0	0	19	19	37	3	0	0	0	40	40
H/TOT	82	11	3	0	0	96	97.5	121	18	3	0	0	142	143.5
17:00	19	2	0	0	0	21	21	41	8	0	0	0	49	49
17:15	35	3	0	0	0	38	38	45	6	1	0	0	52	52.5
17:30	25	1	2	0	0	28	29	35	4	1	0	0	40	40.5

17:45	16	6	1	0	0	23	23.5	38	4	0	0	0	42	42
H/TOT	95	12	3	0	0	110	111.5	159	22	2	0	0	183	184
18:00	13	5	0	0	0	18	18	29	7	0	0	0	36	36
18:15	12	3	1	0	0	16	16.5	44	2	0	0	0	46	46
18:30	22	3	0	0	0	25	25	39	0	1	0	0	40	40.5
18:45	15	2	0	0	0	17	17	20	1	0	0	0	21	21
H/TOT	62	13	1	0	0	76	76.5	132	10	1	0	0	143	143.5
19:00	10	2	1	0	0	13	13.5	21	2	0	0	0	23	23
19:15	8	3	0	0	0	11	11	12	2	0	0	0	14	14
19:30	6	0	0	0	0	6	6	10	3	0	0	0	13	13
19:45	6	1	0	0	0	7	7	9	2	0	0	0	11	11
H/TOT	30	6	1	0	0	37	37.5	52	9	0	0	0	61	61
20:00	7	0	0	0	0	7	7	8	1	1	0	0	10	10.5
20:15	4	1	0	0	0	5	5	6	0	0	0	0	6	6
20:30	4	0	0	0	0	4	4	9	1	0	0	0	10	10
20:45	5	0	0	0	0	5	5	1	1	0	0	0	2	2
H/TOT	20	1	0	0	0	21	21	24	3	1	0	0	28	28.5
21:00	3	0	0	0	0	3	3	6	0	0	0	0	6	6
21:15	4	0	0	0	0	4	4	4	0	0	0	0	4	4
21:30	1	0	0	0	0	1	1	4	0	0	0	0	4	4
21:45	6	0	0	0	0	6	6	3	1	0	0	0	4	4
H/TOT	14	0	0	0	0	14	14	17	1	0	0	0	18	18
22:00	6	0	0	0	0	6	6	5	0	0	0	0	5	5
22:15	6	0	0	2	0	8	10.6	4	1	1	0	0	6	6.5
22:30	5	1	0	0	0	6	6	7	0	0	0	0	7	7
22:45	1	0	0	0	0	1	1	4	0	0	0	0	4	4
H/TOT	18	1	0	2	0	21	23.6	20	1	1	0	0	22	22.5
23:00	2	0	0	0	0	2	2	2	1	0	0	0	3	3
23:15	1	1	0	0	0	2	2	4	0	0	0	0	4	4
23:30	2	3	0	0	0	5	5	1	0	0	0	0	1	1
23:45	2	3	0	0	0	5	5	1	0	0	0	0	1	1
H/TOT	7	7	0	0	0	14	14	8	1	0	0	0	9	9
24 TOT	895	126	40	6	0	1067	1095	1187	145	28	4	0	1364	1383

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 11/11/17
Location : Ballycorus Road



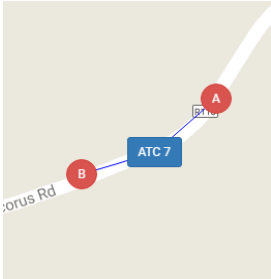
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2
00:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1
00:30	1	0	1	0	0	2	2.5	1	0	0	0	0	1	1
00:45	1	0	0	0	0	1	1	1	0	1	0	0	2	2.5
H/TOT	4	0	1	0	0	5	5.5	4	1	1	0	0	6	6.5
01:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
01:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
01:30	2	0	0	0	0	2	2	0	0	0	0	0	0	0
01:45	0	1	0	0	0	1	1	2	0	0	0	0	2	2
H/TOT	5	1	0	0	0	6	6	4	0	0	0	0	4	4
02:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	1	0	0	0	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	1	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	0	1	0	0	0	1	1	2	1	0	0	0	3	3
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	2	0	0	0	0	2	2	0	1	0	0	0	1	1
06:45	1	1	0	0	0	2	2	1	0	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	1	1	0	0	0	2	2
07:00	1	0	0	0	0	1	1	4	0	0	0	0	4	4
07:15	1	1	1	0	0	3	3.5	1	0	0	0	0	1	1
07:30	2	1	1	0	0	4	4.5	0	1	0	0	0	1	1
07:45	1	0	0	0	0	1	1	5	1	0	0	0	6	6

H/TOT	5	2	2	0	0	9	10	10	2	0	0	0	12	12
08:00	1	1	0	0	0	2	2	5	0	1	0	0	6	6.5
08:15	6	2	0	0	0	8	8	6	2	1	1	0	10	11.8
08:30	10	2	0	0	0	12	12	8	0	0	0	0	8	8
08:45	10	0	0	0	0	10	10	5	0	0	0	0	5	5
H/TOT	27	5	0	0	0	32	32	24	2	2	1	0	29	31.3
09:00	7	1	0	0	0	8	8	8	2	1	0	0	11	11.5
09:15	12	1	0	0	0	13	13	8	1	0	1	0	10	11.3
09:30	12	0	0	0	0	12	12	14	0	2	0	0	16	17
09:45	9	2	0	0	0	11	11	15	1	0	0	0	16	16
H/TOT	40	4	0	0	0	44	44	45	4	3	1	0	53	55.8
10:00	19	0	0	0	0	19	19	15	2	0	0	0	17	17
10:15	12	3	0	0	0	15	15	16	2	2	0	0	20	21
10:30	8	3	1	0	0	12	12.5	26	3	0	0	0	29	29
10:45	12	2	1	0	0	15	15.5	16	3	1	0	0	20	20.5
H/TOT	51	8	2	0	0	61	62	73	10	3	0	0	86	87.5
11:00	9	2	0	0	0	11	11	12	0	1	0	0	13	13.5
11:15	18	2	0	0	0	20	20	16	0	0	0	0	16	16
11:30	16	4	0	0	0	20	20	26	4	1	0	0	31	31.5
11:45	27	3	0	0	0	30	30	17	2	1	0	0	20	20.5
H/TOT	70	11	0	0	0	81	81	71	6	3	0	0	80	81.5
12:00	37	8	1	0	0	46	46.5	20	2	0	1	0	23	24.3
12:15	22	2	0	0	0	24	24	21	1	0	0	0	22	22
12:30	26	4	2	0	0	32	33	23	4	2	0	0	29	30
12:45	17	3	0	0	0	20	20	61	4	3	0	0	68	69.5
H/TOT	102	17	3	0	0	122	123.5	125	11	5	1	0	142	145.8
13:00	21	5	0	0	0	26	26	30	3	1	0	0	34	34.5
13:15	20	5	1	0	0	26	26.5	34	2	1	0	0	37	37.5
13:30	20	4	0	0	0	24	24	21	1	2	0	0	24	25
13:45	11	2	2	0	0	15	16	16	1	0	0	0	17	17
H/TOT	72	16	3	0	0	91	92.5	101	7	4	0	0	112	114
14:00	14	3	0	0	0	17	17	17	0	0	0	0	17	17
14:15	18	1	0	1	0	20	21.3	15	2	1	0	0	18	18.5
14:30	18	4	1	0	0	23	23.5	22	3	1	0	0	26	26.5
14:45	18	4	0	0	0	22	22	27	4	0	1	0	32	33.3
H/TOT	68	12	1	1	0	82	83.8	81	9	2	1	0	93	95.3
15:00	22	2	0	0	0	24	24	23	1	0	0	0	24	24
15:15	8	2	1	0	0	11	11.5	14	2	0	0	0	16	16
15:30	10	4	0	0	0	14	14	15	3	0	0	0	18	18
15:45	14	3	1	0	0	18	18.5	29	2	0	0	0	31	31
H/TOT	54	11	2	0	0	67	68	81	8	0	0	0	89	89
16:00	19	3	0	0	0	22	22	25	5	0	0	0	30	30
16:15	11	1	0	0	0	12	12	17	0	0	0	0	17	17
16:30	20	0	0	1	0	21	22.3	21	0	0	0	0	21	21
16:45	17	3	0	0	0	20	20	9	0	0	0	0	9	9
H/TOT	67	7	0	1	0	75	76.3	72	5	0	0	0	77	77
17:00	17	0	0	0	0	17	17	23	0	0	0	0	23	23
17:15	10	0	0	0	0	10	10	20	1	0	0	0	21	21
17:30	8	1	0	0	0	9	9	18	1	0	0	0	19	19

17:45	4	0	0	0	0	4	4	10	0	0	0	0	10	10
H/TOT	39	1	0	0	0	40	40	71	2	0	0	0	73	73
18:00	5	0	0	0	0	5	5	8	1	0	0	0	9	9
18:15	8	3	0	0	0	11	11	17	3	1	0	0	21	21.5
18:30	8	0	0	0	0	8	8	10	1	0	0	0	11	11
18:45	10	1	0	0	0	11	11	10	2	0	0	0	12	12
H/TOT	31	4	0	0	0	35	35	45	7	1	0	0	53	53.5
19:00	8	0	0	0	0	8	8	12	0	0	0	0	12	12
19:15	11	0	0	0	0	11	11	10	1	0	0	0	11	11
19:30	7	1	0	0	0	8	8	7	1	0	0	0	8	8
19:45	0	3	0	0	0	3	3	7	2	0	0	0	9	9
H/TOT	26	4	0	0	0	30	30	36	4	0	0	0	40	40
20:00	5	0	0	0	0	5	5	7	1	0	0	0	8	8
20:15	6	0	0	0	0	6	6	3	1	0	0	0	4	4
20:30	3	0	0	0	0	3	3	1	0	0	0	0	1	1
20:45	3	1	0	0	0	4	4	1	1	0	0	0	2	2
H/TOT	17	1	0	0	0	18	18	12	3	0	0	0	15	15
21:00	3	1	0	0	0	4	4	1	0	0	0	0	1	1
21:15	2	2	0	0	0	4	4	3	1	0	0	0	4	4
21:30	1	0	0	0	0	1	1	6	0	0	0	0	6	6
21:45	6	1	0	0	0	7	7	7	0	0	0	0	7	7
H/TOT	12	4	0	0	0	16	16	17	1	0	0	0	18	18
22:00	1	1	0	0	0	2	2	1	0	0	0	0	1	1
22:15	4	0	0	0	0	4	4	7	1	0	0	0	8	8
22:30	2	0	0	0	0	2	2	2	0	0	0	0	2	2
22:45	4	0	0	0	0	4	4	4	1	0	0	0	5	5
H/TOT	11	1	0	0	0	12	12	14	2	0	0	0	16	16
23:00	7	0	0	0	0	7	7	3	0	0	0	0	3	3
23:15	0	0	0	0	0	0	0	2	1	0	0	0	3	3
23:30	2	0	0	0	0	2	2	5	0	0	0	0	5	5
23:45	3	0	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	12	0	0	0	0	12	12	13	1	0	0	0	14	14
24 TOT	718	111	14	2	0	845	854.6	903	87	24	4	0	1018	1035

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : ATC 7
Date : 12/11/17
Location : Ballycorus Road



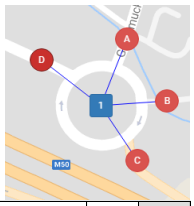
	WESTBOUND							EASTBOUND						
	A=>B							B=>A						
TIME	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
00:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1
00:15	1	2	0	0	0	3	3	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1
00:45	4	1	0	0	0	5	5	3	0	0	0	0	3	3
H/TOT	6	3	0	0	0	9	9	5	0	0	0	0	5	5
01:00	0	0	0	0	0	0	0	3	1	0	0	0	4	4
01:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	5	1	0	0	0	6	6
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	1	0	0	0	0	1	1	4	0	0	0	0	4	4
03:00	2	0	0	0	0	2	2	0	1	0	0	0	1	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	0	1	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	0	1	0	0	0	1	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	2	0	0	0	0	2	2	1	0	0	0	0	1	1
06:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	0	0	0	0	3	3	2	0	0	0	0	2	2
07:00	0	1	0	0	0	1	1	3	0	0	0	0	3	3
07:15	1	0	0	0	0	1	1	2	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	1	1	4	1	0	0	0	5	5

H/TOT	2	1	0	0	0	3	3	9	1	0	0	0	10	10
08:00	3	0	0	0	0	3	3	3	0	0	0	0	3	3
08:15	1	0	0	0	0	1	1	7	0	0	0	0	7	7
08:30	3	0	0	0	0	3	3	3	0	0	0	0	3	3
08:45	6	0	0	0	0	6	6	5	0	0	0	0	5	5
H/TOT	13	0	0	0	0	13	13	18	0	0	0	0	18	18
09:00	10	2	0	0	0	12	12	6	1	0	0	0	7	7
09:15	16	0	0	0	0	16	16	11	0	0	2	0	13	15.6
09:30	11	2	0	0	0	13	13	8	1	0	1	0	10	11.3
09:45	17	2	0	0	0	19	19	6	1	0	1	0	8	9.3
H/TOT	54	6	0	0	0	60	60	31	3	0	4	0	38	43.2
10:00	14	1	1	0	0	16	16.5	11	0	1	0	0	12	12.5
10:15	20	2	0	0	0	22	22	13	3	0	0	0	16	16
10:30	18	4	0	0	0	22	22	17	1	0	0	0	18	18
10:45	17	3	1	0	0	21	21.5	14	2	0	0	0	16	16
H/TOT	69	10	2	0	0	81	82	55	6	1	0	0	62	62.5
11:00	17	1	0	0	0	18	18	20	2	0	0	0	22	22
11:15	15	2	0	0	0	17	17	20	0	0	0	0	20	20
11:30	9	3	0	0	0	12	12	15	6	0	0	0	21	21
11:45	20	0	0	0	0	20	20	21	1	0	0	0	22	22
H/TOT	61	6	0	0	0	67	67	76	9	0	0	0	85	85
12:00	14	2	0	0	0	16	16	23	4	0	0	0	27	27
12:15	20	3	0	0	0	23	23	29	4	0	0	0	33	33
12:30	17	3	0	0	0	20	20	27	1	0	0	0	28	28
12:45	25	2	0	0	0	27	27	19	3	0	0	0	22	22
H/TOT	76	10	0	0	0	86	86	98	12	0	0	0	110	110
13:00	14	4	1	0	0	19	19.5	27	3	0	0	0	30	30
13:15	17	3	0	0	0	20	20	22	1	0	0	0	23	23
13:30	19	2	0	0	0	21	21	28	2	0	0	0	30	30
13:45	12	3	0	0	0	15	15	22	1	0	0	0	23	23
H/TOT	62	12	1	0	0	75	75.5	99	7	0	0	0	106	106
14:00	15	1	0	0	0	16	16	33	2	0	0	0	35	35
14:15	21	2	0	0	0	23	23	22	1	0	0	0	23	23
14:30	18	4	0	0	0	22	22	21	3	0	0	0	24	24
14:45	16	4	1	0	0	21	21.5	25	1	0	0	0	26	26
H/TOT	70	11	1	0	0	82	82.5	101	7	0	0	0	108	108
15:00	20	3	0	0	0	23	23	29	0	0	0	0	29	29
15:15	21	2	0	0	0	23	23	30	4	0	0	0	34	34
15:30	20	3	0	0	0	23	23	16	4	0	0	0	20	20
15:45	25	3	0	0	0	28	28	23	4	1	0	0	28	28.5
H/TOT	86	11	0	0	0	97	97	98	12	1	0	0	111	111.5
16:00	10	4	0	0	0	14	14	20	3	0	0	0	23	23
16:15	12	3	0	0	0	15	15	24	3	0	0	0	27	27
16:30	12	0	0	0	0	12	12	20	3	0	0	0	23	23
16:45	11	1	0	0	0	12	12	14	1	0	0	0	15	15
H/TOT	45	8	0	0	0	53	53	78	10	0	0	0	88	88
17:00	14	2	0	0	0	16	16	15	2	0	0	0	17	17
17:15	12	1	0	0	0	13	13	6	1	0	0	0	7	7
17:30	7	0	0	0	0	7	7	24	1	0	0	0	25	25

17:45	11	0	1	0	0	12	12.5	18	1	0	0	0	19	19
H/TOT	44	3	1	0	0	48	48.5	63	5	0	0	0	68	68
18:00	2	2	0	0	0	4	4	16	1	1	0	0	18	18.5
18:15	7	0	0	0	0	7	7	17	1	0	0	0	18	18
18:30	5	1	0	0	0	6	6	12	0	0	0	0	12	12
18:45	6	1	0	0	0	7	7	6	2	0	0	0	8	8
H/TOT	20	4	0	0	0	24	24	51	4	1	0	0	56	56.5
19:00	4	1	0	0	0	5	5	10	1	0	0	0	11	11
19:15	6	1	0	0	0	7	7	7	0	0	0	0	7	7
19:30	7	2	0	0	0	9	9	9	0	0	0	0	9	9
19:45	4	1	0	0	0	5	5	10	2	0	0	0	12	12
H/TOT	21	5	0	0	0	26	26	36	3	0	0	0	39	39
20:00	6	3	0	0	0	9	9	7	0	0	0	0	7	7
20:15	9	1	0	0	0	10	10	5	2	0	0	0	7	7
20:30	6	1	1	0	0	8	8.5	2	1	0	0	0	3	3
20:45	6	0	0	0	0	6	6	7	0	0	0	0	7	7
H/TOT	27	5	1	0	0	33	33.5	21	3	0	0	0	24	24
21:00	1	1	0	0	0	2	2	4	0	0	0	0	4	4
21:15	6	0	0	0	0	6	6	2	0	0	0	0	2	2
21:30	3	0	0	0	0	3	3	4	0	0	0	0	4	4
21:45	3	1	0	0	0	4	4	4	0	0	0	0	4	4
H/TOT	13	2	0	0	0	15	15	14	0	0	0	0	14	14
22:00	3	1	0	0	0	4	4	4	0	0	0	0	4	4
22:15	2	0	0	0	0	2	2	3	0	0	0	0	3	3
22:30	2	0	0	0	0	2	2	3	0	0	0	0	3	3
22:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	9	1	0	0	0	10	10	10	0	0	0	0	10	10
23:00	1	0	0	0	0	1	1	2	0	0	0	0	2	2
23:15	1	1	0	0	0	2	2	2	0	0	0	0	2	2
23:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	5	0	0	0	0	5	5
24 TOT	688	99	6	0	0	793	796	880	85	3	4	0	972	978.7

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 1
Date : 07/11/17
Location : Glenamuck Road North/M50 Roundabout (East)



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
07:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
07:30	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
07:45	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	35	35
08:00	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
08:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	12	13
08:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
08:45	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	1	46	47
09:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
10:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
11:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
12:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:45	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
15:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
15:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
15:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:45	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	3	0	0	0	11	11
16:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	4	5
16:30	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
16:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	1	16	17
17:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
17:30	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
17:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	1	10	11
18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
18:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
18:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
12 TOT	0	0	0	0	0	0	0	0	0	0	0	143	9	0	0	3	155	158

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	2	0	0	0	3	3	1	0	35	4	0	0	1	41	41.2
0	0	4	1	0	0	0	5	5	1	0	84	2	0	0	0	87	86.2
0	0	6	2	1	0	0	9	9.5	0	0	90	8	1	0	2	101	103.5
0	0	4	0	0	0	0	4	4	0	0	119	12	0	1	0	132	133.3
0	0	15	5	1	0	0	21	21.5	2	0	328	26	1	1	3	361	364.2
0	0	5	1	0	0	0	6	6	0	0	131	9	3	0	0	143	144.5
0	0	11	0	0	0	0	11	11	0	2	143	12	1	0	1	159	159.3
0	0	23	0	0	0	0	23	23	0	0	116	4	1	0	0	121	121.5
0	0	12	2	0	0	0	14	14	1	0	118	5	1	0	1	126	126.7
0	0	51	3	0	0	0	54	54	1	2	508	30	6	0	2	549	552
0	0	21	1	1	0	0	23	23.5	1	1	109	9	1	0	0	121	120.1
1	0	12	1	0	0	0	14	13.2	0	0	106	5	4	2	1	118	123.6
0	0	15	1	2	0	0	18	19	0	0	110	8	4	0	2	124	128
0	0	15	5	0	0	0	20	20	0	0	110	6	1	0	0	117	117.5
1	0	63	8	3	0	0	75	75.7	1	1	435	28	10	2	3	480	489.2
0	0	12	1	0	0	0	13	13	0	0	86	4	1	0	0	91	91.5
0	0	12	2	0	0	0	14	14	0	0	80	5	4	0	1	90	93
0	0	17	1	0	0	0	18	18	1	1	82	8	1	0	1	94	94.1
0	0	12	1	1	1	0	15	16.8	0	0	76	10	1	0	0	87	87.5
0	0	53	5	1	1	0	60	61.8	1	1	324	27	7	0	2	362	366.1
0	0	9	0	2	0	0	11	12	0	0	77	9	1	0	0	87	87.5
0	0	6	1	0	0	0	7	7	0	0	85	9	5	0	1	100	103.5
0	0	3	1	0	0	0	4	4	1	0	96	10	3	0	0	110	110.7
0	0	15	1	0	0	0	16	16	0	0	85	9	0	0	1	95	96
0	0	33	3	2	0	0	38	39	1	0	343	37	9	0	2	392	397.7
0	0	6	2	0	0	0	8	8	1	1	69	10	0	1	0	82	81.9
0	0	13	1	0	0	0	14	14	1	0	102	9	6	0	1	119	122.2
0	0	8	1	0	0	0	9	9	0	0	102	6	6	0	0	114	117
0	0	8	0	0	0	0	8	8	0	0	112	11	3	0	1	127	129.5
0	0	35	4	0	0	0	39	39	2	1	385	36	15	1	2	442	450.6
0	0	9	1	0	0	0	10	10	0	0	135	10	3	0	0	148	149.5
0	0	16	1	0	0	1	18	19	1	0	103	6	0	0	1	111	111.2
0	0	5	0	2	0	1	8	10	0	2	98	9	2	0	0	111	110.8
0	0	11	2	0	0	0	13	13	1	0	98	3	0	1	0	103	103.5
0	0	41	4	2	0	2	49	52	2	2	434	28	5	1	1	473	475
0	0	8	1	1	0	0	10	10.5	0	0	92	8	2	0	1	103	105
0	0	14	5	1	0	0	20	20.5	0	0	89	3	2	0	0	94	95
0	0	10	1	0	0	0	11	11	0	0	84	9	6	1	1	101	106.3
0	0	6	0	0	0	0	6	6	0	0	86	6	2	0	0	94	95
0	0	38	7	2	0	0	47	48	0	0	351	26	12	1	2	392	401.3
0	0	10	12	0	0	1	23	24	0	0	87	12	0	0	1	100	101
0	0	9	4	2	0	0	15	16	0	1	98	13	1	0	1	114	114.9
0	0	3	3	1	0	0	7	7.5	0	0	118	11	1	0	0	130	130.5
0	0	12	0	0	0	0	12	12	0	1	98	13	0	0	0	112	111.4
0	0	34	19	3	0	1	57	59.5	0	2	401	49	2	0	2	456	457.8
0	0	11	2	0	0	0	13	13	0	0	169	22	0	0	1	192	193
0	0	11	1	0	0	1	13	14	1	0	153	16	3	0	0	173	173.7
0	0	6	0	0	0	0	6	6	1	0	169	14	2	0	0	186	186.2
0	0	7	2	0	0	0	9	9	0	0	114	16	0	0	0	130	130
0	0	35	5	0	0	1	41	42	2	0	605	68	5	0	1	681	682.9
0	0	5	1	0	0	1	7	8	0	2	136	4	3	0	0	145	145.3
0	0	8	2	0	0	0	10	10	1	0	135	8	3	0	0	147	147.7
0	0	7	0	0	0	0	7	7	0	0	137	8	0	0	1	146	147
0	0	5	1	0	0	0	6	6	1	0	96	8	1	0	1	107	107.7
0	0	25	4	0	0	1	30	31	2	2	504	28	7	0	2	545	547.7
0	0	3	1	0	0	0	4	4	0	0	103	6	0	0	0	109	109
1	0	11	0	0	0	0	12	11.2	0	0	102	5	0	0	1	108	109
0	0	4	0	0	0	0	4	4	0	1	89	6	1	0	0	97	96.9
0	0	2	0	0	0	0	2	2	0	0	78	4	0	0	0	82	82
1	0	20	1	0	0	0	22	21.2	0	1	372	21	1	0	1	396	396.9
2	0	443	68	14	1	5	533	544.7	14	12	4990	404	80	6	23	5529	5581

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	3	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	1	16	17	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	22	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	92	5	0	0	2	99	101	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	2	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	3	0	0	0	0	3	3	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	6	2	0	0	0	8	8	0	0	10	0	0	0	0	10	10
0	0	1	0	0	0	0	1	1	0	0	1	0	1	0	0	2	2.5
0	0	5	0	0	0	0	5	5	0	0	6	0	0	0	0	6	6
0	0	9	0	0	0	0	9	9	0	0	23	0	0	0	0	23	23
0	0	4	0	0	0	1	5	6	0	0	12	0	0	0	0	12	12
0	0	19	0	0	0	1	20	21	0	0	42	0	1	0	0	43	43.5
0	0	3	0	0	0	0	3	3	0	0	12	0	0	1	0	13	14.3
0	0	2	0	0	0	0	2	2	0	0	6	0	0	0	0	6	6
0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2.3
0	0	7	0	0	0	0	7	7	0	0	22	0	0	2	0	24	26.6
0	0	2	0	0	0	0	2	2	0	0	9	0	0	0	0	9	9
0	0	2	0	0	0	0	2	2	0	0	6	0	0	0	0	6	6
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	5	0	0	1	0	6	7.3
0	0	6	0	0	0	0	6	6	0	0	21	0	0	1	0	22	23.3
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	2	1	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	2	1	0	1	1	5	7.3
0	0	5	0	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	10	1	0	0	0	11	11	0	0	6	2	0	1	1	10	12.3
0	0	3	0	0	0	0	3	3	0	0	2	1	0	0	0	3	3
0	0	1	1	0	0	0	2	2	0	0	1	0	1	1	0	3	4.8
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	1	1	0	0	4	4.5	0	0	3	0	0	0	0	3	3
0	0	9	2	1	0	0	12	12.5	0	0	6	1	1	1	0	9	10.8
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	2	0	0	1	0	3	4.3
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	6	0	0	1	0	7	8.3
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	0	0	0	1	0	1	2.3
0	0	7	0	0	0	0	7	7	0	0	3	1	0	0	0	4	4
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	20	0	0	0	0	20	20	0	0	5	1	0	1	0	7	8.3
0	0	4	1	0	0	0	5	5	0	0	2	1	0	1	0	4	5.3
0	0	5	1	0	0	0	6	6	0	0	1	1	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	8	0	0	0	0	8	8
0	0	9	0	0	0	0	9	9	0	0	2	1	0	1	0	4	5.3
0	0	20	2	0	0	0	22	22	0	0	13	3	0	2	0	18	20.6
0	0	3	0	0	0	0	3	3	0	0	3	1	0	0	0	4	4
0	0	7	1	0	0	0	8	8	0	0	2	0	0	0	0	2	2
0	0	14	0	0	0	0	14	14	0	0	3	0	0	0	0	3	3
0	0	19	0	0	0	0	19	19	0	0	2	0	0	1	0	3	4.3
0	0	43	1	0	0	0	44	44	0	0	10	1	0	1	0	12	13.3
0	0	17	1	1	0	0	19	19.5	0	0	8	0	0	0	0	8	8
0	0	12	0	0	0	1	13	14	0	0	14	2	0	0	0	16	16
0	0	13	0	0	0	0	13	13	0	0	8	0	0	0	0	8	8
0	0	13	0	0	0	0	13	13	0	0	9	2	1	0	0	12	12.5
0	0	55	1	1	0	1	58	59.5	0	0	39	4	1	0	0	44	44.5
0	0	26	0	0	0	0	26	26	0	0	15	0	0	0	0	15	15
0	0	15	0	0	0	0	15	15	0	0	6	1	0	0	0	7	7
0	0	30	1	0	0	0	31	31	0	0	25	0	0	0	0	25	25
0	0	21	0	0	0	0	21	21	0	0	13	0	0	0	0	13	13
0	0	92	1	0	0	0	93	93	0	0	59	1	0	0	0	60	60
0	0	296	10	2	0	2	310	313	0	0	239	13	3	10	1	266	281.5

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

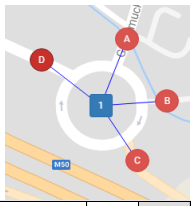
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	2	67	16	2	1	0	89	89.3	0	0	36	2	0	0	1	39	40
0	0	85	20	3	2	2	112	118.1	0	0	31	0	0	0	0	31	31
1	1	134	15	0	1	1	153	153.9	0	0	56	0	0	0	0	56	56
0	1	138	25	1	1	1	167	169.2	0	0	46	2	0	0	0	48	48
2	4	424	76	6	5	4	521	530.5	0	0	169	4	0	0	1	174	175
2	1	139	15	2	0	2	161	161.8	0	0	35	1	0	0	0	36	36
2	1	115	17	2	1	1	139	140.1	0	0	40	2	0	0	0	42	42
4	3	125	20	9	0	2	163	164.5	0	0	40	0	0	0	0	40	40
0	2	103	16	8	1	0	130	134.1	0	0	17	0	1	0	0	18	18.5
8	7	482	68	21	2	5	593	600.5	0	0	132	3	1	0	0	136	136.5
0	0	113	18	4	0	1	136	139	0	0	17	0	0	0	0	17	17
1	0	133	21	2	0	0	157	157.2	0	0	14	0	0	0	0	14	14
0	1	105	16	1	1	1	125	127.2	0	0	7	0	0	1	0	8	9.3
0	2	101	12	0	0	0	115	113.8	0	0	4	0	0	0	0	4	4
1	3	452	67	7	1	2	533	537.2	0	0	42	0	0	1	0	43	44.3
0	0	77	17	3	1	1	99	102.8	0	0	12	0	0	0	0	12	12
0	1	78	11	4	0	1	95	97.4	0	0	8	0	1	0	0	9	9.5
1	0	72	10	4	0	0	87	88.2	0	0	5	1	0	3	0	9	12.9
1	0	97	11	3	0	1	113	114.7	0	0	6	0	0	0	0	6	6
2	1	324	49	14	1	3	394	403.1	0	0	31	1	1	3	0	36	40.4
1	0	123	22	0	1	0	147	147.5	0	0	1	1	0	0	0	2	2
0	0	109	6	2	2	1	120	124.6	0	0	8	4	2	1	0	15	17.3
0	2	95	11	2	0	0	110	109.8	0	0	6	2	0	0	0	8	8
0	0	95	13	4	0	1	113	116	0	0	5	0	0	0	0	5	5
1	2	422	52	8	3	2	490	497.9	0	0	20	7	2	1	0	30	32.3
1	0	112	13	2	1	0	129	130.5	0	0	6	1	0	1	0	8	9.3
0	0	97	8	2	0	1	108	110	0	0	2	3	1	0	0	6	6.5
0	2	91	9	0	0	0	102	100.8	0	0	4	0	0	0	0	4	4
2	0	112	12	2	0	1	129	129.4	0	0	7	1	0	1	0	9	10.3
3	2	412	42	6	1	2	468	470.7	0	0	19	5	1	2	0	27	30.1
0	0	110	10	3	1	0	124	126.8	0	0	4	3	0	0	0	7	7
1	0	99	4	4	0	0	108	109.2	0	0	5	2	0	0	0	7	7
0	0	118	6	6	0	1	131	135	0	0	2	3	0	0	0	5	5
0	2	119	10	2	0	1	134	134.8	0	0	3	0	0	0	0	3	3
1	2	446	30	15	1	2	497	505.8	0	0	14	8	0	0	0	22	22
1	2	117	15	4	0	0	139	139	0	0	8	0	0	1	0	9	10.3
0	0	111	14	2	1	1	129	132.3	0	0	0	1	0	0	0	1	1
0	0	96	9	2	1	2	110	114.3	0	0	2	1	0	0	0	3	3
1	0	103	14	0	1	0	119	119.5	0	0	7	0	0	1	1	9	11.3
2	2	427	52	8	3	3	497	505.1	0	0	17	2	0	2	1	22	25.6
0	0	120	9	2	1	1	133	136.3	0	0	1	0	0	0	0	1	1
0	0	123	8	0	0	1	132	133	0	0	4	2	0	0	0	6	6
0	1	135	7	4	0	0	147	148.4	0	0	4	4	0	1	0	9	10.3
0	1	134	9	0	0	0	144	143.4	0	0	4	0	0	0	0	4	4
0	2	512	33	6	1	2	556	561.1	0	0	13	6	0	1	0	20	21.3
1	0	116	6	1	1	1	126	128	0	0	10	1	0	0	0	11	11
0	0	144	6	0	0	1	151	152	0	0	6	0	0	1	0	7	8.3
1	0	132	6	1	0	0	140	139.7	0	0	5	1	1	0	0	7	7.5
0	0	135	7	2	0	1	145	147	0	0	3	1	1	0	0	5	5.5
2	0	527	25	4	1	3	562	566.7	0	0	24	3	2	1	0	30	32.3
1	0	132	4	0	0	2	139	140.2	0	0	3	1	0	0	0	4	4
1	1	162	6	1	0	0	171	170.1	0	0	5	0	0	0	0	5	5
0	0	131	9	2	0	0	142	143	0	0	3	1	0	0	0	4	4
1	1	128	4	0	0	1	135	134.6	0	0	6	2	1	0	0	9	9.5
3	2	553	23	3	0	3	587	587.9	0	0	17	4	1	0	0	22	22.5
1	0	142	10	0	0	1	154	154.2	0	0	5	2	0	0	0	7	7
0	0	113	3	1	0	0	117	117.5	0	0	3	0	0	0	0	3	3
2	0	121	6	0	0	1	130	129.4	0	0	4	1	0	0	0	5	5
0	0	127	6	0	0	1	134	135	0	0	1	0	1	0	0	2	2.5
3	0	503	25	1	0	3	535	536.1	0	0	13	3	1	0	0	17	17.5
28	27	5484	542	99	19	34	6233	6303	0	0	511	46	9	11	2	579	599.8

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	18	5	0	0	0	23	23	0	0	0	0	0	0	0	0	0
0	0	23	2	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	36	2	2	0	0	40	41	0	0	0	0	0	0	0	0	0
0	0	61	1	4	0	0	66	68	0	0	0	0	0	0	0	0	0
0	0	138	10	6	0	0	154	157	0	0	0	0	0	0	0	0	0
0	0	99	2	3	2	0	106	110.1	0	0	0	0	0	0	0	0	0
0	0	93	9	7	1	0	110	114.8	0	0	0	0	0	0	0	0	0
0	0	88	7	4	1	0	100	103.3	0	0	0	0	0	0	0	0	0
0	0	77	4	5	1	0	87	90.8	0	0	0	0	0	0	0	0	0
0	0	357	22	19	5	0	403	419	0	0	0	0	0	0	0	0	0
0	0	68	5	1	1	0	75	76.8	0	0	0	0	0	0	0	0	0
0	0	54	2	1	0	0	57	57.5	0	0	0	0	0	0	0	0	0
0	0	38	6	2	2	0	48	51.6	0	0	0	0	0	0	0	0	0
0	0	30	3	2	0	0	35	36	0	0	0	0	0	0	0	0	0
0	0	190	16	6	3	0	215	221.9	0	0	0	0	0	0	0	0	0
0	0	37	4	5	1	0	47	50.8	0	0	0	0	0	0	0	0	0
0	0	45	4	4	1	0	54	57.3	0	0	0	0	0	0	0	0	0
0	0	46	3	3	1	0	53	55.8	0	0	0	0	0	0	0	0	0
0	1	60	3	3	1	0	68	70.2	0	0	0	0	0	0	0	0	0
0	1	188	14	15	4	0	222	234.1	0	0	0	0	0	0	0	0	0
0	0	71	6	2	1	0	80	82.3	0	0	0	0	0	0	0	0	0
0	0	48	9	0	1	0	58	59.3	0	0	0	0	0	0	0	0	0
0	0	74	8	4	0	0	86	88	0	0	0	0	0	0	0	0	0
0	0	72	4	2	0	0	78	79	0	0	0	0	0	0	0	0	0
0	0	265	27	8	2	0	302	308.6	0	0	0	0	0	0	0	0	0
0	0	59	3	1	1	0	64	65.8	0	0	0	0	0	0	0	0	0
0	0	81	5	2	0	0	88	89	0	0	0	0	0	0	0	0	0
0	0	83	3	4	0	0	90	92	0	0	0	0	0	0	0	0	0
0	0	88	5	3	0	0	96	97.5	0	0	0	0	0	0	0	0	0
0	0	311	16	10	1	0	338	344.3	0	0	0	0	0	0	0	0	0
0	0	95	4	3	1	0	103	105.8	0	0	0	0	0	0	0	0	0
0	0	115	1	2	2	0	120	123.6	0	0	0	0	0	0	0	0	0
0	0	96	7	3	1	0	107	109.8	0	0	0	0	0	0	0	0	0
0	0	94	10	6	1	0	111	115.3	0	0	0	0	0	0	0	0	0
0	0	400	22	14	5	0	441	454.5	0	0	0	0	0	0	0	0	0
0	0	85	5	2	0	0	92	93	0	0	0	0	0	0	0	0	0
0	0	107	3	0	0	0	110	110	0	0	0	0	0	0	0	0	0
0	0	61	5	0	0	0	66	66	0	0	0	0	0	0	0	0	0
0	0	83	3	2	0	0	88	89	0	0	0	0	0	0	0	0	0
0	0	336	16	4	0	0	356	358	0	0	0	0	0	0	0	0	0
0	0	75	4	3	1	0	83	85.8	0	0	0	0	0	0	0	0	0
0	0	82	4	0	1	0	87	88.3	0	0	0	0	0	0	0	0	0
0	0	92	3	0	0	1	96	97	0	0	0	0	0	0	0	0	0
0	0	90	7	1	1	0	99	100.8	0	0	0	0	0	0	0	0	0
0	0	339	18	4	3	1	365	371.9	0	0	0	0	0	0	0	0	0
0	0	108	7	1	0	0	116	116.5	0	0	0	0	0	0	0	0	0
0	0	104	11	1	2	0	118	121.1	0	0	0	0	0	0	0	0	0
0	0	105	8	1	0	0	114	114.5	0	0	0	0	0	0	0	0	0
0	0	94	6	2	0	0	102	103	0	0	0	0	0	0	0	0	0
0	0	411	32	5	2	0	450	455.1	0	0	0	0	0	0	0	0	0
0	0	98	9	0	0	0	107	107	0	0	0	0	0	0	0	0	0
0	0	92	3	0	0	0	95	95	0	0	0	0	0	0	0	0	0
0	0	87	5	1	0	0	93	93.5	0	0	0	0	0	0	0	0	0
0	1	86	1	1	0	0	89	88.9	0	0	0	0	0	0	0	0	0
0	1	363	18	2	0	0	384	384.4	0	0	0	0	0	0	0	0	0
0	1	85	4	0	0	1	91	91.4	0	0	0	0	0	0	0	0	0
0	1	69	0	1	0	0	71	70.9	0	0	0	0	0	0	0	0	0
0	0	62	8	2	0	0	72	73	0	0	0	0	0	0	0	0	0
0	0	58	2	0	0	0	60	60	0	0	0	0	0	0	0	0	0
0	2	274	14	3	0	1	294	295.3	0	0	0	0	0	0	0	0	0
0	4	3572	225	96	25	2	3924	4004	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 1
Date : 09/11/17
Location : Glenamuck Road North/M50 Roundabout (East)



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
07:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
07:30	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	1	11	12
07:45	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	1	32	33
08:00	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	18
08:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	1	10	11
08:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
08:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	1	42	43
09:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
09:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
10:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
11:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
12:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
14:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
15:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
16:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
16:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
16:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
17:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	2.4
17:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
17:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	9	0	0	0	1	12	11.4
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
12 TOT	0	0	0	0	0	0	0	0	0	2	0	130	1	0	0	3	136	137.4

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	4	1	0	0	0	5	5	0	0	43	3	0	1	1	48	50.3
0	0	4	1	0	0	0	5	5	1	0	64	7	3	0	0	75	75.7
0	0	4	0	0	0	0	4	4	0	0	69	8	1	0	2	80	82.5
0	0	13	1	0	0	0	14	14	0	0	105	8	0	0	0	113	113
0	0	25	3	0	0	0	28	28	1	0	281	26	4	1	3	316	321.5
0	0	7	0	0	0	0	7	7	1	0	127	6	1	0	0	135	134.7
0	0	2	0	1	0	0	3	3.5	1	0	125	5	1	0	1	133	133.7
0	0	8	0	0	0	1	9	10	0	0	137	6	2	0	0	145	146
0	0	19	1	1	0	0	21	21.5	1	0	109	5	3	0	0	118	118.7
0	0	36	1	2	0	1	40	42	3	0	498	22	7	0	1	531	533.1
0	0	20	1	0	0	0	21	21	1	1	118	6	0	0	0	126	124.6
0	0	16	2	0	0	0	18	18	0	0	105	6	9	0	4	124	132.5
0	0	12	0	1	0	0	13	13.5	0	0	93	7	3	1	0	104	106.8
0	0	18	1	0	0	0	19	19	0	0	96	6	2	0	1	105	107
0	0	66	4	1	0	0	71	71.5	1	1	412	25	14	1	5	459	470.9
0	0	10	0	1	0	0	11	11.5	0	0	93	5	2	0	1	101	103
0	0	6	0	0	0	0	6	6	1	0	75	7	1	0	0	84	83.7
0	0	9	0	1	0	0	10	10.5	1	0	69	16	2	0	1	89	90.2
0	0	8	2	0	0	0	10	10	0	1	84	2	1	0	0	88	87.9
0	0	33	2	2	0	0	37	38	2	1	321	30	6	0	2	362	364.8
0	0	5	0	0	0	0	5	5	0	1	83	5	1	0	0	90	89.9
0	0	4	0	1	0	0	5	5.5	0	1	75	3	1	0	1	81	81.9
0	0	7	0	0	0	0	7	7	2	1	74	14	2	0	0	93	91.8
0	0	13	1	0	0	0	14	14	0	0	95	9	1	0	1	106	107.5
0	0	29	1	1	0	0	31	31.5	2	3	327	31	5	0	2	370	371.1
0	0	9	0	0	0	0	9	9	0	0	85	9	1	0	1	96	97.5
0	0	10	2	0	0	0	12	12	1	0	100	11	7	0	0	119	121.7
0	0	20	0	0	0	0	20	20	0	2	89	10	2	1	1	105	107.1
0	0	5	2	1	0	0	8	8.5	0	0	86	8	5	0	0	99	101.5
0	0	44	4	1	0	0	49	49.5	1	2	360	38	15	1	2	419	427.8
0	0	12	2	0	1	0	15	16.3	3	1	101	10	3	0	0	118	116.5
0	0	10	0	0	0	0	10	10	0	0	103	10	3	0	1	117	119.5
0	0	16	0	0	0	0	16	16	0	2	97	12	2	0	0	113	112.8
0	0	10	1	1	0	0	12	12.5	1	0	101	16	2	0	1	121	122.2
0	0	48	3	1	1	0	53	54.8	4	3	402	48	10	0	2	469	471
0	0	15	1	0	0	0	16	16	0	0	106	8	3	0	1	118	120.5
0	0	10	2	1	0	0	13	13.5	0	0	94	7	0	0	0	101	101
0	0	10	1	0	0	0	11	11	0	1	91	12	2	0	1	107	108.4
0	0	2	1	1	0	0	4	4.5	0	0	133	16	3	2	0	154	158.1
0	0	37	5	2	0	0	44	45	0	1	424	43	8	2	2	480	488
0	0	11	2	0	0	0	13	13	0	0	98	12	0	0	1	111	112
0	0	11	1	0	0	1	13	14	0	1	96	7	2	0	1	107	108.4
0	0	9	2	0	0	1	12	13	2	1	120	13	2	0	0	138	136.8
0	0	19	0	0	0	0	19	19	1	0	130	16	2	0	2	151	153.2
0	0	50	5	0	0	2	57	59	3	2	444	48	6	0	4	507	510.4
0	0	3	0	0	0	0	3	3	1	0	168	23	0	0	1	193	193.2
0	0	18	1	0	0	0	19	19	0	0	160	15	1	0	0	176	176.5
0	0	10	2	0	0	0	12	12	0	1	159	18	0	0	1	179	179.4
0	0	6	1	0	0	0	7	7	0	0	123	15	1	0	0	139	139.5
0	0	37	4	0	0	0	41	41	1	1	610	71	2	0	2	687	688.6
1	0	3	0	0	0	0	4	3.2	0	0	143	5	0	0	1	149	150
0	0	8	0	0	0	0	8	8	0	0	154	17	0	0	1	172	173
0	1	2	0	1	0	0	4	3.9	0	0	139	11	0	0	0	150	150
0	0	5	5	1	1	0	12	13.8	0	0	110	2	0	0	1	113	114
1	1	18	5	2	1	0	28	28.9	0	0	546	35	0	0	3	584	587
0	0	4	0	0	0	0	4	4	0	1	125	5	0	0	0	131	130.4
0	0	4	0	0	0	0	4	4	2	3	114	3	0	0	1	123	120.6
0	1	7	0	0	0	0	8	7.4	0	1	96	1	0	0	0	98	97.4
0	0	4	2	0	0	0	6	6	0	0	106	1	1	0	1	109	110.5
0	1	19	2	0	0	0	22	21.4	2	5	441	10	1	0	2	461	458.9
1	2	442	39	12	2	3	501	510.6	20	19	5066	427	78	5	30	5645	5693

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	1	14	15	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	22	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	78	1	0	0	2	81	83	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	3	1	0	0	0	4	4
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	3	1	0	0	0	4	4	0	0	9	1	0	0	0	10	10
0	0	1	0	0	0	0	1	1	0	0	1	0	1	0	0	2	2.5
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	1	2	3	0	0	1	0	0	0	1	2	3
0	0	4	0	0	0	0	4	4	0	0	2	2	0	0	0	4	4
0	0	8	0	0	0	1	9	10	0	0	7	2	1	0	1	11	12.5
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	1	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	1	1	0	0	0	2	2	0	0	5	0	0	0	0	5	5
0	0	1	0	1	0	0	2	2.5	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	3	0	1	0	0	4	4.5	0	0	5	0	0	0	0	5	5
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	9	0	0	0	0	9	9	0	0	8	0	0	0	0	8	8
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	1	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	0	1	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	9	0	0	0	0	9	9	0	0	4	2	0	0	0	6	6
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	6	0	0	0	0	6	6	0	0	7	1	0	0	0	8	8
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	6	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
0	0	13	1	0	0	0	14	14	0	0	7	0	0	0	0	7	7
0	0	4	1	0	0	0	5	5	0	0	3	0	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	2	0	0	0	0	2	2
0	0	14	0	0	0	0	14	14	0	0	6	0	0	0	0	6	6
0	0	5	0	0	0	0	5	5	0	0	3	0	0	0	0	3	3
0	0	27	1	0	0	0	28	28	0	0	14	0	0	0	0	14	14
0	0	6	0	0	0	0	6	6	0	0	8	0	0	0	0	8	8
0	0	7	0	0	0	1	8	9	0	0	5	0	0	0	0	5	5
0	0	18	0	0	0	0	18	18	0	0	8	0	0	0	0	8	8
0	0	16	0	0	0	0	16	16	0	0	18	0	0	0	0	18	18
0	0	47	0	0	0	1	48	49	0	0	39	0	0	0	0	39	39
0	0	15	0	0	0	0	15	15	0	0	12	1	0	0	0	13	13
0	0	16	0	0	0	0	16	16	0	0	14	0	0	0	0	14	14
0	0	16	0	0	0	0	16	16	0	0	9	0	0	0	0	9	9
0	0	9	0	0	0	0	9	9	0	0	8	0	0	0	0	8	8
0	0	56	0	0	0	0	56	56	0	0	43	1	0	0	0	44	44
0	0	183	4	1	0	2	190	192.5	0	0	153	7	1	0	1	162	163.5

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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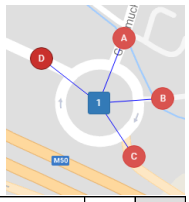
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
2	0	59	12	3	0	0	76	75.9	0	0	10	3	0	0	0	13	13
0	1	99	20	3	0	2	125	127.9	1	0	15	1	0	1	0	18	18.5
1	1	115	17	1	0	1	136	136.1	0	0	21	4	0	0	0	25	25
0	1	170	16	2	0	1	190	191.4	0	0	29	0	0	0	0	29	29
3	3	443	65	9	0	4	527	531.3	1	0	75	8	0	1	0	85	85.5
1	0	110	8	2	1	2	124	127.5	0	0	35	2	2	0	0	39	40
1	3	135	23	3	0	1	166	165.9	0	0	30	4	0	0	0	34	34
2	1	124	6	3	0	1	137	137.3	0	0	20	1	1	0	0	22	22.5
0	2	118	14	3	0	0	137	137.3	0	0	20	1	0	0	0	21	21
4	6	487	51	11	1	4	564	568	0	0	105	8	3	0	0	116	117.5
0	1	132	18	2	0	1	154	155.4	0	0	4	2	0	0	0	6	6
0	2	110	17	4	0	1	134	135.8	0	0	6	0	0	0	0	6	6
1	1	79	20	2	1	0	104	104.9	0	0	4	1	0	0	0	5	5
0	0	91	20	1	0	1	113	114.5	0	0	8	1	0	0	0	9	9
1	4	412	75	9	1	3	505	510.6	0	0	22	4	0	0	0	26	26
1	0	101	3	3	0	0	108	108.7	0	0	7	1	2	0	0	10	11
0	0	88	9	6	0	1	104	108	0	0	5	0	0	0	0	5	5
1	1	89	7	6	2	0	106	110.2	0	0	2	0	0	0	0	2	2
0	0	83	7	3	0	1	94	96.5	0	0	3	0	0	0	0	3	3
2	1	361	26	18	2	2	412	423.4	0	0	17	1	2	0	0	20	21
2	0	87	8	1	0	0	98	96.9	0	0	3	0	1	0	0	4	4.5
1	2	85	10	3	0	1	102	102.5	0	0	6	2	0	0	0	8	8
0	1	98	13	7	0	0	119	121.9	0	0	7	3	0	0	0	10	10
0	0	111	11	2	0	0	124	125	0	0	4	5	0	0	0	9	9
3	3	381	42	13	0	1	443	446.3	0	0	20	10	1	0	0	31	31.5
0	2	114	16	2	1	1	136	138.1	0	0	6	0	0	0	0	6	6
0	0	112	11	3	1	0	127	129.8	0	0	3	2	0	0	0	5	5
2	0	88	10	3	0	1	104	104.9	0	0	11	2	0	0	0	13	13
0	0	129	9	2	0	1	141	143	0	0	3	1	1	0	0	5	5.5
2	2	443	46	10	2	3	508	515.8	0	0	23	5	1	0	0	29	29.5
1	0	109	12	5	0	0	127	128.7	0	0	2	0	0	1	0	3	4.3
1	0	127	9	1	0	1	139	139.7	0	0	1	1	0	0	0	2	2
0	0	116	12	5	0	0	133	135.5	0	0	2	0	0	0	0	2	2
1	0	117	14	2	0	0	134	134.2	0	0	4	0	1	0	0	5	5.5
3	0	469	47	13	0	1	533	538.1	0	0	9	1	1	1	0	12	13.8
0	2	136	14	1	0	2	155	156.3	0	0	1	2	0	0	0	3	3
1	0	133	10	2	1	0	147	148.5	0	0	7	0	0	0	0	7	7
1	1	109	12	1	1	1	126	127.4	0	0	3	1	0	0	0	4	4
0	0	138	8	1	0	1	148	149.5	0	0	5	1	0	0	1	7	8
2	3	516	44	5	2	4	576	581.7	0	0	16	4	0	0	1	21	22
0	1	124	8	3	0	0	136	136.9	0	0	6	5	0	0	0	11	11
0	0	139	12	2	0	1	154	156	0	0	2	2	0	0	0	4	4
0	0	129	5	1	0	0	135	135.5	0	0	5	3	0	0	0	8	8
2	0	138	7	1	0	0	148	146.9	0	0	4	7	0	0	0	11	11
2	1	530	32	7	0	1	573	575.3	0	0	17	17	0	0	0	34	34
2	0	119	7	2	0	1	131	131.4	0	0	2	3	0	0	0	5	5
0	1	114	9	2	0	1	127	128.4	0	0	4	3	0	0	0	7	7
0	0	122	16	0	0	0	138	138	0	0	5	2	0	0	0	7	7
0	0	170	16	1	0	1	188	189.5	0	0	1	0	0	0	0	1	1
2	1	525	48	5	0	3	584	587.3	0	0	12	8	0	0	0	20	20
0	1	152	8	1	1	0	163	164.2	0	0	4	0	10	0	0	14	19
2	0	117	7	0	0	1	127	126.4	0	0	3	1	1	0	1	6	7.5
1	1	150	8	0	0	0	160	158.6	0	1	5	1	0	0	0	7	6.4
1	0	140	4	1	1	0	147	148	0	0	6	2	0	0	0	8	8
4	2	559	27	2	2	1	597	597.2	0	1	18	4	11	0	1	35	40.9
2	1	148	4	0	0	1	156	154.8	0	1	3	0	0	0	1	5	5.4
0	0	132	3	0	0	0	135	135	0	0	3	0	0	0	0	3	3
0	0	125	2	0	0	1	128	129	0	0	4	0	0	0	0	4	4
0	1	118	4	0	0	0	123	122.4	0	0	2	0	0	0	0	2	2
2	2	523	13	0	0	2	542	541.2	0	1	12	0	0	0	1	14	14.4
30	28	5649	516	102	10	29	6364	6416	1	2	346	70	19	2	3	443	456.1

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	16	5	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
0	0	24	4	1	0	0	29	29.5	0	0	0	0	0	0	0	0	0
0	0	45	5	3	0	0	53	54.5	0	0	0	0	0	0	0	0	0
0	0	52	2	2	1	0	57	59.3	0	0	0	0	0	0	0	0	0
0	0	137	16	7	1	0	161	165.8	0	0	0	0	0	0	0	0	0
0	0	88	8	4	0	1	101	104	0	0	0	0	0	0	0	0	0
0	0	87	7	6	1	0	101	105.3	0	0	0	0	0	0	0	0	0
0	0	85	3	6	2	1	97	103.6	0	0	0	0	0	0	0	0	0
0	0	72	6	3	1	0	82	84.8	0	0	0	0	0	0	0	0	0
0	0	332	24	19	4	2	381	397.7	0	0	0	0	0	0	0	0	0
0	0	59	2	4	0	0	65	67	0	0	0	0	0	0	0	0	0
0	0	55	5	3	0	0	63	64.5	0	0	0	0	0	0	0	0	0
0	0	33	7	2	1	0	43	45.3	0	0	0	0	0	0	0	0	0
0	0	37	4	1	0	0	42	42.5	0	0	0	0	0	0	0	0	0
0	0	184	18	10	1	0	213	219.3	0	0	0	0	0	0	0	0	0
0	0	36	2	1	0	0	39	39.5	0	0	0	0	0	0	0	0	0
0	0	61	4	1	2	0	68	71.1	0	0	0	0	0	0	0	0	0
0	0	39	6	1	1	0	47	48.8	0	0	0	0	0	0	0	0	0
0	1	51	4	1	1	0	58	59.2	0	0	0	0	0	0	0	0	0
0	1	187	16	4	4	0	212	218.6	0	0	0	0	0	0	0	0	0
0	0	55	3	3	0	0	61	62.5	0	0	0	0	0	0	0	0	0
0	0	56	2	2	0	0	60	61	0	0	0	0	0	0	0	0	0
0	1	66	4	4	1	0	76	78.7	0	0	0	0	0	0	0	0	0
0	0	71	8	4	0	0	83	85	0	0	0	0	0	0	0	0	0
0	1	248	17	13	1	0	280	287.2	0	0	0	0	0	0	0	0	0
0	0	72	6	3	0	0	81	82.5	0	0	0	0	0	0	0	0	0
0	0	67	13	4	0	0	84	86	0	0	0	0	0	0	0	0	0
0	0	78	2	1	0	0	81	81.5	0	0	0	0	0	0	0	0	0
0	0	88	3	1	0	1	93	94.5	0	0	0	0	0	0	0	0	0
0	0	305	24	9	0	1	339	344.5	0	0	0	0	0	0	0	0	0
0	0	101	4	3	0	0	108	109.5	0	0	0	0	0	0	0	0	0
0	1	100	5	0	1	0	107	107.7	0	0	0	0	0	0	0	0	0
0	1	97	8	3	3	0	112	116.8	0	0	0	0	0	0	0	0	0
0	2	89	5	3	0	0	99	99.3	0	0	0	0	0	0	0	0	0
0	4	387	22	9	4	0	426	433.3	0	0	0	0	0	0	0	0	0
0	1	76	4	2	0	0	83	83.4	0	0	0	0	0	0	0	0	0
0	0	105	8	1	1	1	116	118.8	0	0	0	0	0	0	0	0	0
0	0	65	5	2	1	0	73	75.3	0	0	0	0	0	0	0	0	0
0	0	74	10	1	0	0	85	85.5	0	0	0	0	0	0	0	0	0
0	1	320	27	6	2	1	357	363	0	0	0	0	0	0	0	0	0
0	0	86	2	1	0	0	89	89.5	0	0	0	0	0	0	0	0	0
0	0	69	3	1	0	0	73	73.5	0	0	0	0	0	0	0	0	0
0	0	95	6	1	2	1	105	109.1	0	0	0	0	0	0	0	0	0
0	0	97	7	0	0	0	104	104	0	0	0	0	0	0	0	0	0
0	0	347	18	3	2	1	371	376.1	0	0	0	0	0	0	0	0	0
0	1	99	7	1	0	0	108	107.9	0	0	0	0	0	0	0	0	0
0	1	103	4	1	0	0	109	108.9	0	0	0	0	0	0	0	0	0
0	0	98	3	2	1	0	104	106.3	0	0	0	0	0	0	0	0	0
0	0	83	2	0	0	0	85	85	0	0	0	0	0	0	0	0	0
0	2	383	16	4	1	0	406	408.1	0	0	0	0	0	0	0	0	0
0	0	78	8	0	0	0	86	86	0	0	0	0	0	0	0	0	0
0	0	82	7	0	0	0	89	89	0	0	0	0	0	0	0	0	0
0	1	87	2	0	0	0	90	89.4	0	0	0	0	0	0	0	0	0
0	0	70	2	0	0	0	72	72	0	0	0	0	0	0	0	0	0
0	1	317	19	0	0	0	337	336.4	0	0	0	0	0	0	0	0	0
0	0	86	2	0	0	0	88	88	0	0	0	0	0	0	0	0	0
0	0	64	1	1	0	0	66	66.5	0	0	0	0	0	0	0	0	0
0	1	78	5	1	0	0	85	84.9	0	0	0	0	0	0	0	0	0
0	0	75	3	0	0	0	78	78	0	0	0	0	0	0	0	0	0
0	1	303	11	2	0	0	317	317.4	0	0	0	0	0	0	0	0	0
0	11	3450	228	86	20	5	3800	3867	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 1
Date : 11/11/17
Location : Glenamuck Road North/M50 Roundabout (East)



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
08:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
13:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
13:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
14:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
14:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
15:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
16:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
17:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12 TOT	0	0	0	0	0	0	0	0	0	0	0	56	0	0	0	0	56	56

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
0	0	2	1	0	0	0	3	3	0	0	12	2	1	0	1	16	17.5
0	0	3	1	1	0	0	5	5.5	0	0	19	2	0	0	0	21	21
0	0	6	1	0	0	0	7	7	0	0	13	3	0	0	0	16	16
0	0	11	3	1	0	0	15	15.5	0	0	53	7	1	0	1	62	63.5
0	0	3	0	0	0	0	3	3	0	0	33	3	1	0	1	38	39.5
0	0	8	1	0	0	0	9	9	0	0	44	2	0	0	0	46	46
0	0	3	0	0	0	0	3	3	0	0	50	4	1	1	0	56	57.8
0	0	14	2	0	0	0	16	16	5	0	60	3	0	0	1	69	66
0	0	28	3	0	0	0	31	31	5	0	187	12	2	1	2	209	209.3
0	0	13	0	0	0	0	13	13	1	0	67	3	0	0	0	71	70.2
1	0	16	1	1	0	0	19	18.7	0	0	85	1	0	0	0	86	86
0	0	16	0	0	0	0	16	16	0	0	68	1	0	0	1	70	71
0	0	18	1	0	0	0	19	19	0	1	93	1	1	0	0	96	95.9
1	0	63	2	1	0	0	67	66.7	1	1	313	6	1	0	1	323	323.1
0	0	6	3	0	0	0	9	9	0	0	101	4	2	0	0	107	108
3	0	37	1	0	0	0	41	38.6	0	0	97	3	0	0	0	100	100
7	0	11	1	0	0	1	20	15.4	1	0	109	4	0	0	0	114	113.2
0	0	24	3	0	0	0	27	27	0	0	106	5	0	0	0	111	111
10	0	78	8	0	0	1	97	90	1	0	413	16	2	0	0	432	432.2
1	1	4	1	0	0	0	7	5.6	0	0	128	2	0	0	0	130	130
0	0	7	0	2	0	1	10	12	0	1	135	2	1	0	0	139	138.9
0	0	4	5	0	0	0	9	9	0	0	121	2	1	0	0	124	124.5
0	0	12	2	1	0	0	15	15.5	0	0	137	5	0	0	0	142	142
1	1	27	8	3	0	1	41	42.1	0	1	521	11	2	0	0	535	535.4
0	0	14	0	0	0	0	14	14	0	0	128	6	0	0	1	135	136
0	0	17	0	0	0	0	17	17	0	1	151	8	1	0	0	161	160.9
0	0	14	1	0	0	0	15	15	1	1	127	2	3	0	0	134	134.1
0	0	15	1	1	0	0	17	17.5	0	0	137	5	0	0	1	143	144
0	0	60	2	1	0	0	63	63.5	1	2	543	21	4	0	2	573	575
0	0	9	3	0	0	0	12	12	0	0	136	2	0	0	1	139	140
0	0	13	3	0	0	0	16	16	0	1	118	6	0	0	0	125	124.4
0	0	5	1	0	0	0	6	6	0	0	123	4	0	0	0	127	127
0	0	14	0	0	0	0	14	14	0	0	117	4	1	0	1	123	124.5
0	0	41	7	0	0	0	48	48	0	1	494	16	1	0	2	514	515.9
0	0	13	0	0	0	0	13	13	0	0	128	6	0	0	0	134	134
0	0	15	2	0	0	0	17	17	0	0	136	2	0	0	1	139	140
0	0	14	4	0	0	0	18	18	0	0	125	2	1	0	0	128	128.5
0	1	18	0	0	0	0	19	18.4	0	0	104	8	1	0	0	113	113.5
0	1	60	6	0	0	0	67	66.4	0	0	493	18	2	0	1	514	516
0	0	23	1	0	0	0	24	24	0	0	104	2	1	0	1	108	109.5
0	0	12	0	0	0	0	12	12	0	0	111	5	0	0	0	116	116
0	0	21	3	0	0	0	24	24	1	0	96	3	0	0	0	100	99.2
0	0	18	3	0	0	0	21	21	0	1	95	4	0	0	1	101	101.4
0	0	74	7	0	0	0	81	81	1	1	406	14	1	0	2	425	426.1
0	0	15	1	0	0	0	16	16	0	0	109	2	0	0	0	111	111
0	0	15	2	0	0	0	17	17	0	0	108	0	0	0	0	108	108
0	0	14	0	0	0	0	14	14	0	0	117	3	0	0	1	121	122
0	0	8	0	0	0	0	8	8	0	0	83	1	0	0	0	84	84
0	0	52	3	0	0	0	55	55	0	0	417	6	0	0	1	424	425
0	0	13	2	0	0	0	15	15	0	0	89	1	1	0	0	91	91.5
0	0	16	1	0	0	0	17	17	0	0	88	2	0	0	0	90	90
0	0	5	0	0	0	0	5	5	0	0	62	0	1	0	1	64	65.5
0	0	11	0	0	0	0	11	11	0	0	66	1	0	0	0	67	67
0	0	45	3	0	0	0	48	48	0	0	305	4	2	0	1	312	314
0	0	11	1	0	0	0	12	12	0	1	53	2	0	0	1	57	57.4
0	0	11	0	0	0	0	11	11	0	0	45	0	0	0	0	45	45
0	0	12	0	0	0	0	12	12	0	0	58	0	0	0	0	58	58
0	0	12	0	0	0	0	12	12	0	1	48	2	0	0	1	52	52.4
0	0	46	1	0	0	0	47	47	0	2	204	4	0	0	2	212	212.8
12	2	585	53	6	0	2	660	654.2	9	8	4349	135	18	1	15	4535	4548

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	64	2	0	0	0	66	66	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	4	0	0	0	0	4	4
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	1	0	2	0	0	0	0	3	2.2
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	5	0	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	8	0	0	0	0	8	8	1	0	7	0	0	0	0	8	7.2
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	9	0	0	0	0	9	9	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	3	0	1	0	0	4	4.5
0	0	10	0	0	0	0	10	10	0	0	6	0	1	0	0	7	7.5
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	4	0	0	0	0	4	4	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	4	0	0	0	0	4	4
0	0	10	0	0	0	0	10	10	0	0	7	1	0	0	0	8	8
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	13	0	0	0	0	13	13	0	0	3	0	0	0	0	3	3
0	0	6	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	0	1	0	0	0	1	1
0	0	17	0	0	0	0	17	17	0	0	4	1	0	0	0	5	5
0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	1	0	0	0	1	1
0	0	11	0	0	0	0	11	11	0	0	3	1	0	0	0	4	4
0	0	90	0	0	0	0	90	90	1	0	47	3	1	0	0	52	51.7

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

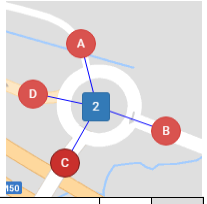
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	14	2	0	0	0	16	16	0	0	4	0	1	0	0	5	5.5
0	0	22	6	1	0	0	29	29.5	0	0	3	1	0	0	0	4	4
0	0	23	8	0	0	0	31	31	0	0	7	0	0	0	0	7	7
0	1	24	8	1	0	1	35	35.9	0	0	0	1	0	0	0	1	1
0	1	83	24	2	0	1	111	112.4	0	0	14	2	1	0	0	17	17.5
0	0	31	7	0	0	0	38	38	0	0	6	0	0	0	0	6	6
1	0	47	7	0	0	0	55	54.2	0	0	4	1	0	0	0	5	5
1	0	37	8	2	0	1	49	50.2	0	0	8	2	0	0	0	10	10
0	0	48	5	1	0	0	54	54.5	0	0	6	0	0	0	0	6	6
2	0	163	27	3	0	1	196	196.9	0	0	24	3	0	0	0	27	27
0	0	61	7	0	0	0	68	68	0	0	3	1	0	0	0	4	4
1	0	64	6	1	0	1	73	73.7	0	0	0	1	0	0	0	1	1
0	0	87	5	0	0	0	92	92	0	0	4	1	0	0	0	5	5
0	0	102	5	0	0	0	107	107	0	0	8	0	0	0	0	8	8
1	0	314	23	1	0	1	340	340.7	0	0	15	3	0	0	0	18	18
0	0	83	6	3	0	0	92	93.5	0	0	8	2	0	0	0	10	10
0	0	90	5	2	0	1	98	100	0	0	4	1	0	0	0	5	5
1	0	114	6	0	0	0	121	120.2	0	0	7	2	0	0	0	9	9
0	0	117	3	2	0	0	122	123	0	0	7	1	0	0	0	8	8
1	0	404	20	7	0	1	433	436.7	0	0	26	6	0	0	0	32	32
0	1	125	10	0	0	1	137	137.4	0	0	9	0	0	0	0	9	9
2	0	132	8	0	0	0	142	140.4	0	0	7	0	0	0	0	7	7
7	0	133	10	0	0	0	150	144.4	0	0	1	0	0	0	0	1	1
2	0	142	8	0	0	1	153	152.4	0	0	4	0	0	0	0	4	4
11	1	532	36	0	0	2	582	574.6	0	0	21	0	0	0	0	21	21
0	0	170	3	1	0	0	174	174.5	0	0	4	0	0	0	0	4	4
0	0	138	6	2	0	0	146	147	0	0	7	0	0	0	0	7	7
1	0	137	5	0	1	0	144	144.5	0	0	6	1	0	0	0	7	7
1	0	156	3	0	0	1	161	161.2	0	0	8	0	0	0	0	8	8
2	0	601	17	3	1	1	625	627.2	0	0	25	1	0	0	0	26	26
0	1	134	8	0	0	0	143	142.4	0	0	5	1	0	0	0	6	6
0	1	154	6	0	0	1	162	162.4	0	0	5	1	0	0	0	6	6
0	1	168	5	0	0	0	174	173.4	0	0	6	1	0	0	0	7	7
1	0	140	7	0	0	0	148	147.2	0	0	3	0	0	0	0	3	3
1	3	596	26	0	0	1	627	625.4	0	0	19	3	0	0	0	22	22
0	1	144	4	2	0	1	152	153.4	0	0	4	0	0	0	0	4	4
0	1	162	5	0	0	0	168	167.4	0	0	6	0	0	0	0	6	6
0	0	128	4	0	0	1	133	134	0	0	13	1	0	0	0	14	14
1	0	145	5	1	0	0	152	151.7	0	0	7	1	1	0	0	9	9.5
1	2	579	18	3	0	2	605	606.5	0	0	30	2	1	0	0	33	33.5
0	0	148	5	0	0	0	153	153	0	0	9	2	0	0	0	11	11
0	0	141	4	0	0	0	145	145	0	0	5	0	0	0	0	5	5
0	0	172	7	0	0	1	180	181	0	0	13	0	0	0	0	13	13
0	0	147	4	0	0	0	151	151	0	0	12	0	0	0	0	12	12
0	0	608	20	0	0	1	629	630	0	0	39	2	0	0	0	41	41
0	1	134	4	0	0	0	139	138.4	0	0	5	0	0	0	0	5	5
1	0	140	3	0	0	1	145	145.2	0	0	2	0	0	0	0	2	2
0	0	139	1	0	0	0	140	140	0	0	6	1	0	0	0	7	7
1	0	141	1	0	0	0	143	142.2	0	0	6	0	0	0	0	6	6
2	1	554	9	0	0	1	567	565.8	0	0	19	1	0	0	0	20	20
0	0	143	2	0	0	1	146	147	0	0	11	1	0	0	0	12	12
1	0	129	0	1	0	0	131	130.7	0	0	8	0	0	0	0	8	8
0	0	116	0	0	0	0	116	116	0	0	5	0	0	0	0	5	5
0	0	101	2	1	0	0	104	104.5	0	0	8	0	0	0	0	8	8
1	0	489	4	2	0	1	497	498.2	0	0	32	1	0	0	0	33	33
0	0	120	1	0	0	1	122	123	0	0	4	0	0	0	0	4	4
0	0	87	0	0	0	0	87	87	0	0	3	0	0	0	0	3	3
1	1	91	6	0	0	1	100	99.6	0	0	4	1	0	0	0	5	5
0	0	84	3	0	0	0	87	87	0	0	6	1	0	0	0	7	7
1	1	382	10	0	0	2	396	396.6	0	0	17	2	0	0	0	19	19
23	9	5305	234	21	1	15	5608	5611	0	0	281	26	2	0	0	309	310

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	4	0	2	0	0	6	7	0	0	0	0	0	0	0	0	0
0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	15	2	3	0	0	20	21.5	0	0	0	0	0	0	0	0	0
0	0	9	2	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	10	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	26	2	0	1	0	29	30.3	0	0	0	0	0	0	0	0	0
0	0	58	7	0	1	0	66	67.3	0	0	0	0	0	0	0	0	0
0	0	17	3	2	0	0	22	23	0	0	0	0	0	0	0	0	0
0	0	40	3	0	1	0	44	45.3	0	0	0	0	0	0	0	0	0
0	0	52	1	0	0	0	53	53	0	0	0	0	0	0	0	0	0
0	0	59	2	1	0	0	62	62.5	0	0	0	0	0	0	0	0	0
0	0	168	9	3	1	0	181	183.8	0	0	0	0	0	0	0	0	0
0	0	43	3	0	0	0	46	46	0	0	0	0	0	0	0	0	0
0	0	66	4	0	1	0	71	72.3	0	0	0	0	0	0	0	0	0
0	0	65	3	1	0	0	69	69.5	0	0	0	0	0	0	0	0	0
0	0	55	5	1	0	0	61	61.5	0	0	0	0	0	0	0	0	0
0	0	229	15	2	1	0	247	249.3	0	0	0	0	0	0	0	0	0
0	1	87	3	0	0	0	91	90.4	0	0	0	0	0	0	0	0	0
0	0	73	5	0	1	0	79	80.3	0	0	0	0	0	0	0	0	0
0	0	95	4	1	1	0	101	102.8	0	0	0	0	0	0	0	0	0
0	0	80	6	0	0	0	86	86	0	0	0	0	0	0	0	0	0
0	1	335	18	1	2	0	357	359.5	0	0	0	0	0	0	0	0	0
0	1	112	12	1	0	0	126	125.9	0	0	0	0	0	0	0	0	0
0	0	91	4	0	0	0	95	95	0	0	0	0	0	0	0	0	0
0	0	115	12	0	0	0	127	127	0	0	0	0	0	0	0	0	0
0	0	116	6	0	0	0	122	122	0	0	0	0	0	0	0	0	0
0	1	434	34	1	0	0	470	469.9	0	0	0	0	0	0	0	0	0
0	0	122	5	0	0	0	127	127	0	0	0	0	0	0	0	0	0
0	0	145	8	1	0	0	154	154.5	0	0	0	0	0	0	0	0	0
0	0	124	6	0	0	0	130	130	0	0	0	0	0	0	0	0	0
0	1	101	2	0	0	0	104	103.4	0	0	0	0	0	0	0	0	0
0	1	492	21	1	0	0	515	514.9	0	0	0	0	0	0	0	0	0
0	0	121	1	0	0	0	122	122	0	0	0	0	0	0	0	0	0
0	0	102	4	0	0	0	106	106	0	0	0	0	0	0	0	0	0
0	0	116	6	1	0	0	123	123.5	0	0	0	0	0	0	0	0	0
0	0	111	6	0	0	0	117	117	0	0	0	0	0	0	0	0	0
0	0	450	17	1	0	0	468	468.5	0	0	0	0	0	0	0	0	0
0	0	138	3	1	0	0	142	142.5	0	0	0	0	0	0	0	0	0
0	0	119	3	0	0	0	122	122	0	0	0	0	0	0	0	0	0
0	0	111	3	0	0	0	114	114	0	0	0	0	0	0	0	0	0
0	0	137	4	2	0	0	143	144	0	0	0	0	0	0	0	0	0
0	0	505	13	3	0	0	521	522.5	0	0	0	0	0	0	0	0	0
0	0	117	1	0	0	0	118	118	0	0	0	0	0	0	0	0	0
0	1	136	3	1	0	0	141	140.9	0	0	0	0	0	0	0	0	0
0	0	116	5	1	0	0	122	122.5	0	0	0	0	0	0	0	0	0
0	0	112	3	0	0	0	115	115	0	0	0	0	0	0	0	0	0
0	1	481	12	2	0	0	496	496.4	0	0	0	0	0	0	0	0	0
0	0	109	2	0	0	0	111	111	0	0	0	0	0	0	0	0	0
0	0	108	2	0	0	0	110	110	0	0	0	0	0	0	0	0	0
0	0	84	1	0	0	0	85	85	0	0	0	0	0	0	0	0	0
0	0	85	0	0	0	0	85	85	0	0	0	0	0	0	0	0	0
0	0	386	5	0	0	0	391	391	0	0	0	0	0	0	0	0	0
0	1	98	1	0	0	0	100	99.4	0	0	0	0	0	0	0	0	0
0	0	89	2	0	0	0	91	91	0	0	0	0	0	0	0	0	0
0	0	55	3	0	0	0	58	58	0	0	0	0	0	0	0	0	0
0	0	60	0	0	0	0	60	60	0	0	0	0	0	0	0	0	0
0	1	302	6	0	0	0	309	308.4	0	0	0	0	0	0	0	0	0
0	5	3855	159	17	5	0	4041	4053	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 2
Date : 07/11/17
Location : Glenamuck Road North/M50 Roundabout (West)



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	0	5	6.3
07:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
07:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	14	1	0	1	0	16	17.3
08:00	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	13	13.5
08:15	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
08:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
08:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	0	0	33	0	1	0	0	34	34.5
09:00	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
09:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
09:30	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
09:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	20	20
10:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
10:15	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
10:30	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
10:45	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	12	12.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	35	2	1	0	0	38	38.5
11:00	0	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	9	8.2
11:15	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	9	9
11:30	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
11:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	1	0	31	3	0	0	0	35	34.2
12:00	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2
12:15	0	0	0	0	0	0	0	0	0	0	0	7	1	1	0	0	9	9.5
12:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
12:45	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	7	6.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	22	1	1	0	0	26	24.9
13:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
13:15	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
13:30	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
13:45	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	6	6.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	21	3	1	0	0	25	25.5
14:00	0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	18	18
14:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
14:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	32	32
15:00	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
15:15	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	14	14
15:30	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
15:45	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	19
H/TOT	0	0	0	0	0	0	0	0	0	0	0	52	4	0	0	0	56	56
16:00	0	0	0	0	0	0	0	0	0	1	0	21	0	0	0	0	22	21.2
16:15	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
16:30	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
16:45	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	19	19
H/TOT	0	0	0	0	0	0	0	0	0	1	0	88	1	0	0	0	90	89.2
17:00	0	0	0	0	0	0	0	0	0	0	0	29	2	0	0	0	31	31
17:15	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
17:30	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	21	21
17:45	0	0	0	0	0	0	0	0	0	0	0	23	1	0	0	0	24	24
H/TOT	0	0	0	0	0	0	0	0	0	0	0	99	4	0	0	0	103	103
18:00	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	1	19	20
18:15	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
18:30	0	0	0	0	0	0	0	0	0	2	0	27	0	0	0	0	29	27.4
18:45	0	0	0	0	0	0	0	0	0	0	0	20	0	1	0	0	21	21.5
H/TOT	0	0	0	0	0	0	0	0	0	2	0	85	0	1	0	1	89	88.9
12 TOT	0	0	0	0	0	0	0	0	0	6	0	530	21	5	1	1	564	564

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	1	5	6	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	13	0	0	1	1	15	17.3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	1	5	6	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
1	0	6	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
1	0	18	1	0	0	1	21	21.2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	24	0	0	0	1	25	26	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	2	6	0	0	0	0	8	6.8	0	0	0	0	0	0	0	0	0
0	0	9	3	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	2	34	4	0	0	0	40	38.8	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	14	2	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	35	2	0	0	0	37	37	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	47	1	0	0	0	48	48	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	1	14	15	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	8	0	1	0	1	10	11.5	0	0	0	0	0	0	0	0	0
0	0	34	2	1	0	2	39	41.5	0	0	0	0	0	0	0	0	0
0	0	12	0	0	1	0	13	14.3	0	0	0	0	0	0	0	0	0
0	0	11	1	0	0	1	13	14	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	2	8	10	0	0	0	0	0	0	0	0	0
0	0	34	1	0	1	3	39	43.3	0	0	0	0	0	0	0	0	0
0	1	4	1	0	0	0	6	5.4	0	0	0	0	0	0	0	0	0
0	1	7	1	0	0	0	9	8.4	0	0	0	0	0	0	0	0	0
0	0	3	0	2	0	0	5	6	0	0	0	0	0	0	0	0	0
1	0	14	3	1	0	0	19	18.7	0	0	0	0	0	0	0	0	0
1	2	28	5	3	0	0	39	38.5	0	0	0	0	0	0	0	0	0
0	0	8	0	0	1	0	9	10.3	0	0	0	0	0	0	0	0	0
0	0	21	3	0	0	1	25	26	0	0	0	0	0	0	0	0	0
0	1	18	0	0	0	0	19	18.4	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	1	57	3	0	1	1	63	64.7	0	0	0	0	0	0	0	0	0
1	0	23	1	0	0	1	26	26.2	0	0	0	0	0	0	0	0	0
0	0	28	2	0	0	0	30	30	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
1	0	20	0	0	0	0	21	20.2	0	0	0	0	0	0	0	0	0
2	0	88	3	0	0	1	94	93.4	0	0	0	0	0	0	0	0	0
1	0	20	0	0	0	0	21	20.2	0	0	0	0	0	0	0	0	0
0	1	21	0	0	0	0	22	21.4	0	0	0	0	0	0	0	0	0
1	0	15	0	0	0	1	17	17.2	0	0	0	0	0	0	0	0	0
0	0	4	3	0	0	0	7	7	0	0	0	0	0	0	0	0	0
2	1	60	3	0	0	1	67	65.8	0	0	0	0	0	0	0	0	0
6	6	472	25	4	3	11	527	535.5	0	0	0	0	0	0	0	0	0

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	24	0	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	37	0	0	0	0	37	37	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	18	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	168	3	0	0	0	171	171	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	36	4	0	0	1	42	42.2	0	0	0	0	0	0	0	0	0
1	0	86	2	0	0	0	89	88.2	0	0	0	0	0	0	0	0	0
0	0	92	8	1	0	2	103	105.5	0	0	0	0	0	0	0	0	0
0	0	117	12	0	1	0	130	131.3	0	0	0	0	0	0	0	0	0
2	0	331	26	1	1	3	364	367.2	0	0	0	0	0	0	0	0	0
0	0	128	9	4	0	0	141	143	0	0	0	0	0	0	0	0	0
0	2	142	12	1	0	1	158	158.3	0	0	0	0	0	0	0	0	0
0	0	132	4	1	0	0	137	137.5	0	0	0	0	0	0	0	0	0
1	0	124	5	1	0	1	132	132.7	0	0	0	0	0	0	0	0	0
1	2	526	30	7	0	2	568	571.5	0	0	0	0	0	0	0	0	0
1	1	112	9	1	1	0	125	125.4	0	0	0	0	0	0	0	0	0
0	0	99	5	4	2	1	111	116.6	0	0	0	0	0	0	0	0	0
0	0	108	8	4	0	2	122	126	0	0	0	0	0	0	0	0	0
0	0	101	6	1	1	0	109	110.8	0	0	0	0	0	0	0	0	0
1	1	420	28	10	4	3	467	478.8	0	0	0	0	0	0	0	0	0
0	0	92	4	1	0	0	97	97.5	0	0	0	0	0	0	0	0	0
0	0	84	5	4	0	1	94	97	0	0	0	0	0	0	0	0	0
1	1	80	8	1	0	1	92	92.1	0	0	0	0	0	0	0	0	0
0	0	78	10	1	1	0	90	91.8	0	0	0	0	0	0	0	0	0
1	1	334	27	7	1	2	373	378.4	0	0	0	0	0	0	0	0	0
0	0	75	9	1	0	0	85	85.5	0	0	0	0	0	0	0	0	0
0	0	86	10	5	0	1	102	105.5	0	0	0	0	0	0	0	0	0
1	0	97	10	3	1	1	113	116	0	0	0	0	0	0	0	0	0
0	0	84	9	0	0	1	94	95	0	0	0	0	0	0	0	0	0
1	0	342	38	9	1	3	394	402	0	0	0	0	0	0	0	0	0
1	1	70	11	0	1	0	84	83.9	0	0	0	0	0	0	0	0	0
1	0	102	9	7	1	1	121	126	0	0	0	0	0	0	0	0	0
0	0	96	6	6	0	0	108	111	0	0	0	0	0	0	0	0	0
0	0	114	11	3	0	1	129	131.5	0	0	0	0	0	0	0	0	0
2	1	382	37	16	2	2	442	452.4	0	0	0	0	0	0	0	0	0
0	0	133	10	3	0	0	146	147.5	0	0	0	0	0	0	0	0	0
1	0	103	6	0	1	1	112	113.5	0	0	0	0	0	0	0	0	0
0	2	101	9	2	0	0	114	113.8	0	0	0	0	0	0	0	0	0
1	0	95	3	0	1	0	100	100.5	0	0	0	0	0	0	0	0	0
2	2	432	28	5	2	1	472	475.3	0	0	0	0	0	0	0	0	0
0	0	92	8	2	0	1	103	105	0	0	0	0	0	0	0	0	0
0	0	86	3	2	1	0	92	94.3	0	0	0	0	0	0	0	0	0
0	0	86	9	6	1	1	103	108.3	0	0	0	0	0	0	0	0	0
0	0	85	6	2	0	0	93	94	0	0	0	0	0	0	0	0	0
0	0	349	26	12	2	2	391	401.6	0	0	0	0	0	0	0	0	0
0	0	88	13	0	1	1	103	105.3	0	0	0	0	0	0	0	0	0
0	1	94	14	1	0	1	111	111.9	0	0	0	0	0	0	0	0	0
0	0	124	11	1	0	0	136	136.5	0	0	0	0	0	0	0	0	0
0	1	96	14	0	1	0	112	112.7	0	0	0	0	0	0	0	0	0
0	2	402	52	2	2	2	462	466.4	0	0	0	0	0	0	0	0	0
0	0	171	23	0	0	1	195	196	0	0	0	0	0	0	0	0	0
1	0	153	16	3	0	0	173	173.7	0	0	0	0	0	0	0	0	0
1	0	165	14	2	0	0	182	182.2	0	0	0	0	0	0	0	0	0
0	0	111	16	0	1	0	128	129.3	0	0	0	0	0	0	0	0	0
2	0	600	69	5	1	1	678	681.2	0	0	0	0	0	0	0	0	0
0	2	139	4	3	0	0	148	148.3	0	0	0	0	0	0	0	0	0
1	0	148	10	3	0	0	162	162.7	0	0	0	0	0	0	0	0	0
0	0	140	8	0	0	1	149	150	0	0	0	0	0	0	0	0	0
1	0	103	9	2	0	1	116	117.2	0	0	0	0	0	0	0	0	0
2	2	530	31	8	0	2	575	578.2	0	0	0	0	0	0	0	0	0
0	0	114	6	0	0	0	120	120	0	0	0	0	0	0	0	0	0
0	0	99	6	0	0	1	106	107	0	0	0	0	0	0	0	0	0
0	1	111	6	1	0	0	119	118.9	0	0	0	0	0	0	0	0	0
0	0	89	4	0	0	0	93	93	0	0	0	0	0	0	0	0	0
0	1	413	22	1	0	1	438	438.9	0	0	0	0	0	0	0	0	0
14	12	5061	414	83	16	24	5624	5692	0	0	0	0	0	0	0	0	0

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	17	3	0	0	0	20	20	1	2	70	7	1	0	0	81	79.5
1	0	47	1	0	0	0	49	48.2	0	0	87	1	0	1	0	89	90.3
1	0	55	1	0	1	0	58	58.5	1	0	142	6	2	0	0	151	151.2
0	0	83	1	1	0	0	85	85.5	0	0	162	13	3	0	1	179	181.5
2	0	202	6	1	1	0	212	212.2	2	2	461	27	6	1	1	500	502.5
0	0	103	3	0	0	0	106	106	2	1	173	4	2	2	2	186	189.4
0	0	109	3	0	0	0	112	112	2	1	163	18	8	1	1	194	198.1
0	1	115	3	0	0	0	119	118.4	4	2	176	9	10	1	2	204	207.9
1	0	111	1	0	0	0	113	112.2	0	2	127	9	11	1	0	150	155.6
1	1	438	10	0	0	0	450	448.6	8	6	639	40	31	5	5	734	751
0	0	93	3	0	0	0	96	96	0	0	93	7	3	1	1	105	108.8
1	0	62	2	0	0	0	65	64.2	1	0	101	6	2	0	0	110	110.2
1	0	43	0	0	0	0	44	43.2	0	1	91	8	1	3	1	105	109.8
0	0	26	1	0	0	0	27	27	0	0	73	8	1	0	0	82	82.5
2	0	224	6	0	0	0	232	230.4	1	1	358	29	7	4	2	402	411.3
0	0	19	2	0	0	0	21	21	0	0	88	10	7	1	1	107	112.8
0	0	14	0	0	1	0	15	16.3	0	1	100	10	7	1	1	120	125.2
0	0	12	0	0	0	0	12	12	1	0	90	10	5	4	0	110	116.9
1	0	5	0	0	0	0	6	5.2	1	1	116	4	4	1	1	128	130.9
1	0	50	2	0	1	0	54	54.5	2	2	394	34	23	7	3	465	485.8
0	0	6	2	0	0	0	8	8	0	0	151	15	1	2	0	169	172.1
0	0	8	0	0	0	0	8	8	0	0	132	12	4	2	1	151	156.6
0	0	9	1	0	0	0	10	10	0	1	138	17	5	0	0	161	162.9
0	0	13	1	0	0	0	14	14	0	0	142	6	4	0	1	153	156
0	0	36	4	0	0	0	40	40	0	1	563	50	14	4	2	634	647.6
1	0	12	1	0	0	0	14	13.2	0	0	139	6	3	2	0	150	154.1
2	0	13	4	0	0	0	19	17.4	0	0	143	11	2	0	1	157	159
1	0	10	1	0	0	0	12	11.2	0	1	148	7	4	0	0	160	161.4
0	0	11	0	0	0	0	11	11	0	0	165	8	4	1	1	179	183.3
4	0	46	6	0	0	0	56	52.8	0	1	595	32	13	3	2	646	657.8
0	0	16	0	0	0	0	16	16	0	0	174	9	5	2	0	190	195.1
0	0	20	3	0	0	0	23	23	1	0	191	5	4	2	0	203	206.8
0	0	17	1	0	1	0	19	20.3	0	0	171	13	8	0	1	193	198
0	0	14	0	0	0	0	14	14	0	2	169	16	6	1	1	195	199.1
0	0	67	4	0	1	0	72	73.3	1	2	705	43	23	5	2	781	799
0	0	19	0	0	0	0	19	19	1	1	176	6	4	1	0	189	190.9
0	0	11	0	0	0	0	11	11	0	0	181	14	1	0	1	197	198.5
0	0	18	1	0	0	0	19	19	0	0	108	10	2	0	2	122	125
0	0	18	1	0	0	0	19	19	1	0	150	4	2	2	1	160	163.8
0	0	66	2	0	0	0	68	68	2	1	615	34	9	3	4	668	678.2
0	0	22	1	0	0	0	23	23	0	0	132	7	4	1	1	145	149.3
0	0	16	0	0	0	0	16	16	0	0	159	8	0	1	1	169	171.3
0	0	14	0	0	0	0	14	14	0	1	168	5	4	1	1	180	183.7
1	0	15	0	0	0	0	16	15.2	0	1	171	11	1	0	0	184	183.9
1	0	67	1	0	0	0	69	68.2	0	2	630	31	9	3	3	678	688.2
0	0	16	1	0	0	0	17	17	0	0	166	9	2	1	1	179	182.3
0	0	12	0	0	0	0	12	12	0	0	174	10	1	3	1	189	194.4
0	0	11	1	1	0	0	13	13.5	1	0	152	8	2	0	0	163	163.2
1	0	18	0	0	0	1	20	20.2	0	0	158	9	5	0	1	173	176.5
1	0	57	2	1	0	1	62	62.7	1	0	650	36	10	4	3	704	716.4
0	0	24	0	0	0	0	24	24	1	0	126	11	0	0	2	140	141.2
0	0	9	0	0	0	0	9	9	1	0	147	4	0	0	0	152	151.2
0	0	16	0	0	0	0	16	16	0	0	120	7	2	0	0	129	130
0	0	25	0	0	0	0	25	25	1	0	123	3	2	0	1	130	131.2
0	0	74	0	0	0	0	74	74	3	0	516	25	4	0	3	551	553.6
1	0	17	0	0	0	0	18	17.2	1	1	136	8	0	0	1	147	146.6
0	0	19	0	0	0	0	19	19	0	1	108	0	1	0	0	110	109.9
0	0	12	0	0	0	0	12	12	0	0	103	10	2	0	1	116	118
0	0	10	0	0	0	0	10	10	0	0	89	2	0	0	1	92	93
1	0	58	0	0	0	0	59	58.2	1	2	436	20	3	0	3	465	467.5
13	1	1385	43	2	3	1	1448	1443	21	20	6562	401	152	39	33	7228	7359

C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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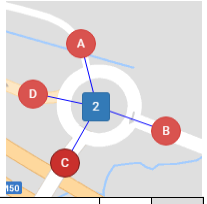
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	1	0	1	0	3	4.3	0	0	49	16	1	1	1	68	70.8
0	0	4	0	0	0	0	4	4	0	0	49	20	3	0	2	74	77.5
0	0	4	2	0	0	0	6	6	0	1	80	11	0	1	1	94	95.7
0	0	7	0	0	0	0	7	7	0	1	78	15	2	1	0	97	98.7
0	0	16	3	0	1	0	20	21.3	0	2	256	62	6	3	4	333	342.7
0	0	14	2	0	0	0	16	16	0	0	88	14	2	0	0	104	105
0	0	32	1	0	0	1	34	35	0	0	77	10	1	1	0	89	90.8
0	0	34	0	0	0	0	34	34	0	1	72	18	3	0	0	94	94.9
0	0	37	0	0	0	0	37	37	0	0	62	11	3	1	0	77	79.8
0	0	117	3	0	0	1	121	122	0	1	299	53	9	2	0	364	370.5
0	1	52	1	0	0	0	54	53.4	0	0	96	16	2	0	0	114	115
0	0	40	3	1	0	0	44	44.5	0	0	96	17	1	0	0	114	114.5
0	0	23	3	0	0	0	26	26	0	0	56	13	2	1	0	72	74.3
0	0	7	0	0	0	0	7	7	0	2	59	7	1	0	0	69	68.3
0	1	122	7	1	0	0	131	130.9	0	2	307	53	6	1	0	369	372.1
0	0	5	0	0	0	0	5	5	0	0	33	11	1	1	0	46	47.8
0	0	4	0	0	0	0	4	4	0	0	21	3	2	0	0	26	27
0	0	3	0	0	0	0	3	3	0	0	24	4	2	0	0	30	31
0	0	2	0	0	0	0	2	2	0	0	36	10	1	0	0	47	47.5
0	0	14	0	0	0	0	14	14	0	0	114	28	6	1	0	149	153.3
0	0	7	1	0	1	0	9	10.3	0	0	36	14	1	0	0	51	51.5
0	0	3	2	0	0	0	5	5	0	0	27	4	0	2	0	33	35.6
0	0	4	2	0	0	0	6	6	0	1	28	4	1	0	0	34	33.9
0	0	7	1	0	0	0	8	8	0	0	22	11	2	0	0	35	36
0	0	21	6	0	1	0	28	29.3	0	1	113	33	4	2	0	153	157
0	0	3	0	0	0	0	3	3	0	0	34	11	0	1	0	46	47.3
0	0	2	1	0	0	0	3	3	0	0	30	4	2	0	0	36	37
0	0	1	1	0	0	1	3	4	0	1	25	5	0	0	0	31	30.4
0	0	1	0	1	0	0	2	2.5	1	0	36	10	1	0	0	48	47.7
0	0	7	2	1	0	1	11	12.5	1	1	125	30	3	1	0	161	162.4
0	0	2	0	0	0	0	2	2	0	0	30	7	1	0	0	38	38.5
0	0	9	0	0	0	0	9	9	0	0	21	1	2	0	0	24	25
0	0	5	1	0	0	0	6	6	0	0	41	2	1	1	0	45	46.8
0	0	1	0	0	0	0	1	1	0	0	42	4	1	0	0	47	47.5
0	0	17	1	0	0	0	18	18	0	0	134	14	5	1	0	154	157.8
0	0	3	0	0	0	0	3	3	0	1	17	13	2	0	0	33	33.4
0	0	5	0	0	0	0	5	5	0	0	33	4	1	1	0	39	40.8
0	0	6	0	0	0	0	6	6	0	0	46	5	0	1	0	52	53.3
0	0	2	0	0	0	0	2	2	0	0	38	13	0	0	0	51	51
0	0	16	0	0	0	0	16	16	0	1	134	35	3	2	0	175	178.5
0	0	4	0	0	0	0	4	4	0	0	52	6	1	1	0	60	61.8
0	0	5	0	0	0	0	5	5	0	0	37	5	0	0	0	42	42
0	0	5	0	0	0	0	5	5	0	0	53	8	0	0	0	61	61
0	0	4	2	0	0	0	6	6	0	0	40	3	0	1	0	44	45.3
0	0	18	2	0	0	0	20	20	0	0	182	22	1	2	0	207	210.1
0	0	1	1	0	0	0	2	2	0	0	47	5	0	0	0	52	52
0	0	0	2	0	0	0	2	2	0	0	54	6	0	0	0	60	60
0	0	0	0	0	0	0	0	0	0	0	68	7	1	0	0	76	76.5
0	0	4	0	0	0	0	4	4	0	0	55	5	0	0	0	60	60
0	0	5	3	0	0	0	8	8	0	0	224	23	1	0	0	248	248.5
0	0	8	1	0	0	0	9	9	0	0	78	1	0	0	0	79	79
0	0	8	0	0	0	0	8	8	0	1	86	4	1	0	0	92	91.9
0	0	3	0	0	0	0	3	3	0	0	80	8	1	0	0	89	89.5
0	0	10	0	0	0	0	10	10	0	2	74	3	0	0	0	79	77.8
0	0	29	1	0	0	0	30	30	0	3	318	16	2	0	0	339	338.2
0	0	10	0	0	0	0	10	10	0	0	78	8	0	0	0	86	86
0	0	5	0	0	0	0	5	5	0	0	57	3	1	0	0	61	61.5
0	0	5	0	0	0	0	5	5	0	0	57	5	0	0	0	62	62
0	0	2	1	0	0	0	3	3	0	0	77	6	0	0	0	83	83
0	0	22	1	0	0	0	23	23	0	0	269	22	1	0	0	292	292.5
0	1	404	29	2	2	2	440	445	1	11	2475	391	47	15	4	2944	2984

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	35	12	2	0	0	49	50	0	0	0	0	0	0	0	0	0
0	0	46	21	1	1	0	69	70.8	0	0	0	0	0	0	0	0	0
0	0	39	16	1	2	0	58	61.1	0	0	0	0	0	0	0	0	0
0	0	51	13	2	1	0	67	69.3	0	0	0	0	0	0	0	0	0
0	0	171	62	6	4	0	243	251.2	0	0	0	0	0	0	0	0	0
0	0	45	10	1	0	0	56	56.5	0	0	0	0	0	0	0	0	0
0	0	44	7	3	3	0	57	62.4	0	0	0	0	0	0	0	0	0
0	0	63	6	3	0	0	72	73.5	0	0	0	0	0	0	0	0	0
0	0	77	9	1	2	0	89	92.1	0	0	0	0	0	0	0	0	0
0	0	229	32	8	5	0	274	284.5	0	0	0	0	0	0	0	0	0
0	0	94	13	0	1	0	108	109.3	0	0	0	0	0	0	0	0	0
0	0	61	6	5	2	0	74	79.1	0	0	0	0	0	0	0	0	0
0	0	50	12	2	1	0	65	67.3	0	0	0	0	0	0	0	0	0
0	0	67	7	3	4	0	81	87.7	0	0	0	0	0	0	0	0	0
0	0	272	38	10	8	0	328	343.4	0	0	0	0	0	0	0	0	0
0	0	67	12	2	2	0	83	86.6	0	0	0	0	0	0	0	0	0
0	0	57	7	3	0	0	67	68.5	0	0	0	0	0	0	0	0	0
0	0	59	7	1	2	0	69	72.1	0	0	0	0	0	0	0	0	0
0	1	83	7	2	3	0	96	100.3	0	0	0	0	0	0	0	0	0
0	1	266	33	8	7	0	315	327.5	0	0	0	0	0	0	0	0	0
0	1	77	8	1	3	0	90	93.8	0	0	0	0	0	0	0	0	0
0	0	57	6	1	0	0	64	64.5	0	0	0	0	0	0	0	0	0
0	3	84	8	3	3	0	101	104.6	0	0	0	0	0	0	0	0	0
0	1	75	12	3	2	0	93	96.5	0	0	0	0	0	0	0	0	0
0	5	293	34	8	8	0	348	359.4	0	0	0	0	0	0	0	0	0
0	0	82	8	1	0	0	91	91.5	0	0	0	0	0	0	0	0	0
0	0	73	7	5	1	0	86	89.8	0	0	0	0	0	0	0	0	0
0	1	92	12	6	2	0	113	118	0	0	0	0	0	0	0	0	0
0	0	72	11	2	0	0	85	86	0	0	0	0	0	0	0	0	0
0	1	319	38	14	3	0	375	385.3	0	0	0	0	0	0	0	0	0
0	0	79	6	1	3	0	89	93.4	0	0	0	0	0	0	0	0	0
0	0	88	5	5	5	0	103	112	0	0	0	0	0	0	0	0	0
0	0	67	9	4	2	0	82	86.6	0	0	0	0	0	0	0	0	0
0	0	72	13	0	1	0	86	87.3	0	0	0	0	0	0	0	0	0
0	0	306	33	10	11	0	360	379.3	0	0	0	0	0	0	0	0	0
0	0	87	8	1	1	0	97	98.8	0	0	0	0	0	0	0	0	0
0	0	71	5	4	2	0	82	86.6	0	0	0	0	0	0	0	0	0
0	0	53	7	4	1	0	65	68.3	0	0	0	0	0	0	0	0	0
0	0	78	10	2	1	0	91	93.3	0	0	0	0	0	0	0	0	0
0	0	289	30	11	5	0	335	347	0	0	0	0	0	0	0	0	0
0	0	77	6	2	2	0	87	90.6	0	0	0	0	0	0	0	0	0
0	0	74	10	1	0	0	85	85.5	0	0	0	0	0	0	0	0	0
0	1	73	9	0	1	0	84	84.7	0	0	0	0	0	0	0	0	0
0	1	67	6	1	4	2	81	88.1	0	0	0	0	0	0	0	0	0
0	2	291	31	4	7	2	337	348.9	0	0	0	0	0	0	0	0	0
0	0	82	9	2	0	1	94	96	0	0	0	0	0	0	0	0	0
0	1	82	9	1	1	0	94	95.2	0	0	0	0	0	0	0	0	0
0	0	101	11	0	0	0	112	112	0	0	0	0	0	0	0	0	0
0	1	109	11	0	1	1	123	124.7	0	0	0	0	0	0	0	0	0
0	2	374	40	3	2	2	423	427.9	0	0	0	0	0	0	0	0	0
0	1	114	15	0	0	0	130	129.4	0	0	0	0	0	0	0	0	0
0	0	96	9	2	0	0	107	108	0	0	0	0	0	0	0	0	0
0	0	81	4	0	0	0	85	85	0	0	0	0	0	0	0	0	0
0	1	84	9	0	0	0	94	93.4	0	0	0	0	0	0	0	0	0
0	2	375	37	2	0	0	416	415.8	0	0	0	0	0	0	0	0	0
0	0	107	2	1	1	1	112	114.8	0	0	0	0	0	0	0	0	0
0	0	92	5	1	0	0	98	98.5	0	0	0	0	0	0	0	0	0
0	0	93	1	1	0	0	95	95.5	0	0	0	0	0	0	0	0	0
0	0	66	5	0	0	0	71	71	0	0	0	0	0	0	0	0	0
0	0	358	13	3	1	1	376	379.8	0	0	0	0	0	0	0	0	0
0	13	3543	421	87	61	5	4130	4250	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 2
Date : 09/11/17
Location : Glenamuck Road North/M50 Roundabout (West)



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
07:30	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
07:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	9	3	0	0	0	12	12
08:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
08:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
08:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
08:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	20	1	0	0	0	21	21
09:00	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
09:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
09:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
09:45	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
10:00	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
10:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
10:30	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	11
10:45	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	22	4	0	0	0	26	26
11:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
11:15	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	9
11:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
11:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	25	2	0	0	0	27	27
12:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
12:15	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	11
12:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
12:45	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	28	3	0	0	0	31	31
13:00	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
13:15	0	0	0	0	0	0	0	0	0	0	1	11	0	0	0	0	12	11.4
13:30	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
13:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	1	38	1	0	0	0	40	39.4
14:00	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
14:15	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
14:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
14:45	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	0	28	28
15:00	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
15:15	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
15:30	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	17	17
15:45	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	0	0	41	4	0	0	0	45	45
16:00	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	34	34
16:15	0	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	25	25
16:30	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
16:45	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
H/TOT	0	0	0	0	0	0	0	0	0	0	0	100	1	0	0	0	101	101
17:00	0	0	0	0	0	0	0	0	0	0	0	24	2	0	0	0	26	26
17:15	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	24	24
17:30	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
17:45	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	19
H/TOT	0	0	0	0	0	0	0	0	0	0	0	85	4	0	0	0	89	89
18:00	0	0	0	0	0	0	0	0	0	2	0	21	0	0	0	1	24	23.4
18:15	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26	26
18:30	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	25	25
18:45	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
H/TOT	0	0	0	0	0	0	0	0	0	2	0	87	0	0	0	1	90	89.4
12 TOT	0	0	0	0	0	0	0	0	0	2	1	495	28	0	0	1	527	525.8

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
1	0	8	0	0	0	0	9	8.2	0	0	0	0	0	0	0	0	0
1	0	20	1	0	0	1	23	23.2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
1	0	22	0	0	0	0	23	22.2	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	1	9	10	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	4	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	27	0	1	0	1	29	30.5	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	26	4	0	0	0	30	30	0	0	0	0	0	0	0	0	0
1	0	11	0	0	0	0	12	11.2	0	0	0	0	0	0	0	0	0
1	0	6	1	0	0	0	8	7.2	0	0	0	0	0	0	0	0	0
1	0	11	1	0	0	0	13	12.2	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
3	0	34	2	0	0	0	39	36.6	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	1	13	14	0	0	0	0	0	0	0	0	0
0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	10	2	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
0	0	47	3	1	0	1	52	53.5	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
1	0	10	1	1	0	0	13	12.7	0	0	0	0	0	0	0	0	0
1	0	42	3	1	0	0	47	46.7	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0
0	0	37	1	0	0	1	39	40	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	10	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	34	3	0	0	0	37	37	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	22	3	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	18	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0
0	0	70	4	0	0	0	74	74	0	0	0	0	0	0	0	0	0
0	0	33	1	0	0	0	34	34	0	0	0	0	0	0	0	0	0
0	0	23	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0
1	1	17	0	0	0	0	19	17.6	0	0	0	0	0	0	0	0	0
0	0	19	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0
1	1	92	2	0	0	0	96	94.6	0	0	0	0	0	0	0	0	0
0	0	23	0	0	0	1	24	25	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	14	0	0	1	0	15	16.3	0	0	0	0	0	0	0	0	0
0	0	68	0	0	1	1	70	72.3	0	0	0	0	0	0	0	0	0
7	1	519	23	3	1	5	559	560.6	0	0	0	0	0	0	0	0	0

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	20	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	138	1	0	0	0	139	139	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	45	3	0	1	1	50	52.3	0	0	0	0	0	0	0	0	0
1	0	63	7	3	0	0	74	74.7	0	0	0	0	0	0	0	0	0
0	0	70	9	1	0	2	82	84.5	0	0	0	0	0	0	0	0	0
0	0	108	8	0	0	0	116	116	0	0	0	0	0	0	0	0	0
1	0	286	27	4	1	3	322	327.5	0	0	0	0	0	0	0	0	0
1	0	123	6	2	0	0	132	132.2	0	0	0	0	0	0	0	0	0
1	0	125	5	1	0	1	133	133.7	0	0	0	0	0	0	0	0	0
0	0	134	6	2	0	1	143	145	0	0	0	0	0	0	0	0	0
1	0	103	7	3	0	0	114	114.7	0	0	0	0	0	0	0	0	0
3	0	485	24	8	0	2	522	525.6	0	0	0	0	0	0	0	0	0
1	1	116	5	0	0	0	123	121.6	0	0	0	0	0	0	0	0	0
0	0	100	6	9	0	4	119	127.5	0	0	0	0	0	0	0	0	0
0	0	91	7	3	1	0	102	104.8	0	0	0	0	0	0	0	0	0
0	0	93	6	2	0	1	102	104	0	0	0	0	0	0	0	0	0
1	1	400	24	14	1	5	446	457.9	0	0	0	0	0	0	0	0	0
0	0	90	5	2	0	1	98	100	0	0	0	0	0	0	0	0	0
1	0	70	7	1	0	0	79	78.7	0	0	0	0	0	0	0	0	0
1	0	70	16	2	0	1	90	91.2	0	0	0	0	0	0	0	0	0
0	1	85	2	1	0	0	89	88.9	0	0	0	0	0	0	0	0	0
2	1	315	30	6	0	2	356	358.8	0	0	0	0	0	0	0	0	0
0	1	79	5	1	0	0	86	85.9	0	0	0	0	0	0	0	0	0
0	1	75	3	1	0	1	81	81.9	0	0	0	0	0	0	0	0	0
2	1	75	14	2	0	0	94	92.8	0	0	0	0	0	0	0	0	0
0	0	91	9	1	0	1	102	103.5	0	0	0	0	0	0	0	0	0
2	3	320	31	5	0	2	363	364.1	0	0	0	0	0	0	0	0	0
0	0	83	9	1	0	1	94	95.5	0	0	0	0	0	0	0	0	0
1	0	101	11	7	0	0	120	122.7	0	0	0	0	0	0	0	0	0
0	2	90	10	2	1	1	106	108.1	0	0	0	0	0	0	0	0	0
0	0	86	8	5	0	0	99	101.5	0	0	0	0	0	0	0	0	0
1	2	360	38	15	1	2	419	427.8	0	0	0	0	0	0	0	0	0
3	1	100	10	3	0	0	117	115.5	0	0	0	0	0	0	0	0	0
0	0	101	11	3	0	1	116	118.5	0	0	0	0	0	0	0	0	0
0	2	95	13	2	0	0	112	111.8	0	0	0	0	0	0	0	0	0
1	0	101	16	2	0	1	121	122.2	0	0	0	0	0	0	0	0	0
4	3	397	50	10	0	2	466	468	0	0	0	0	0	0	0	0	0
0	0	104	9	3	0	1	117	119.5	0	0	0	0	0	0	0	0	0
0	0	92	7	0	0	0	99	99	0	0	0	0	0	0	0	0	0
0	1	93	12	2	0	1	109	110.4	0	0	0	0	0	0	0	0	0
0	0	134	16	3	2	0	155	159.1	0	0	0	0	0	0	0	0	0
0	1	423	44	8	2	2	480	488	0	0	0	0	0	0	0	0	0
0	0	98	12	0	0	1	111	112	0	0	0	0	0	0	0	0	0
0	1	93	7	2	0	1	104	105.4	0	0	0	0	0	0	0	0	0
2	1	118	13	2	0	0	136	134.8	0	0	0	0	0	0	0	0	0
1	0	132	16	2	0	2	153	155.2	0	0	0	0	0	0	0	0	0
3	2	441	48	6	0	4	504	507.4	0	0	0	0	0	0	0	0	0
1	0	169	23	0	0	1	194	194.2	0	0	0	0	0	0	0	0	0
0	0	159	15	1	0	0	175	175.5	0	0	0	0	0	0	0	0	0
0	1	162	18	0	0	1	182	182.4	0	0	0	0	0	0	0	0	0
0	0	121	15	1	0	0	137	137.5	0	0	0	0	0	0	0	0	0
1	1	611	71	2	0	2	688	689.6	0	0	0	0	0	0	0	0	0
0	0	149	5	0	0	1	155	156	0	0	0	0	0	0	0	0	0
0	0	155	17	0	0	1	173	174	0	0	0	0	0	0	0	0	0
0	0	145	11	0	0	0	156	156	0	0	0	0	0	0	0	0	0
0	0	125	2	0	0	1	128	129	0	0	0	0	0	0	0	0	0
0	0	574	35	0	0	3	612	615	0	0	0	0	0	0	0	0	0
0	1	133	6	0	0	0	140	139.4	0	0	0	0	0	0	0	0	0
2	3	122	3	0	0	1	131	128.6	0	0	0	0	0	0	0	0	0
0	1	103	1	0	0	0	105	104.4	0	0	0	0	0	0	0	0	0
0	0	111	1	1	0	1	114	115.5	0	0	0	0	0	0	0	0	0
2	5	469	11	1	0	2	490	487.9	0	0	0	0	0	0	0	0	0
20	19	5081	433	79	5	31	5668	5718	0	0	0	0	0	0	0	0	0

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	21	0	0	0	0	22	21.2	2	0	42	6	4	0	0	54	54.4
0	0	41	2	0	0	0	43	43	1	1	70	4	3	1	0	80	81.4
1	0	53	4	0	0	0	58	57.2	1	0	111	6	4	0	0	122	123.2
0	0	80	2	0	0	0	82	82	0	1	154	8	3	0	1	167	168.9
2	0	195	8	0	0	0	205	203.4	4	2	377	24	14	1	1	423	427.9
0	0	96	1	1	0	0	98	98.5	1	0	167	7	4	1	3	183	188.5
3	0	100	2	0	0	0	105	102.6	1	2	185	22	8	1	1	220	224.3
0	1	144	4	0	0	1	150	150.4	2	1	144	3	10	2	2	164	171.4
1	1	125	3	1	0	0	131	130.1	0	1	146	12	5	1	0	165	168.2
4	2	465	10	2	0	1	484	481.6	4	4	642	44	27	5	6	732	752.4
0	0	83	1	0	0	0	84	84	0	1	127	10	6	0	1	145	148.4
1	0	58	0	0	0	0	59	58.2	0	2	115	9	7	0	1	134	137.3
1	0	39	0	0	0	0	40	39.2	1	1	64	13	3	1	0	83	84.4
0	0	33	1	0	0	0	34	34	0	0	104	10	2	0	1	117	119
2	0	213	2	0	0	0	217	215.4	1	4	410	42	18	1	3	479	489.1
0	0	13	0	0	0	0	13	13	1	0	92	3	4	0	0	100	101.2
0	0	19	0	0	0	0	19	19	0	0	119	7	7	2	1	136	143.1
0	0	11	1	0	0	0	12	12	1	0	88	1	5	3	0	98	103.6
0	0	13	0	0	0	0	13	13	0	1	94	6	4	1	1	107	110.7
0	0	56	1	0	0	0	57	57	2	1	393	17	20	6	2	441	458.6
0	0	15	1	0	0	0	16	16	2	0	103	5	3	0	0	113	112.9
0	0	10	1	0	0	0	11	11	1	1	114	6	4	0	1	127	128.6
0	0	7	1	0	0	0	8	8	0	2	130	11	10	1	0	154	159.1
0	0	14	0	0	0	0	14	14	0	0	141	17	6	0	0	164	167
0	0	46	3	0	0	0	49	49	3	3	488	39	23	1	1	558	567.6
0	1	8	0	1	0	0	10	9.9	0	2	150	14	3	0	1	170	171.3
0	0	13	0	0	0	0	13	13	0	0	138	14	7	0	0	159	162.5
0	0	13	2	0	0	0	15	15	2	0	134	5	4	0	1	146	147.4
0	0	22	1	0	0	0	23	23	0	0	175	3	4	0	1	183	186
0	1	56	3	1	0	0	61	60.9	2	2	597	36	18	0	3	658	667.2
0	0	17	0	0	0	0	17	17	1	0	157	5	8	1	0	172	176.5
0	0	15	0	0	0	0	15	15	1	0	170	7	1	0	1	180	180.7
0	0	19	0	0	0	0	19	19	0	1	161	17	8	3	0	190	197.3
0	0	14	2	0	0	0	16	16	1	2	152	12	6	0	0	173	174
0	0	65	2	0	0	0	67	67	3	3	640	41	23	4	1	715	728.5
0	0	15	0	0	0	0	15	15	0	2	169	8	2	0	2	183	184.8
1	0	16	0	0	0	0	17	16.2	1	0	189	10	0	2	1	203	205.8
0	0	10	2	1	0	0	13	13.5	1	1	138	8	1	0	1	150	150.1
1	0	25	1	0	0	0	27	26.2	0	0	168	13	1	0	2	184	186.5
2	0	66	3	1	0	0	72	70.9	2	3	664	39	4	2	6	720	727.2
0	0	19	2	0	0	0	21	21	0	0	158	11	2	0	0	171	172
0	0	17	0	0	0	0	17	17	0	0	159	4	3	0	1	167	169.5
0	0	18	0	0	0	0	18	18	0	0	168	8	2	2	1	181	185.6
0	0	20	0	0	0	0	20	20	2	0	184	17	1	0	0	204	202.9
0	0	74	2	0	0	0	76	76	2	0	669	40	8	2	2	723	730
0	0	14	0	0	0	0	14	14	2	1	147	11	3	0	1	165	165.3
0	0	18	0	0	0	0	18	18	0	1	151	11	2	0	1	166	167.4
0	0	14	1	0	0	0	15	15	0	0	151	13	2	1	0	167	169.3
0	0	20	0	0	0	1	21	22	0	0	131	4	1	0	1	137	138.5
0	0	66	1	0	0	1	68	69	2	2	580	39	8	1	3	635	640.5
0	0	21	1	0	0	0	22	22	0	0	126	7	11	1	0	145	151.8
2	0	19	0	0	0	0	21	19.4	2	0	100	8	1	0	2	113	113.9
0	0	17	0	0	0	0	17	17	1	2	153	2	0	0	0	158	156
1	0	14	0	0	0	0	15	14.2	1	0	125	2	1	0	0	129	128.7
3	0	71	1	0	0	0	75	72.6	4	2	504	19	13	1	2	545	550.4
0	0	21	0	0	0	0	21	21	0	2	143	2	0	0	1	148	147.8
0	0	12	0	0	0	0	12	12	0	0	104	1	1	0	0	106	106.5
0	0	16	0	0	0	0	16	16	0	1	95	3	1	0	1	101	101.9
0	0	5	0	0	0	0	5	5	0	0	95	3	0	0	0	98	98
0	0	54	0	0	0	0	54	54	0	3	437	9	2	0	2	453	454.2
13	3	1427	36	4	0	2	1485	1477	29	29	6401	389	178	24	32	7082	7194

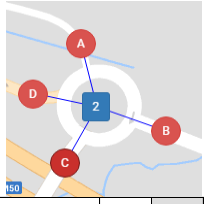
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	3	1	0	0	0	4	4	0	0	43	13	0	0	0	56	56
0	0	2	0	0	0	0	2	2	0	0	65	20	1	0	2	88	90.5
0	0	4	2	0	0	0	6	6	0	1	66	19	0	0	1	87	87.4
0	0	9	0	0	0	0	9	9	0	0	95	10	1	1	0	107	108.8
0	0	18	3	0	0	0	21	21	0	1	269	62	2	1	3	338	342.7
0	0	13	0	0	0	0	13	13	0	0	62	11	4	0	0	77	79
0	0	20	0	0	0	0	20	20	0	1	63	12	1	0	0	77	76.9
0	0	16	0	0	0	0	16	16	0	0	79	6	0	0	0	85	85
0	0	33	1	0	0	0	34	34	0	1	58	9	1	0	0	69	68.9
0	0	82	1	0	0	0	83	83	0	2	262	38	6	0	0	308	309.8
0	0	30	4	0	0	0	34	34	0	0	66	11	0	0	0	77	77
0	0	10	1	0	0	0	11	11	0	0	52	13	0	0	0	65	65
0	0	7	1	0	0	0	8	8	0	0	45	15	1	1	0	62	63.8
0	0	8	0	0	0	0	8	8	0	0	30	14	0	0	0	44	44
0	0	55	6	0	0	0	61	61	0	0	193	53	1	1	0	248	249.8
0	0	6	0	0	0	0	6	6	0	0	46	2	2	0	0	50	51
0	0	5	1	0	0	0	6	6	0	0	35	5	0	0	0	40	40
0	0	8	1	0	0	0	9	9	0	1	33	10	2	0	0	46	46.4
0	0	1	0	0	0	0	1	1	0	0	36	5	0	0	0	41	41
0	0	20	2	0	0	0	22	22	0	1	150	22	4	0	0	177	178.4
0	0	4	0	0	0	0	4	4	0	0	36	6	2	0	0	44	45
0	0	6	0	0	0	0	6	6	0	1	26	6	1	0	0	34	33.9
0	0	3	1	0	0	0	4	4	0	0	35	9	1	0	0	45	45.5
0	0	2	1	0	0	0	3	3	0	0	39	7	0	0	0	46	46
0	0	15	2	0	0	0	17	17	0	1	136	28	4	0	0	169	170.4
0	0	3	1	0	0	0	4	4	0	0	36	8	2	1	0	47	49.3
0	0	2	3	0	0	0	5	5	0	0	35	10	0	1	0	46	47.3
0	0	3	0	0	0	0	3	3	0	0	36	9	0	0	0	45	45
0	0	4	1	0	0	0	5	5	0	0	39	9	0	0	1	49	50
0	0	12	5	0	0	0	17	17	0	0	146	36	2	2	1	187	191.6
0	0	0	2	0	0	0	2	2	0	0	43	10	0	0	0	53	53
0	0	2	2	0	0	0	4	4	0	0	47	8	0	1	0	56	57.3
0	0	3	0	0	0	0	3	3	0	0	45	3	0	0	0	48	48
0	0	1	0	0	0	0	1	1	0	0	52	7	0	0	0	59	59
0	0	6	4	0	0	0	10	10	0	0	187	28	0	1	0	216	217.3
0	0	3	2	0	0	0	5	5	0	1	37	11	1	0	0	50	49.9
0	0	3	0	0	0	0	3	3	0	0	50	7	3	0	0	60	61.5
0	0	4	0	0	0	0	4	4	0	0	33	10	2	2	0	47	50.6
0	0	3	0	0	0	0	3	3	0	0	43	5	1	0	0	49	49.5
0	0	13	2	0	0	0	15	15	0	1	163	33	7	2	0	206	211.5
0	0	4	2	0	0	0	6	6	0	1	50	3	2	0	0	56	56.4
0	0	2	0	0	0	0	2	2	0	0	46	12	0	0	0	58	58
0	0	4	0	0	0	0	4	4	0	0	45	5	0	0	0	50	50
0	0	5	0	0	0	0	5	5	0	0	43	3	0	0	0	46	46
0	0	15	2	0	0	0	17	17	0	1	184	23	2	0	0	210	210.4
0	0	3	1	0	0	0	4	4	0	0	39	6	0	0	0	45	45
0	0	4	0	0	0	0	4	4	0	1	46	4	1	0	0	52	51.9
0	0	1	0	0	0	0	1	1	0	0	52	8	0	0	0	60	60
0	0	3	0	0	0	0	3	3	0	0	103	14	0	0	0	117	117
0	0	11	1	0	0	0	12	12	0	1	240	32	1	0	0	274	273.9
0	0	4	0	0	0	0	4	4	0	1	84	7	0	0	0	92	91.4
0	0	7	0	0	0	0	7	7	0	0	78	7	0	0	0	85	85
0	0	6	0	0	0	0	6	6	0	1	69	9	0	0	0	79	78.4
0	0	7	0	0	0	0	7	7	0	0	74	4	0	1	0	79	80.3
0	0	24	0	0	0	0	24	24	0	2	305	27	0	1	0	335	335.1
0	0	4	0	0	0	0	4	4	0	0	73	4	0	0	0	77	77
0	0	5	0	0	0	0	5	5	0	0	69	3	0	0	0	72	72
0	0	2	0	0	0	0	2	2	0	0	87	4	0	0	0	91	91
0	0	3	0	0	0	0	3	3	0	1	85	4	0	0	0	90	89.4
0	0	14	0	0	0	0	14	14	0	1	314	15	0	0	0	330	329.4
0	0	285	28	0	0	0	313	313	0	11	2549	397	29	8	4	2998	3020

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	34	11	1	1	0	47	48.8	0	0	0	0	0	0	0	0	0
0	0	46	19	0	3	0	68	71.9	0	0	0	0	0	0	0	0	0
0	1	48	24	2	3	0	78	82.3	0	0	0	0	0	0	0	0	0
0	0	64	13	4	3	0	84	89.9	0	0	0	0	0	0	0	0	0
0	1	192	67	7	10	0	277	292.9	0	0	0	0	0	0	0	0	0
0	1	54	10	2	4	1	72	78.6	0	0	0	0	0	0	0	0	0
0	0	42	10	2	3	0	57	61.9	0	0	0	0	0	0	0	0	0
0	2	85	8	0	1	0	96	96.1	0	0	0	0	0	0	0	0	0
0	0	89	8	1	2	1	101	105.1	0	0	0	0	0	0	0	0	0
0	3	270	36	5	10	2	326	341.7	0	0	0	0	0	0	0	0	0
0	1	99	17	1	1	0	119	120.2	0	0	0	0	0	0	0	0	0
0	0	63	10	0	2	0	75	77.6	0	0	0	0	0	0	0	0	0
0	1	68	9	2	3	0	83	87.3	0	0	0	0	0	0	0	0	0
0	0	75	12	3	2	0	92	96.1	0	0	0	0	0	0	0	0	0
0	2	305	48	6	8	0	369	381.2	0	0	0	0	0	0	0	0	0
0	0	78	4	2	2	0	86	89.6	0	0	0	0	0	0	0	0	0
0	0	61	10	2	2	0	75	78.6	0	0	0	0	0	0	0	0	0
0	0	54	15	3	4	1	77	84.7	0	0	0	0	0	0	0	0	0
0	0	47	11	3	3	0	64	69.4	0	0	0	0	0	0	0	0	0
0	0	240	40	10	11	1	302	322.3	0	0	0	0	0	0	0	0	0
0	0	68	5	3	0	0	76	77.5	0	0	0	0	0	0	0	0	0
0	0	51	5	1	4	0	61	66.7	0	0	0	0	0	0	0	0	0
0	0	72	9	3	1	0	85	87.8	0	0	0	0	0	0	0	0	0
0	1	71	5	3	2	0	82	85.5	0	0	0	0	0	0	0	0	0
0	1	262	24	10	7	0	304	317.5	0	0	0	0	0	0	0	0	0
0	0	80	6	4	3	1	94	100.9	0	0	0	0	0	0	0	0	0
0	0	75	12	0	2	0	89	91.6	0	0	0	0	0	0	0	0	0
0	0	72	12	2	1	0	87	89.3	0	0	0	0	0	0	0	0	0
0	0	99	17	0	4	0	120	125.2	0	0	0	0	0	0	0	0	0
0	0	326	47	6	10	1	390	407	0	0	0	0	0	0	0	0	0
0	0	52	5	4	4	0	65	72.2	0	0	0	0	0	0	0	0	0
0	0	69	6	3	2	1	81	86.1	0	0	0	0	0	0	0	0	0
0	0	75	6	4	1	0	86	89.3	0	0	0	0	0	0	0	0	0
0	0	80	8	3	3	1	95	101.4	0	0	0	0	0	0	0	0	0
0	0	276	25	14	10	2	327	349	0	0	0	0	0	0	0	0	0
0	0	66	7	1	3	0	77	81.4	0	0	0	0	0	0	0	0	0
0	0	70	8	1	6	0	85	93.3	0	0	0	0	0	0	0	0	0
0	0	76	6	1	5	0	88	95	0	0	0	0	0	0	0	0	0
0	0	65	14	1	4	0	84	89.7	0	0	0	0	0	0	0	0	0
0	0	277	35	4	18	0	334	359.4	0	0	0	0	0	0	0	0	0
0	0	78	8	1	1	0	88	89.8	0	0	0	0	0	0	0	0	0
0	0	84	7	3	3	0	97	102.4	0	0	0	0	0	0	0	0	0
0	0	65	6	2	1	1	75	78.3	0	0	0	0	0	0	0	0	0
0	1	59	8	1	1	0	70	71.2	0	0	0	0	0	0	0	0	0
0	1	286	29	7	6	1	330	341.7	0	0	0	0	0	0	0	0	0
0	0	67	10	1	4	0	82	87.7	0	0	0	0	0	0	0	0	0
0	0	99	7	1	1	0	108	109.8	0	0	0	0	0	0	0	0	0
0	1	97	16	0	2	0	116	118	0	0	0	0	0	0	0	0	0
0	0	119	10	2	2	0	133	136.6	0	0	0	0	0	0	0	0	0
0	1	382	43	4	9	0	439	452.1	0	0	0	0	0	0	0	0	0
0	0	94	15	1	0	0	110	110.5	0	0	0	0	0	0	0	0	0
0	0	104	6	0	0	0	110	110	0	0	0	0	0	0	0	0	0
0	0	109	11	0	0	0	120	120	0	0	0	0	0	0	0	0	0
0	0	88	4	0	0	0	92	92	0	0	0	0	0	0	0	0	0
0	0	395	36	1	0	0	432	432.5	0	0	0	0	0	0	0	0	0
0	0	85	7	1	0	0	93	93.5	0	0	0	0	0	0	0	0	0
0	0	92	8	0	0	0	100	100	0	0	0	0	0	0	0	0	0
0	0	61	3	1	1	0	66	67.8	0	0	0	0	0	0	0	0	0
0	0	74	7	0	0	0	81	81	0	0	0	0	0	0	0	0	0
0	0	312	25	2	1	0	340	342.3	0	0	0	0	0	0	0	0	0
0	9	3523	455	76	100	7	4170	4340	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 2
Date : 11/11/17
Location : Glenamuck Road North/M50 Roundabout (West)



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
08:45	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	6
09:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
09:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
09:45	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	7	7.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	13	0	1	0	0	14	14.5
10:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
10:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
10:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
10:45	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
H/TOT	0	0	0	0	0	0	0	0	0	0	0	25	1	0	0	0	26	26
11:00	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
11:15	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
11:30	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
11:45	0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	11	10.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	41	0	0	0	0	42	41.2
12:00	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
12:15	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
12:30	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
12:45	0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	11	10.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	42	1	0	0	0	44	43.2
13:00	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	14	14
13:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
13:30	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
13:45	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
H/TOT	0	0	0	0	0	0	0	0	0	0	0	45	1	0	0	0	46	46
14:00	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
14:15	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
14:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
14:45	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
H/TOT	0	0	0	0	0	0	0	0	0	0	0	37	2	0	0	0	39	39
15:00	0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	18	18
15:15	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
15:30	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
15:45	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
H/TOT	0	0	0	0	0	0	0	0	0	0	0	45	2	0	0	0	47	47
16:00	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
16:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
16:30	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
16:45	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
H/TOT	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	53	53
17:00	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	21	21
17:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
17:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
17:45	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	0	42	42
18:00	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
18:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
18:30	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2
18:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	1	0	22	0	0	0	0	23	22.2
12 TOT	0	0	0	0	0	0	0	0	0	3	0	369	10	1	0	0	383	381.1

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
1	0	3	0	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
1	0	16	0	0	0	0	17	16.2	0	0	0	0	0	0	0	0	0
0	0	3	0	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	1	9	10	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	31	0	1	0	1	33	34.5	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	15	0	1	0	1	17	18.5	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	54	0	1	0	1	56	57.5	0	0	0	0	0	0	0	0	0
0	0	20	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	10	0	0	1	0	11	12.3	0	0	0	0	0	0	0	0	0
0	0	64	1	0	1	0	66	67.3	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	47	0	0	0	0	47	47	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	2	17	19	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	59	0	0	0	2	61	63	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	14	2	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	57	2	0	0	0	59	59	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	42	1	0	0	0	43	43	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	23	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0
1	0	416	5	2	1	4	429	434.5	0	0	0	0	0	0	0	0	0

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	8	0	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0
0	0	13	0	1	0	0	14	14.5	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	123	1	1	0	0	125	125.5	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	12	2	1	0	1	16	17.5	0	0	0	0	0	0	0	0	0
0	0	19	2	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	13	3	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	54	7	1	0	1	63	64.5	0	0	0	0	0	0	0	0	0
0	0	30	3	1	0	1	35	36.5	0	0	0	0	0	0	0	0	0
0	0	44	2	0	0	0	46	46	0	0	0	0	0	0	0	0	0
0	0	50	4	1	1	0	56	57.8	0	0	0	0	0	0	0	0	0
5	0	58	3	0	0	1	67	64	0	0	0	0	0	0	0	0	0
5	0	182	12	2	1	2	204	204.3	0	0	0	0	0	0	0	0	0
1	0	65	3	0	0	0	69	68.2	0	0	0	0	0	0	0	0	0
0	0	84	1	0	0	0	85	85	0	0	0	0	0	0	0	0	0
0	0	64	1	0	0	1	66	67	0	0	0	0	0	0	0	0	0
0	1	87	1	1	0	0	90	89.9	0	0	0	0	0	0	0	0	0
1	1	300	6	1	0	1	310	310.1	0	0	0	0	0	0	0	0	0
0	0	97	4	2	0	0	103	104	0	0	0	0	0	0	0	0	0
0	0	96	3	0	0	0	99	99	0	0	0	0	0	0	0	0	0
1	0	109	4	0	0	0	114	113.2	0	0	0	0	0	0	0	0	0
0	0	101	5	0	0	0	106	106	0	0	0	0	0	0	0	0	0
1	0	403	16	2	0	0	422	422.2	0	0	0	0	0	0	0	0	0
0	0	126	2	0	0	0	128	128	0	0	0	0	0	0	0	0	0
0	1	132	2	1	0	0	136	135.9	0	0	0	0	0	0	0	0	0
0	0	121	2	1	0	0	124	124.5	0	0	0	0	0	0	0	0	0
0	0	128	5	0	0	0	133	133	0	0	0	0	0	0	0	0	0
0	1	507	11	2	0	0	521	521.4	0	0	0	0	0	0	0	0	0
0	0	125	6	0	0	1	132	133	0	0	0	0	0	0	0	0	0
1	1	152	8	1	0	0	163	162.1	0	0	0	0	0	0	0	0	0
1	1	125	2	3	0	0	132	132.1	0	0	0	0	0	0	0	0	0
0	0	135	5	0	0	1	141	142	0	0	0	0	0	0	0	0	0
2	2	537	21	4	0	2	568	569.2	0	0	0	0	0	0	0	0	0
0	0	134	2	0	0	1	137	138	0	0	0	0	0	0	0	0	0
0	1	116	5	0	0	0	122	121.4	0	0	0	0	0	0	0	0	0
0	0	124	4	0	0	0	128	128	0	0	0	0	0	0	0	0	0
0	0	115	4	1	0	1	121	122.5	0	0	0	0	0	0	0	0	0
0	1	489	15	1	0	2	508	509.9	0	0	0	0	0	0	0	0	0
0	0	127	6	0	0	0	133	133	0	0	0	0	0	0	0	0	0
0	0	135	2	0	0	1	138	139	0	0	0	0	0	0	0	0	0
0	0	125	2	1	0	0	128	128.5	0	0	0	0	0	0	0	0	0
0	0	99	8	1	0	0	108	108.5	0	0	0	0	0	0	0	0	0
0	0	486	18	2	0	1	507	509	0	0	0	0	0	0	0	0	0
0	0	102	2	1	0	1	106	107.5	0	0	0	0	0	0	0	0	0
0	0	111	6	0	0	0	117	117	0	0	0	0	0	0	0	0	0
1	0	95	3	0	0	0	99	98.2	0	0	0	0	0	0	0	0	0
0	1	95	4	0	0	1	101	101.4	0	0	0	0	0	0	0	0	0
1	1	403	15	1	0	2	423	424.1	0	0	0	0	0	0	0	0	0
0	0	108	2	0	0	0	110	110	0	0	0	0	0	0	0	0	0
0	0	107	0	0	0	0	107	107	0	0	0	0	0	0	0	0	0
0	0	114	3	0	0	1	118	119	0	0	0	0	0	0	0	0	0
0	0	80	1	0	0	0	81	81	0	0	0	0	0	0	0	0	0
0	0	409	6	0	0	1	416	417	0	0	0	0	0	0	0	0	0
0	0	88	1	1	0	0	90	90.5	0	0	0	0	0	0	0	0	0
0	0	87	2	0	0	0	89	89	0	0	0	0	0	0	0	0	0
0	0	60	0	1	0	1	62	63.5	0	0	0	0	0	0	0	0	0
0	0	65	2	0	0	0	67	67	0	0	0	0	0	0	0	0	0
0	0	300	5	2	0	1	308	310	0	0	0	0	0	0	0	0	0
0	1	55	2	0	0	1	59	59.4	0	0	0	0	0	0	0	0	0
0	0	44	0	0	0	0	44	44	0	0	0	0	0	0	0	0	0
0	0	57	0	0	0	0	57	57	0	0	0	0	0	0	0	0	0
0	1	47	3	0	0	1	52	52.4	0	0	0	0	0	0	0	0	0
0	2	203	5	0	0	2	212	212.8	0	0	0	0	0	0	0	0	0
10	8	4273	137	18	1	15	4462	4475	0	0	0	0	0	0	0	0	0

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	10	2	2	0	0	14	15
0	0	2	0	0	0	0	2	2	0	0	16	3	1	0	0	20	20.5
0	0	4	0	0	0	0	4	4	0	0	21	2	2	0	0	25	26
0	0	7	0	0	0	0	7	7	0	0	14	6	0	0	1	21	22
0	0	14	0	0	0	0	14	14	0	0	61	13	5	0	1	80	83.5
0	0	5	0	0	0	0	5	5	0	0	32	3	0	0	0	35	35
0	0	11	0	0	0	0	11	11	1	0	45	8	0	0	0	54	53.2
0	0	10	0	0	0	0	10	10	1	0	43	5	1	0	1	51	51.7
0	0	14	0	0	0	0	14	14	0	0	60	2	1	1	0	64	65.8
0	0	40	0	0	0	0	40	40	2	0	180	18	2	1	1	204	205.7
0	0	14	0	0	0	0	14	14	0	0	58	6	1	0	0	65	65.5
0	0	17	0	0	0	0	17	17	1	0	67	9	1	1	1	80	82
0	0	16	0	0	0	0	16	16	0	0	107	5	0	0	0	112	112
0	0	17	1	0	0	0	18	18	0	0	128	2	0	0	0	130	130
0	0	64	1	0	0	0	65	65	1	0	360	22	2	1	1	387	389.5
0	0	14	0	0	0	0	14	14	0	0	88	8	2	0	0	98	99
0	0	21	1	0	0	0	22	22	0	0	131	8	1	1	1	142	144.8
0	0	16	0	0	0	0	16	16	1	0	131	6	1	0	0	139	138.7
0	0	28	0	0	0	0	28	28	0	0	121	8	2	0	0	131	132
0	0	79	1	0	0	0	80	80	1	0	471	30	6	1	1	510	514.5
0	0	19	0	0	0	0	19	19	0	2	179	6	0	0	1	188	187.8
0	0	21	0	0	0	0	21	21	2	0	159	10	0	0	0	171	169.4
0	0	18	0	0	0	0	18	18	7	0	179	10	1	0	0	197	191.9
1	0	26	0	0	0	0	27	26.2	1	0	146	9	0	0	1	157	157.2
1	0	84	0	0	0	0	85	84.2	10	2	663	35	1	0	2	713	706.3
0	0	16	0	0	0	0	16	16	0	1	216	14	2	0	0	233	233.4
0	0	24	0	0	0	0	24	24	0	0	178	3	2	0	0	183	184
0	0	19	0	0	0	0	19	19	1	0	200	15	0	0	0	216	215.2
2	0	14	0	0	0	0	16	14.4	0	0	217	7	0	0	1	225	226
2	0	73	0	0	0	0	75	73.4	1	1	811	39	4	0	1	857	858.6
0	0	15	2	0	0	0	17	17	0	0	196	7	0	0	0	203	203
0	0	22	1	0	0	0	23	23	0	1	242	9	1	0	1	254	254.9
2	0	16	0	0	0	0	18	16.4	0	0	218	11	0	0	0	229	229
0	0	28	0	0	0	0	28	28	1	1	183	4	0	0	0	189	187.6
2	0	81	3	0	0	0	86	84.4	1	2	839	31	1	0	1	875	874.5
0	0	21	0	0	0	0	21	21	0	1	199	3	2	0	1	206	207.4
0	0	19	0	0	0	0	19	19	0	1	173	7	0	0	0	181	180.4
0	0	25	0	0	0	0	25	25	0	0	220	3	1	0	1	225	226.5
0	0	17	0	0	0	0	17	17	1	0	200	6	1	0	0	208	207.7
0	0	82	0	0	0	0	82	82	1	2	792	19	4	0	2	820	822
0	0	20	0	0	0	0	20	20	0	0	237	6	1	0	0	244	244.5
0	0	26	1	0	0	0	27	27	0	0	223	5	0	0	0	228	228
0	0	26	0	0	0	0	26	26	0	0	237	0	0	0	1	238	239
0	0	28	0	0	0	0	28	28	0	0	245	3	2	0	0	250	251
0	0	100	1	0	0	0	101	101	0	0	942	14	3	0	1	960	962.5
0	0	16	0	0	0	0	16	16	0	0	204	2	0	0	0	206	206
0	0	25	0	0	0	0	25	25	1	1	221	2	1	0	1	227	227.1
0	0	12	0	1	0	0	13	13.5	0	0	200	7	1	0	0	208	208.5
0	0	19	0	1	0	0	20	20.5	1	0	207	0	0	0	0	208	207.2
0	0	72	0	2	0	0	74	75	2	1	832	11	2	0	1	849	848.8
0	0	17	0	0	0	0	17	17	0	0	187	2	0	0	1	190	191
0	0	13	0	0	0	0	13	13	1	0	205	1	0	0	0	207	206.2
0	0	10	0	0	0	0	10	10	0	0	161	1	0	0	0	162	162
0	0	9	0	0	0	0	9	9	0	0	162	0	1	0	0	163	163.5
0	0	49	0	0	0	0	49	49	1	0	715	4	1	0	1	722	722.7
0	0	10	0	0	0	0	10	10	0	1	177	1	0	0	1	180	180.4
0	0	4	0	0	0	0	4	4	0	0	133	1	0	0	0	134	134
0	0	6	0	0	0	0	6	6	0	0	116	6	0	0	1	123	124
0	0	6	0	0	0	0	6	6	0	0	109	2	0	0	0	111	111
0	0	26	0	0	0	0	26	26	0	1	535	10	0	0	2	548	549.4
5	0	764	6	2	0	0	777	774	20	9	7201	246	31	3	15	7525	7538

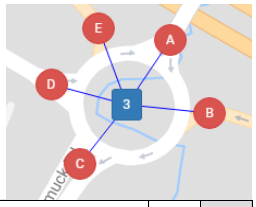
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	10	0	0	0	0	10	10
0	0	1	0	0	0	0	1	1	0	0	13	4	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	12	6	0	0	0	18	18
0	0	2	0	0	0	0	2	2	0	1	15	5	1	0	0	22	21.9
0	0	4	0	0	0	0	4	4	0	1	50	15	1	0	0	67	66.9
0	0	2	0	0	0	0	2	2	0	0	13	6	0	0	0	19	19
0	0	0	1	0	0	0	1	1	0	0	15	2	0	0	0	17	17
0	0	2	0	0	0	0	2	2	0	0	15	5	1	0	0	21	21.5
0	0	2	1	0	0	0	3	3	0	0	18	4	0	0	0	22	22
0	0	6	2	0	0	0	8	8	0	0	61	17	1	0	0	79	79.5
0	0	2	1	0	0	0	3	3	0	0	22	5	1	0	0	28	28.5
0	0	2	0	0	0	0	2	2	0	0	34	1	0	0	0	35	35
0	0	3	0	0	0	0	3	3	0	0	33	2	0	0	0	35	35
0	0	6	0	0	0	0	6	6	0	0	35	5	0	0	0	40	40
0	0	13	1	0	0	0	14	14	0	0	124	13	1	0	0	138	138.5
0	0	3	1	0	1	0	5	6.3	0	0	41	3	1	0	0	45	45.5
0	0	5	0	0	0	0	5	5	0	0	24	2	1	0	0	27	27.5
0	0	5	1	1	0	0	7	7.5	0	0	49	4	0	0	0	53	53
0	0	12	1	0	0	0	13	13	0	0	49	1	1	0	0	51	51.5
0	0	25	3	1	1	0	30	31.8	0	0	163	10	3	0	0	176	177.5
0	0	7	0	0	0	0	7	7	0	0	30	7	0	0	0	37	37
0	0	11	0	0	0	0	11	11	0	0	43	3	0	1	0	47	48.3
0	0	8	0	0	0	0	8	8	0	0	41	4	0	1	0	46	47.3
0	0	3	1	0	0	0	4	4	0	0	70	5	0	0	0	75	75
0	0	29	1	0	0	0	30	30	0	0	184	19	0	2	0	205	207.6
0	0	3	1	0	0	0	4	4	0	0	61	1	0	0	0	62	62
0	0	4	0	0	0	0	4	4	0	0	49	6	0	0	0	55	55
0	0	3	0	0	0	0	3	3	0	0	44	3	0	1	0	48	49.3
0	0	5	0	0	0	0	5	5	0	0	53	2	0	0	0	55	55
0	0	15	1	0	0	0	16	16	0	0	207	12	0	1	0	220	221.3
0	0	5	0	0	0	0	5	5	0	1	52	6	0	0	0	59	58.4
0	0	6	1	0	0	0	7	7	0	0	51	6	0	0	0	57	57
0	0	4	0	0	0	0	4	4	0	1	68	1	0	0	0	70	69.4
0	0	4	1	0	0	0	5	5	0	0	52	5	0	0	0	57	57
0	0	19	2	0	0	0	21	21	0	2	223	18	0	0	0	243	241.8
0	0	3	0	0	0	0	3	3	0	0	59	2	0	0	0	61	61
0	0	1	0	0	0	0	1	1	0	0	87	0	0	0	0	87	87
0	0	7	1	0	0	0	8	8	0	0	30	8	0	0	0	38	38
0	0	3	1	0	0	0	4	4	0	0	54	6	1	0	0	61	61.5
0	0	14	2	0	0	0	16	16	0	0	230	16	1	0	0	247	247.5
0	0	3	1	0	0	0	4	4	0	0	41	3	0	0	0	44	44
0	0	7	0	0	0	0	7	7	0	0	34	2	0	0	0	36	36
0	0	6	0	0	0	0	6	6	0	0	54	9	0	0	0	63	63
0	0	3	0	0	0	0	3	3	0	0	36	5	0	0	0	41	41
0	0	19	1	0	0	0	20	20	0	0	165	19	0	0	0	184	184
0	0	6	0	0	0	0	6	6	0	1	32	3	0	0	0	36	35.4
0	0	3	0	0	0	0	3	3	0	0	46	4	0	0	0	50	50
0	0	4	0	0	0	0	4	4	0	0	49	0	0	0	0	49	49
0	0	3	0	0	0	0	3	3	0	0	42	4	0	0	0	46	46
0	0	16	0	0	0	0	16	16	0	1	169	11	0	0	0	181	180.4
0	0	4	0	0	0	0	4	4	0	0	55	3	0	0	0	58	58
0	0	4	0	0	0	0	4	4	0	0	31	1	1	0	0	33	33.5
0	0	3	0	0	0	0	3	3	0	0	39	0	0	0	0	39	39
0	0	5	0	0	0	0	5	5	0	0	26	1	0	0	0	27	27
0	0	16	0	0	0	0	16	16	0	0	151	5	1	0	0	157	157.5
0	0	3	0	0	0	0	3	3	0	0	35	1	0	0	0	36	36
0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	0	42	42
0	0	1	0	0	0	0	1	1	0	1	31	4	0	0	0	36	35.4
0	0	1	0	0	0	0	1	1	0	0	37	2	0	0	0	39	39
0	0	5	0	0	0	0	5	5	0	1	144	8	0	0	0	153	152.4
0	0	181	13	1	1	0	196	197.8	0	5	1871	163	8	3	0	2050	2055

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	11	5	1	1	0	18	19.8	0	0	0	0	0	0	0	0	0
0	0	27	4	0	0	0	31	31	0	0	0	0	0	0	0	0	0
0	0	21	5	1	0	0	27	27.5	0	0	0	0	0	0	0	0	0
0	0	21	11	2	2	0	36	39.6	0	0	0	0	0	0	0	0	0
0	0	80	25	4	3	0	112	117.9	0	0	0	0	0	0	0	0	0
0	0	16	5	2	1	0	24	26.3	0	0	0	0	0	0	0	0	0
0	0	19	2	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
0	0	24	2	0	1	0	27	28.3	0	0	0	0	0	0	0	0	0
0	0	45	2	3	1	0	51	53.8	0	0	0	0	0	0	0	0	0
0	0	104	11	6	3	0	124	130.9	0	0	0	0	0	0	0	0	0
0	0	40	3	0	1	0	44	45.3	0	0	0	0	0	0	0	0	0
0	0	45	7	2	0	0	54	55	0	0	0	0	0	0	0	0	0
0	1	59	5	0	0	0	65	64.4	0	0	0	0	0	0	0	0	0
0	0	73	3	1	0	0	77	77.5	0	0	0	0	0	0	0	0	0
0	1	217	18	3	1	0	240	242.2	0	0	0	0	0	0	0	0	0
0	1	82	7	0	0	0	90	89.4	0	0	0	0	0	0	0	0	0
0	0	85	5	2	0	0	92	93	0	0	0	0	0	0	0	0	0
0	0	99	2	2	0	0	103	104	0	0	0	0	0	0	0	0	0
0	0	120	4	0	0	0	124	124	0	0	0	0	0	0	0	0	0
0	1	386	18	4	0	0	409	410.4	0	0	0	0	0	0	0	0	0
0	1	98	4	2	1	0	106	107.7	0	0	0	0	0	0	0	0	0
0	0	97	6	0	0	0	103	103	0	0	0	0	0	0	0	0	0
0	0	91	3	0	2	0	96	98.6	0	0	0	0	0	0	0	0	0
0	0	81	1	2	0	0	84	85	0	0	0	0	0	0	0	0	0
0	1	367	14	4	3	0	389	394.3	0	0	0	0	0	0	0	0	0
0	1	118	4	0	0	0	123	122.4	0	0	0	0	0	0	0	0	0
0	0	123	6	0	0	0	129	129	0	0	0	0	0	0	0	0	0
0	0	106	6	2	0	0	114	115	0	0	0	0	0	0	0	0	0
0	0	137	7	0	0	0	144	144	0	0	0	0	0	0	0	0	0
0	1	484	23	2	0	0	510	510.4	0	0	0	0	0	0	0	0	0
0	0	113	9	0	0	0	122	122	0	0	0	0	0	0	0	0	0
0	0	105	3	0	0	0	108	108	0	0	0	0	0	0	0	0	0
0	0	124	5	1	0	0	130	130.5	0	0	0	0	0	0	0	0	0
0	0	122	3	0	1	0	126	127.3	0	0	0	0	0	0	0	0	0
0	0	464	20	1	1	0	486	487.8	0	0	0	0	0	0	0	0	0
0	0	125	4	0	0	0	129	129	0	0	0	0	0	0	0	0	0
0	0	103	3	1	0	0	107	107.5	0	0	0	0	0	0	0	0	0
0	0	105	4	0	0	0	109	109	0	0	0	0	0	0	0	0	0
0	0	112	6	0	0	0	118	118	0	0	0	0	0	0	0	0	0
0	0	445	17	1	0	0	463	463.5	0	0	0	0	0	0	0	0	0
0	0	109	8	0	0	0	117	117	0	0	0	0	0	0	0	0	0
0	0	123	8	0	0	0	131	131	0	0	0	0	0	0	0	0	0
0	0	114	4	1	0	1	120	121.5	0	0	0	0	0	0	0	0	0
0	0	106	4	0	0	0	110	110	0	0	0	0	0	0	0	0	0
0	0	452	24	1	0	1	478	479.5	0	0	0	0	0	0	0	0	0
0	0	122	6	1	0	0	129	129.5	0	0	0	0	0	0	0	0	0
0	0	103	3	0	0	0	106	106	0	0	0	0	0	0	0	0	0
0	0	97	2	0	0	0	99	99	0	0	0	0	0	0	0	0	0
0	0	87	2	0	0	0	89	89	0	0	0	0	0	0	0	0	0
0	0	409	13	1	0	0	423	423.5	0	0	0	0	0	0	0	0	0
0	0	64	1	1	0	0	66	66.5	0	0	0	0	0	0	0	0	0
0	0	57	1	0	0	0	58	58	0	0	0	0	0	0	0	0	0
0	0	64	1	1	1	0	67	68.8	0	0	0	0	0	0	0	0	0
0	0	52	2	0	0	0	54	54	0	0	0	0	0	0	0	0	0
0	0	237	5	2	1	0	245	247.3	0	0	0	0	0	0	0	0	0
0	1	35	1	0	0	0	37	36.4	0	0	0	0	0	0	0	0	0
0	0	47	2	0	0	0	49	49	0	0	0	0	0	0	0	0	0
0	0	34	1	0	0	0	35	35	0	0	0	0	0	0	0	0	0
0	0	44	1	0	0	0	45	45	0	0	0	0	0	0	0	0	0
0	1	160	5	0	0	0	166	165.4	0	0	0	0	0	0	0	0	0
0	5	3805	193	29	12	1	4045	4073	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 3
Date : 07/11/17
Location : Glenamuck Road/M50/Ballyogan Road Roundabout



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	46	13	2	0	0	62	62.2	0	0	10	2	0	1	1	14	16.3
1	0	63	21	1	1	0	87	88	0	0	18	1	0	0	0	19	19
0	0	56	19	2	2	0	79	82.6	0	0	24	2	0	0	2	28	30
0	0	92	18	2	2	0	114	117.6	0	0	25	2	0	0	0	27	27
2	0	257	71	7	5	0	342	350.4	0	0	77	7	0	1	3	88	92.3
0	0	87	12	3	0	1	103	105.5	0	0	26	4	1	0	0	31	31.5
0	2	107	7	4	3	0	123	127.7	0	0	35	7	0	0	1	43	44
0	0	107	7	3	0	0	117	118.5	1	0	35	1	1	0	0	38	37.7
1	0	126	11	2	2	0	142	144.8	0	0	31	2	0	0	1	34	35
1	2	427	37	12	5	1	485	496.5	1	0	127	14	2	0	2	146	148.2
0	1	133	16	1	2	1	154	157.5	1	0	36	2	0	0	0	39	38.2
0	0	96	8	6	2	0	112	117.6	0	0	33	1	2	1	0	37	39.3
0	0	104	14	2	1	1	122	125.3	0	0	27	2	4	0	1	34	37
0	0	110	5	3	5	0	123	131	0	0	29	1	0	0	0	30	30
0	1	443	43	12	10	2	511	531.4	1	0	125	6	6	1	1	140	144.5
0	0	117	13	2	2	0	134	137.6	0	0	21	1	0	0	0	22	22
0	1	104	5	5	0	0	115	116.9	0	0	22	6	2	0	1	31	33
1	1	85	13	2	2	0	104	106.2	0	0	29	1	0	0	1	31	32
0	1	121	10	2	3	0	137	141.3	0	0	25	1	1	1	0	28	29.8
1	3	427	41	11	7	0	490	502	0	0	97	9	3	1	2	112	116.8
0	1	121	10	2	3	0	137	141.3	0	0	22	3	0	0	0	25	25
0	0	109	11	4	0	0	124	126	0	0	22	3	1	0	1	27	28.5
1	3	141	12	4	3	1	165	169.3	0	0	22	2	1	1	0	26	27.8
0	1	126	12	3	1	0	143	145.2	0	0	16	4	0	1	1	22	24.3
1	5	497	45	13	7	1	569	581.8	0	0	82	12	2	2	2	100	105.6
1	1	117	11	1	0	0	131	130.1	0	0	20	2	0	1	0	23	24.3
1	0	131	8	9	2	0	151	157.3	0	0	30	4	2	0	1	37	39
0	1	130	10	7	2	0	150	155.5	0	0	45	5	5	0	0	55	57.5
0	0	122	13	4	0	0	139	141	0	0	55	4	1	0	1	61	62.5
2	2	500	42	21	4	0	571	583.9	0	0	150	15	8	1	2	176	183.3
0	0	129	7	4	3	0	143	148.9	0	0	48	3	0	0	0	51	51
1	0	141	4	4	5	1	156	164.7	0	0	24	2	1	1	1	29	31.8
0	1	117	7	3	2	0	130	133.5	0	1	26	7	0	0	0	34	33.4
1	0	125	16	0	2	0	144	145.8	0	0	20	0	0	0	1	21	22
2	1	512	34	11	12	1	573	592.9	0	1	118	12	1	1	2	135	138.2
0	0	144	9	1	0	0	154	154.5	0	0	20	1	0	2	1	24	27.6
0	0	123	6	4	3	1	137	143.9	0	0	19	1	1	0	0	21	21.5
0	0	94	7	4	1	1	107	111.3	0	0	26	3	3	1	0	33	35.8
0	0	123	10	2	1	0	136	138.3	0	0	27	3	0	0	1	31	32
0	0	484	32	11	5	2	534	548	0	0	92	8	4	3	2	109	116.9
0	0	115	10	1	3	1	130	135.4	0	0	25	3	0	0	0	28	28
0	0	120	15	2	0	0	137	138	0	0	25	6	0	0	1	32	33
0	0	133	9	0	1	0	143	144.3	0	1	21	2	2	0	0	26	26.4
1	1	115	10	0	4	0	131	134.8	0	0	15	2	0	0	2	19	21
1	1	483	44	3	8	1	541	552.5	0	1	86	13	2	0	3	105	108.4
0	0	158	12	1	0	1	172	173.5	0	0	32	4	1	1	0	38	39.8
1	1	144	16	4	1	0	167	168.9	0	0	46	3	0	0	1	50	51
1	0	174	15	2	0	0	192	192.2	0	0	48	5	0	0	0	53	53
0	1	146	17	0	2	1	167	170	0	0	33	1	0	0	0	34	34
2	2	622	60	7	3	2	698	704.6	0	0	159	13	1	1	1	175	177.8
0	3	194	12	1	0	0	210	208.7	1	0	38	3	1	0	1	44	44.7
1	0	180	11	3	0	0	195	195.7	0	0	43	5	2	0	0	50	51
0	0	137	7	0	0	0	144	144	0	0	46	0	0	0	1	47	48
2	1	125	10	1	0	0	139	137.3	0	0	43	5	0	0	1	49	50
3	4	636	40	5	0	0	688	685.7	1	0	170	13	3	0	3	190	193.7
1	0	175	3	1	1	1	182	184	0	0	28	4	0	0	0	32	32
0	0	151	7	1	0	0	159	159.5	0	0	28	1	0	0	1	30	31
1	0	163	2	2	0	0	168	168.2	0	0	30	1	0	0	0	31	31
0	0	108	6	0	0	0	114	114	0	0	24	2	0	0	0	26	26
2	0	597	18	4	1	1	623	625.7	0	0	110	8	0	0	1	119	120
17	21	5885	507	117	67	11	6625	6755	3	2	1393	130	32	11	24	1595	1646

A=>E									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	15	1	0	0	0	16	16	0	0	64	10	0	0	0	74	74
0	0	55	1	0	0	1	57	58	0	0	93	2	0	1	0	96	97.3
0	0	56	3	0	0	0	59	59	0	0	104	1	0	0	0	105	105
0	0	55	5	0	0	0	60	60	0	0	128	9	0	0	0	137	137
0	0	181	10	0	0	1	192	193	0	0	389	22	0	1	0	412	413.3
0	0	64	3	1	0	0	68	68.5	0	0	112	6	0	0	0	118	118
0	0	47	5	0	0	0	52	52	0	0	108	6	0	0	0	114	114
0	0	59	2	0	0	0	61	61	0	1	113	2	0	0	0	116	115.4
0	0	49	2	0	0	0	51	51	0	0	111	2	0	0	0	113	113
0	0	219	12	1	0	0	232	232.5	0	1	444	16	0	0	0	461	460.4
0	0	44	4	0	0	0	48	48	0	0	84	4	0	0	0	88	88
0	0	36	2	1	1	1	41	43.8	0	0	78	3	0	0	0	81	81
0	0	30	4	0	0	0	34	34	0	0	50	0	0	0	0	50	50
0	0	38	7	1	0	0	46	46.5	0	0	44	0	0	0	0	44	44
0	0	148	17	2	1	1	169	172.3	0	0	256	7	0	0	0	263	263
0	0	29	3	1	0	0	33	33.5	0	0	32	1	1	1	0	35	36.8
0	1	21	1	0	0	0	23	22.4	0	0	25	2	0	0	0	27	27
0	0	34	4	0	0	0	38	38	0	0	22	0	0	0	0	22	22
0	0	26	6	0	0	0	32	32	0	0	17	2	0	0	0	19	19
0	1	110	14	1	0	0	126	125.9	0	0	96	5	1	1	0	103	104.8
0	0	19	4	0	0	0	23	23	0	0	17	1	0	0	0	18	18
0	0	26	4	1	0	0	31	31.5	0	0	17	0	0	0	0	17	17
0	0	23	4	1	0	0	28	28.5	0	1	16	0	0	0	0	17	16.4
0	0	23	5	0	0	0	28	28	0	0	13	1	0	0	0	14	14
0	0	91	17	2	0	0	110	111	0	1	63	2	0	0	0	66	65.4
0	0	22	7	0	0	0	29	29	0	0	22	3	0	0	0	25	25
0	0	29	4	1	0	0	34	34.5	0	0	18	2	0	0	0	20	20
0	0	26	3	0	0	0	29	29	0	0	19	0	0	0	0	19	19
0	0	21	5	0	0	0	26	26	0	0	21	1	1	0	0	23	23.5
0	0	98	19	1	0	0	118	118.5	0	0	80	6	1	0	0	87	87.5
0	0	41	8	0	0	0	49	49	0	0	17	1	0	0	0	18	18
0	0	39	5	0	0	0	44	44	0	0	19	3	0	0	0	22	22
0	0	32	4	3	0	0	39	40.5	0	0	19	1	1	0	0	21	21.5
0	0	30	0	1	0	0	31	31.5	0	0	20	2	0	0	0	22	22
0	0	142	17	4	0	0	163	165	0	0	75	7	1	0	0	83	83.5
0	0	27	6	2	0	0	35	36	0	1	20	1	0	0	0	22	21.4
0	0	26	2	1	0	0	29	29.5	0	0	17	3	0	0	0	20	20
0	0	24	6	3	0	0	33	34.5	0	0	24	2	1	0	0	27	27.5
0	0	19	3	2	0	1	25	27	0	0	15	0	0	0	0	15	15
0	0	96	17	8	0	1	122	127	0	1	76	6	1	0	0	84	83.9
0	1	29	7	1	0	0	38	37.9	0	0	19	1	0	0	0	20	20
0	2	30	4	0	0	0	36	34.8	0	0	21	1	0	0	0	22	22
0	0	46	9	1	0	0	56	56.5	0	0	20	1	0	0	0	21	21
0	1	47	11	2	1	0	62	63.7	0	0	17	0	0	0	0	17	17
0	4	152	31	4	1	0	192	192.9	0	0	77	3	0	0	0	80	80
0	0	71	16	0	0	1	88	89	0	0	13	2	0	0	0	15	15
0	0	66	9	0	0	0	75	75	0	0	19	0	0	0	0	19	19
0	1	62	5	0	0	0	68	67.4	0	0	21	3	0	0	0	24	24
0	0	51	9	0	0	0	60	60	0	0	19	1	0	0	1	21	22
0	1	250	39	0	0	1	291	291.4	0	0	72	6	0	0	1	79	80
0	0	44	5	1	0	0	50	50.5	0	0	20	0	0	0	0	20	20
0	0	49	5	0	0	0	54	54	0	0	21	0	0	0	0	21	21
0	0	55	5	0	0	0	60	60	0	0	20	0	0	0	0	20	20
0	0	39	3	1	0	0	43	43.5	0	0	19	0	0	0	0	19	19
0	0	187	18	2	0	0	207	208	0	0	80	0	0	0	0	80	80
0	0	38	1	0	0	0	39	39	0	0	22	0	0	0	0	22	22
0	1	33	3	0	0	0	37	36.4	0	0	18	0	0	0	0	18	18
0	1	26	4	0	0	1	32	32.4	0	0	12	0	0	0	0	12	12
0	0	27	4	0	0	0	31	31	0	0	8	1	0	0	0	9	9
0	2	124	12	0	0	1	139	138.8	0	0	60	1	0	0	0	61	61
0	8	1798	223	25	2	5	2061	2076	0	3	1768	81	4	2	1	1859	1863

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	11	8	2	1	0	22	24.3
0	0	0	0	0	0	0	0	0	0	0	25	2	1	0	0	28	28.5
0	0	0	0	0	0	0	0	0	0	0	30	4	0	0	0	34	34
0	0	0	0	0	0	0	0	0	0	0	80	15	3	1	0	99	101.8
0	0	0	0	0	0	0	0	0	0	0	17	3	0	0	0	20	20
0	0	0	0	0	0	0	0	0	0	0	13	0	1	1	0	15	16.8
0	0	0	0	0	0	0	0	0	0	0	21	0	2	0	0	23	24
0	0	0	0	0	0	0	0	0	0	0	29	6	0	1	0	36	37.3
0	0	0	0	0	0	0	0	0	0	0	80	9	3	2	0	94	98.1
0	0	0	0	0	0	0	0	0	0	0	30	2	0	2	0	34	36.6
0	0	0	0	0	0	0	0	0	0	0	36	1	0	0	0	37	37
0	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	25	25
0	0	0	0	0	0	0	0	0	0	0	25	1	1	2	0	29	32.1
0	0	0	0	0	0	0	0	0	0	0	115	5	1	4	0	125	130.7
0	0	0	0	0	0	0	0	0	0	0	50	1	1	0	0	52	52.5
0	0	0	0	0	0	0	0	0	0	0	44	5	0	1	0	50	51.3
0	0	0	0	0	0	0	0	0	0	1	52	1	1	0	0	55	54.9
0	0	0	0	0	0	0	0	0	0	0	54	2	0	0	0	56	56
0	0	0	0	0	0	0	0	0	0	1	200	9	2	1	0	213	214.7
0	0	0	0	0	0	0	0	0	1	0	45	2	1	0	0	49	48.7
0	0	0	0	0	0	0	0	0	0	0	46	6	1	1	0	54	55.8
0	0	0	0	0	0	0	0	0	0	0	67	1	3	0	0	71	72.5
0	0	0	0	0	0	0	0	0	0	0	54	9	1	0	0	64	64.5
0	0	0	0	0	0	0	0	0	1	0	212	18	6	1	0	238	241.5
0	0	0	0	0	0	0	0	0	0	0	69	8	1	0	0	78	78.5
0	0	0	0	0	0	0	0	0	0	0	54	1	2	1	0	58	60.3
0	0	0	0	0	0	0	0	0	0	0	54	3	0	0	0	57	57
0	0	0	0	0	0	0	0	0	0	0	65	5	0	1	0	71	72.3
0	0	0	0	0	0	0	0	0	0	0	242	17	3	2	0	264	268.1
0	0	0	0	0	0	0	0	0	0	0	63	0	0	1	0	64	65.3
0	0	0	0	0	0	0	0	0	0	0	57	0	0	0	0	57	57
0	0	0	0	0	0	0	0	0	0	0	43	0	1	0	0	44	44.5
0	0	0	0	0	0	0	0	0	0	0	48	1	2	0	0	51	52
0	0	0	0	0	0	0	0	0	0	0	211	1	3	1	0	216	218.8
0	0	0	0	0	0	0	0	0	0	0	48	3	0	0	0	51	51
0	0	0	0	0	0	0	0	0	0	0	42	2	0	0	0	44	44
0	0	0	0	0	0	0	0	0	0	0	50	3	0	0	0	53	53
0	0	0	0	0	0	0	0	0	0	0	63	0	4	2	0	69	73.6
0	0	0	0	0	0	0	0	0	0	0	203	8	4	2	0	217	221.6
0	0	0	0	0	0	0	0	0	0	0	48	2	0	0	0	50	50
0	0	0	0	0	0	0	0	0	0	0	36	2	0	1	0	39	40.3
0	0	0	0	0	0	0	0	0	0	0	31	1	1	0	0	33	33.5
0	0	0	0	0	0	0	0	0	0	0	29	3	2	1	0	35	37.3
0	0	0	0	0	0	0	0	0	0	0	144	8	3	2	0	157	161.1
0	0	0	0	0	0	0	0	0	0	0	25	5	0	1	0	31	32.3
0	0	0	0	0	0	0	0	0	1	0	37	2	0	0	0	40	39.2
0	0	0	0	0	0	0	0	0	0	0	29	1	0	0	0	30	30
0	0	0	0	0	0	0	0	0	0	0	26	3	0	0	0	29	29
0	0	0	0	0	0	0	0	0	1	0	117	11	0	1	0	130	130.5
0	0	0	0	0	0	0	0	0	2	0	34	2	1	0	0	39	37.9
0	0	0	0	0	0	0	0	0	0	0	28	3	0	0	0	31	31
0	0	0	0	0	0	0	0	0	0	0	39	1	0	0	0	40	40
0	0	0	0	0	0	0	0	0	0	0	42	1	0	1	0	44	45.3
0	0	0	0	0	0	0	0	0	2	0	143	7	1	1	0	154	154.2
0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	27	27
0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
0	0	0	0	0	0	0	0	0	1	0	37	1	0	0	0	39	38.2
0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	32
0	0	0	0	0	0	0	0	0	1	0	122	2	0	0	0	125	124.2
0	0	0	0	0	0	0	0	0	5	1	1869	110	29	18	0	2032	2065

B=>D									B=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	15	1	0	2	0	18	20.6	0	0	0	0	0	0	0	0	0
0	0	14	1	0	2	0	17	19.6	0	0	1	0	0	0	0	1	1
0	0	18	1	0	1	0	20	21.3	0	0	7	1	0	0	0	8	8
0	0	34	6	0	1	0	41	42.3	0	0	5	0	0	0	0	5	5
0	0	81	9	0	6	0	96	103.8	0	0	13	1	0	0	0	14	14
0	0	35	2	0	0	0	37	37	0	0	6	2	0	0	0	8	8
0	0	57	7	3	0	1	68	70.5	0	0	9	0	0	0	0	9	9
0	0	27	4	0	1	0	32	33.3	0	0	14	0	0	0	0	14	14
0	0	28	3	0	1	0	32	33.3	0	0	1	0	0	0	0	1	1
0	0	147	16	3	2	1	169	174.1	0	0	30	2	0	0	0	32	32
0	0	33	3	2	1	0	39	41.3	0	0	10	1	0	0	0	11	11
0	1	23	5	1	0	0	30	29.9	0	0	3	0	0	0	0	3	3
0	0	19	3	3	0	0	25	26.5	0	0	3	0	0	0	0	3	3
0	0	26	0	1	0	0	27	27.5	0	0	2	0	0	0	0	2	2
0	1	101	11	7	1	0	121	125.2	0	0	18	1	0	0	0	19	19
0	0	25	1	2	2	0	30	33.6	0	0	4	0	1	0	0	5	5.5
0	0	21	3	1	1	0	26	27.8	0	0	1	0	0	0	0	1	1
0	0	24	4	0	0	0	28	28	0	0	3	0	0	0	0	3	3
0	0	21	1	1	0	0	23	23.5	0	0	1	0	0	0	0	1	1
0	0	91	9	4	3	0	107	112.9	0	0	9	0	1	0	0	10	10.5
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	28	1	3	1	0	33	35.8	0	0	1	0	0	0	0	1	1
0	0	24	0	1	1	0	26	27.8	0	0	0	0	0	0	0	0	0
0	0	25	4	0	1	0	30	31.3	0	0	1	0	0	0	0	1	1
0	0	90	6	4	3	0	103	108.9	0	0	2	0	0	0	0	2	2
0	0	20	3	1	1	0	25	26.8	0	0	1	0	0	0	0	1	1
0	0	22	5	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	23	3	1	0	0	27	27.5	0	0	0	0	0	0	0	0	0
0	0	29	3	0	0	0	32	32	0	0	1	0	0	0	0	1	1
0	0	94	14	2	1	0	111	113.3	0	0	2	0	0	0	0	2	2
0	0	34	2	1	0	0	37	37.5	0	0	1	0	0	0	0	1	1
0	0	15	2	1	0	0	18	18.5	0	0	1	0	0	0	0	1	1
0	0	19	4	0	0	0	23	23	0	0	1	0	0	0	0	1	1
1	0	17	3	1	0	0	22	21.7	0	0	0	0	0	0	0	0	0
1	0	85	11	3	0	0	100	100.7	0	0	3	0	0	0	0	3	3
0	0	26	0	2	1	0	29	31.3	0	0	1	0	0	0	0	1	1
0	0	22	1	2	1	0	26	28.3	0	0	1	0	0	0	0	1	1
0	0	22	2	2	0	0	26	27	0	0	0	0	0	0	0	0	0
0	0	25	3	1	0	0	29	29.5	0	0	2	0	0	0	0	2	2
0	0	95	6	7	2	0	110	116.1	0	0	4	0	0	0	0	4	4
0	0	19	1	0	0	0	20	20	0	0	1	0	0	0	0	1	1
0	0	15	2	1	0	0	18	18.5	0	0	2	0	0	0	0	2	2
0	0	13	1	2	0	0	16	17	0	0	1	0	0	0	0	1	1
0	0	18	0	0	0	0	18	18	0	0	1	0	0	0	0	1	1
0	0	65	4	3	0	0	72	73.5	0	0	5	0	0	0	0	5	5
0	0	19	1	0	2	0	22	24.6	0	0	1	0	0	0	0	1	1
0	0	21	2	0	1	0	24	25.3	0	0	3	0	0	0	0	3	3
0	0	26	5	0	0	0	31	31	0	0	3	0	0	0	0	3	3
0	0	38	2	0	0	0	40	40	0	0	3	0	0	0	0	3	3
0	0	104	10	0	3	0	117	120.9	0	0	10	0	0	0	0	10	10
0	0	36	2	0	0	0	38	38	0	0	1	1	0	0	0	2	2
0	0	54	3	0	0	0	57	57	0	0	4	0	0	0	0	4	4
0	0	31	0	0	0	0	31	31	0	0	2	0	0	0	0	2	2
0	0	29	2	0	0	0	31	31	0	0	3	0	0	0	0	3	3
0	0	150	7	0	0	0	157	157	0	0	10	1	0	0	0	11	11
0	0	21	2	0	0	0	23	23	0	0	1	0	0	0	0	1	1
0	0	22	1	0	0	0	23	23	0	0	0	0	0	0	0	0	0
0	0	36	0	0	0	0	36	36	0	0	1	0	0	0	0	1	1
0	0	25	0	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	104	3	0	0	0	107	107	0	0	2	0	0	0	0	2	2
1	1	1207	106	33	21	1	1370	1413	0	0	108	5	1	0	0	114	114.5

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	6	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0
1	0	15	0	0	0	0	16	15.2	0	0	0	0	0	0	0	0	0
2	0	47	4	2	1	0	56	56.7	0	0	0	0	0	0	0	0	0
0	0	48	2	1	0	0	51	51.5	0	0	0	0	0	0	0	0	0
4	0	116	6	3	1	0	130	129.6	0	0	0	0	0	0	0	0	0
2	1	87	0	0	1	1	92	92.1	0	0	0	0	0	0	0	0	0
2	1	99	5	5	0	0	112	112.3	0	0	0	0	0	0	0	0	0
4	1	110	3	7	0	2	127	128.7	0	0	0	0	0	0	0	0	0
1	2	61	3	5	0	0	72	72.5	0	0	0	0	0	0	0	0	0
9	5	357	11	17	1	3	403	405.6	0	0	0	0	0	0	0	0	0
0	0	52	0	2	1	0	55	57.3	0	0	0	0	0	0	0	0	0
1	0	42	1	2	0	0	46	46.2	0	0	0	0	0	0	0	0	0
1	1	50	4	0	2	1	59	61.2	0	0	0	0	0	0	0	0	0
0	0	30	6	1	0	0	37	37.5	0	0	0	0	0	0	0	0	0
2	1	174	11	5	3	1	197	202.2	0	0	0	0	0	0	0	0	0
0	0	48	4	4	0	0	56	58	0	0	0	0	0	0	0	0	0
0	1	63	4	4	1	0	73	75.7	0	0	0	0	0	0	0	0	0
1	0	52	5	2	3	0	63	67.1	0	0	0	0	0	0	0	0	0
2	1	70	0	3	0	0	76	75.3	0	0	0	0	0	0	0	0	0
3	2	233	13	13	4	0	268	276.1	0	0	0	0	0	0	0	0	0
0	0	99	6	0	0	0	105	105	0	0	0	0	0	0	0	0	0
0	0	92	3	3	2	0	100	104.1	0	0	0	0	0	0	0	0	0
0	0	99	10	3	0	0	112	113.5	0	0	0	0	0	0	0	0	0
0	0	119	5	2	0	0	126	127	0	0	0	0	0	0	0	0	0
0	0	409	24	8	2	0	443	449.6	0	0	0	0	0	0	0	0	0
1	0	91	0	2	1	0	95	96.5	0	0	0	0	0	0	0	0	0
2	0	103	9	0	0	1	115	114.4	0	0	0	0	0	0	0	0	0
1	1	106	6	4	0	0	118	118.6	0	0	0	0	0	0	0	0	0
0	0	121	1	3	1	0	126	128.8	0	0	0	0	0	0	0	0	0
4	1	421	16	9	2	1	454	458.3	0	0	0	0	0	0	0	0	0
0	0	126	5	4	1	0	136	139.3	0	0	0	0	0	0	0	0	0
1	0	140	2	3	2	0	148	151.3	0	0	0	0	0	0	0	0	0
0	0	132	10	5	0	0	147	149.5	0	0	0	0	0	0	0	0	0
0	2	128	6	3	0	0	139	139.3	0	0	0	0	0	0	0	0	0
1	2	526	23	15	3	0	570	579.4	0	0	0	0	0	0	0	0	0
1	0	141	2	3	1	0	148	150	0	0	0	0	0	0	0	0	0
0	0	120	6	1	0	0	127	127.5	0	0	0	0	0	0	0	0	0
0	0	68	0	1	0	2	71	73.5	0	0	0	0	0	0	0	0	0
1	0	115	1	2	1	0	120	121.5	0	0	0	0	0	0	0	0	0
2	0	444	9	7	2	2	466	472.5	0	0	0	0	0	0	0	0	0
0	0	103	1	3	0	0	107	108.5	0	0	0	0	0	0	0	0	0
0	0	114	4	0	1	0	119	120.3	0	0	0	0	0	0	0	0	0
0	1	125	0	4	1	0	131	133.7	0	0	0	0	0	0	0	0	0
1	0	119	6	1	0	0	127	126.7	0	0	0	0	0	0	0	0	0
1	1	461	11	8	2	0	484	489.2	0	0	0	0	0	0	0	0	0
0	0	119	4	2	1	0	126	128.3	0	0	0	0	0	0	0	0	0
0	0	125	3	1	2	0	131	134.1	0	0	0	0	0	0	0	0	0
1	0	95	1	2	0	0	99	99.2	0	0	0	0	0	0	0	0	0
1	0	114	1	5	0	0	121	122.7	0	0	0	0	0	0	0	0	0
2	0	453	9	10	3	0	477	484.3	0	0	0	0	0	0	0	0	0
1	0	77	4	0	0	1	83	83.2	0	0	0	0	0	0	0	0	0
1	0	94	2	0	0	0	97	96.2	0	0	0	0	0	0	0	0	0
0	0	82	6	1	0	0	89	89.5	0	0	0	0	0	0	0	0	0
1	0	88	2	1	0	0	92	91.7	0	0	0	0	0	0	0	0	0
3	0	341	14	2	0	1	361	360.6	0	0	0	0	0	0	0	0	0
2	1	80	6	0	0	1	90	88.8	0	0	0	0	0	0	0	0	0
0	0	62	0	0	0	0	62	62	0	0	0	0	0	0	0	0	0
0	0	56	6	1	0	0	63	63.5	0	0	0	0	0	0	0	0	0
0	0	44	1	0	0	0	45	45	0	0	0	0	0	0	0	0	0
2	1	242	13	1	0	1	260	259.3	0	0	0	0	0	0	0	0	0
33	13	4177	160	98	23	9	4513	4567	0	0	0	0	0	0	0	0	0

C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	2	0	0	0	0	2	2	0	0	17	1	0	0	1	19	20
0	0	2	0	0	0	0	2	2	0	0	19	2	0	0	0	21	21
0	0	3	0	0	0	0	3	3	0	0	23	4	1	1	3	32	36.8
0	0	7	0	0	0	0	7	7	0	0	64	7	1	1	4	77	82.8
0	0	0	0	0	0	0	0	0	0	0	18	1	1	2	1	23	27.1
0	0	0	0	0	0	0	0	0	0	0	50	1	0	0	1	52	53
0	0	2	0	0	0	1	3	4	0	0	47	2	0	0	0	49	49
0	0	1	0	0	0	0	1	1	0	2	53	1	0	0	1	57	56.8
0	0	3	0	0	0	1	4	5	0	2	168	5	1	2	3	181	185.9
0	0	5	0	0	0	1	6	7	0	1	38	1	2	0	0	42	42.4
0	0	3	0	0	0	0	3	3	0	0	26	4	1	0	1	32	33.5
0	0	4	0	0	0	0	4	4	0	0	27	2	0	0	0	29	29
0	0	7	1	0	0	1	9	10	0	0	29	2	0	0	1	32	33
0	0	19	1	0	0	2	22	24	0	1	120	9	3	0	2	135	137.9
0	0	9	1	1	0	0	11	11.5	0	1	18	2	0	0	0	21	20.4
0	0	9	0	0	0	1	10	11	0	0	18	5	0	0	1	24	25
0	0	8	4	0	0	0	12	12	0	0	23	6	1	0	0	30	30.5
0	0	3	2	0	0	1	6	7	0	0	19	2	0	0	1	22	23
0	0	29	7	1	0	2	39	41.5	0	1	78	15	1	0	2	97	98.9
0	0	4	0	0	0	0	4	4	0	1	31	2	2	0	0	36	36.4
0	0	6	0	0	0	1	7	8	1	2	29	1	1	0	1	35	34.5
0	0	4	0	0	0	0	4	4	0	2	22	1	0	0	0	25	23.8
0	0	7	0	0	0	0	7	7	0	0	36	3	0	0	1	40	41
0	0	21	0	0	0	1	22	23	1	5	118	7	3	0	2	136	135.7
0	0	10	1	0	0	1	12	13	1	0	34	1	0	0	0	36	35.2
0	0	9	1	0	0	1	11	12	0	0	43	2	1	0	1	47	48.5
0	0	12	0	0	0	0	12	12	0	0	33	3	0	1	0	37	38.3
0	0	10	1	0	0	0	11	11	1	0	42	3	1	0	1	48	48.7
0	0	41	3	0	0	2	46	48	2	0	152	9	2	1	2	168	170.7
0	0	21	2	0	0	1	24	25	0	1	54	4	1	0	0	60	59.9
0	0	16	2	0	0	0	18	18	0	0	33	4	0	0	0	37	37
0	1	11	3	0	0	1	16	16.4	0	0	41	2	1	0	0	44	44.5
0	0	16	2	1	0	1	20	21.5	0	0	35	3	0	0	1	39	40
0	1	64	9	1	0	3	78	80.9	0	1	163	13	2	0	1	180	181.4
0	1	28	0	0	0	0	29	28.4	0	0	56	3	1	0	0	60	60.5
0	0	10	1	0	0	0	11	11	0	0	39	1	0	0	1	41	42
0	0	22	5	0	0	0	27	27	0	0	47	2	0	0	0	49	49
0	0	13	1	0	0	1	15	16	1	0	38	4	0	0	1	44	44.2
0	1	73	7	0	0	1	82	82.4	1	0	180	10	1	0	2	194	195.7
0	0	11	1	0	0	0	12	12	1	0	27	4	1	0	0	33	32.7
0	0	15	1	0	0	0	16	16	1	0	36	1	4	0	1	43	45.2
0	0	11	1	0	0	1	13	14	1	0	41	4	2	0	0	48	48.2
0	0	10	1	0	0	0	11	11	0	0	52	5	0	0	1	58	59
0	0	47	4	0	0	1	52	53	3	0	156	14	7	0	2	182	185.1
0	0	15	2	0	0	1	18	19	0	0	38	6	0	0	0	44	44
0	0	20	0	0	0	0	20	20	0	0	46	1	0	0	1	48	49
0	0	15	3	0	0	1	19	20	1	0	41	4	1	0	0	47	46.7
0	0	20	6	0	0	0	26	26	0	0	41	4	0	0	1	46	47
0	0	70	11	0	0	2	83	85	1	0	166	15	1	0	2	185	186.7
0	0	19	3	0	0	1	23	24	2	1	52	1	0	0	0	56	53.8
0	0	14	1	1	0	0	16	16.5	0	2	70	7	2	0	0	81	80.8
0	0	10	1	0	0	0	11	11	1	2	78	6	0	0	1	88	87
0	0	8	0	0	0	1	9	10	0	2	53	2	0	0	0	57	55.8
0	0	51	5	1	0	2	59	61.5	3	7	253	16	2	0	1	282	277.4
0	0	16	0	0	0	1	17	18	0	0	28	2	0	0	0	30	30
0	0	8	3	0	0	0	11	11	1	0	35	0	0	0	1	37	37.2
0	0	6	2	0	0	1	9	10	4	1	29	3	1	0	0	38	34.7
0	0	9	0	0	0	0	9	9	0	0	25	1	0	0	1	27	28
0	0	39	5	0	0	2	46	48	5	1	117	6	1	0	2	132	129.9
0	2	464	52	3	0	19	540	559.3	16	18	1735	126	25	4	25	1949	1968

C=>E									D=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	27	4	0	1	0	32	33.3	0	2	17	0	1	0	0	20	19.3
0	0	58	8	1	2	0	69	72.1	0	0	26	0	0	0	0	26	26
0	0	64	5	1	2	0	72	75.1	0	0	46	2	0	0	0	48	48
0	0	52	3	1	1	0	57	58.8	0	0	69	3	3	0	1	76	78.5
0	0	201	20	3	6	0	230	239.3	0	2	158	5	4	0	1	170	171.8
0	0	57	9	0	2	0	68	70.6	0	0	77	1	2	1	1	82	85.3
0	1	55	13	0	0	0	69	68.4	0	0	65	10	3	1	1	80	83.8
0	0	54	6	1	1	0	62	63.8	0	1	68	7	3	1	0	80	82.2
0	0	41	8	0	1	0	50	51.3	0	0	66	5	6	1	0	78	82.3
0	1	207	36	1	4	0	249	254.1	0	1	276	23	14	4	2	320	333.6
0	0	34	4	1	1	0	40	41.8	0	0	50	6	1	0	1	58	59.5
0	0	37	7	0	1	0	45	46.3	1	0	43	4	0	0	0	48	47.2
0	0	39	5	2	1	0	47	49.3	0	0	34	4	1	1	0	40	41.8
0	0	39	6	0	2	0	47	49.6	0	0	25	3	0	0	0	28	28
0	0	149	22	3	5	0	179	187	1	0	152	17	2	1	1	174	176.5
0	0	41	7	1	1	0	50	51.8	0	0	27	7	2	0	1	37	39
0	1	35	4	2	3	0	45	49.3	0	0	26	4	3	1	1	35	38.8
0	0	33	5	3	0	0	41	42.5	0	0	28	5	3	1	0	37	39.8
0	0	44	7	0	2	0	53	55.6	0	0	34	2	1	1	1	39	41.8
0	1	153	23	6	6	0	189	199.2	0	0	115	18	9	3	3	148	159.4
0	1	31	5	1	3	0	41	44.8	0	0	41	10	1	2	0	54	57.1
0	0	45	6	2	2	0	55	58.6	0	0	31	9	1	0	1	42	43.5
0	0	48	5	1	3	0	57	61.4	0	0	32	8	2	0	0	42	43
0	0	46	9	3	2	0	60	64.1	0	0	23	1	2	0	1	27	29
0	1	170	25	7	10	0	213	228.9	0	0	127	28	6	2	2	165	172.6
0	0	44	8	3	3	0	58	63.4	0	0	38	4	1	1	0	44	45.8
0	1	69	4	1	0	0	75	74.9	0	0	35	4	2	0	0	41	42
0	0	54	10	4	0	0	68	70	0	0	33	2	0	0	0	35	35
0	0	56	6	3	0	0	65	66.5	0	0	34	6	0	0	1	41	42
0	1	223	28	11	3	0	266	274.8	0	0	140	16	3	1	1	161	164.8
0	0	63	6	3	1	0	73	75.8	0	0	47	3	1	1	0	52	53.8
0	0	73	11	2	2	0	88	91.6	0	0	52	3	1	0	0	56	56.5
0	0	57	6	3	1	0	67	69.8	0	0	37	3	2	1	1	44	47.3
0	0	54	3	1	4	0	62	67.7	0	0	35	8	3	1	1	48	51.8
0	0	247	26	9	8	0	290	304.9	0	0	171	17	7	3	2	200	209.4
0	1	67	5	3	1	0	77	79.2	0	0	34	3	1	0	0	38	38.5
0	0	55	5	2	2	1	65	69.6	0	0	55	5	0	0	1	61	62
0	0	51	10	1	2	0	64	67.1	0	0	34	9	0	0	0	43	43
0	0	56	7	2	1	0	66	68.3	0	0	38	4	0	1	1	44	46.3
0	1	229	27	8	6	1	272	284.2	0	0	161	21	1	1	2	186	189.8
0	0	64	11	2	2	0	79	82.6	0	0	32	6	1	1	1	41	43.8
0	0	69	9	2	4	0	84	90.2	0	0	40	3	0	0	1	44	45
0	0	75	8	0	1	0	84	85.3	0	0	37	4	0	0	1	42	43
0	0	77	10	1	3	0	91	95.4	0	1	50	5	0	0	0	56	55.4
0	0	285	38	5	10	0	338	353.5	0	1	159	18	1	1	3	183	187.2
0	1	82	21	1	1	0	106	107.2	0	0	50	4	0	0	1	55	56
0	1	63	15	1	1	1	82	84.2	0	0	42	7	0	1	1	51	53.3
0	0	70	17	1	1	0	89	90.8	0	0	47	5	1	0	0	53	53.5
0	0	68	17	0	1	0	86	87.3	0	0	43	7	0	0	1	51	52
0	2	283	70	3	4	1	363	369.5	0	0	182	23	1	1	3	210	214.8
0	0	65	5	0	0	0	70	70	0	0	53	7	0	0	1	61	62
0	0	52	7	1	0	0	60	60.5	0	0	41	2	0	0	0	43	43
0	1	65	8	0	0	0	74	73.4	0	0	34	1	1	0	0	36	36.5
0	0	56	4	0	0	0	60	60	0	0	41	1	1	0	1	44	45.5
0	1	238	24	1	0	0	264	263.9	0	0	169	11	2	0	2	184	187
0	1	65	4	1	0	0	71	70.9	0	0	51	2	0	0	0	53	53
0	0	58	4	0	0	0	62	62	0	1	47	0	1	0	0	49	48.9
0	0	54	7	0	0	0	61	61	0	0	47	4	1	0	1	53	54.5
0	0	42	3	1	0	0	46	46.5	0	0	47	0	0	0	1	48	49
0	1	219	18	2	0	0	240	240.4	0	1	192	6	2	0	2	203	205.4
0	9	2604	357	59	62	2	3093	3200	1	5	2002	203	52	17	24	2304	2372

D=>B									D=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	4	5
0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	2	15	17
0	0	0	0	0	0	0	0	0	0	0	13	4	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	33	6	0	0	3	42	45
0	0	0	0	0	0	0	0	0	0	0	12	2	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	14	4	1	0	0	19	19.5
0	0	0	0	0	0	0	0	0	0	0	25	2	0	1	1	29	31.3
0	0	0	0	0	0	0	0	0	0	1	35	2	0	0	0	38	37.4
0	0	0	0	0	0	0	0	0	0	1	86	10	1	1	1	100	102.2
0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	1	29	30
0	0	0	0	0	0	0	0	0	0	0	27	0	1	0	0	28	28.5
0	0	0	0	0	0	0	0	0	0	0	30	2	0	0	0	32	32
0	0	0	0	0	0	0	0	0	0	0	28	2	0	0	1	31	32
0	0	0	0	0	0	0	0	0	0	0	110	7	1	0	2	120	122.5
0	0	0	0	0	0	0	0	0	0	1	36	4	2	0	0	43	43.4
0	0	0	0	0	0	0	0	0	0	0	26	2	0	0	1	29	30
0	0	0	0	0	0	0	0	0	0	1	22	4	1	0	0	28	27.9
0	0	0	0	0	0	0	0	0	0	0	20	3	0	0	1	24	25
0	0	0	0	0	0	0	0	0	0	2	104	13	3	0	2	124	126.3
0	0	0	0	0	0	0	0	0	0	0	27	4	0	0	0	31	31
0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	1	29	30
0	0	0	0	0	0	0	0	0	0	1	29	1	0	0	0	31	30.4
0	0	0	0	0	0	0	0	0	0	1	25	4	2	0	0	32	32.4
0	0	0	0	0	0	0	0	0	0	2	106	12	2	0	1	123	123.8
0	0	0	0	0	0	0	0	0	0	0	36	6	0	0	1	43	44
0	0	0	0	0	0	0	0	0	0	0	38	0	1	0	1	40	41.5
0	0	0	0	0	0	0	0	0	0	0	29	3	4	0	0	36	38
0	0	0	0	0	0	0	0	0	0	0	33	3	0	0	1	37	38
0	0	0	0	0	0	0	0	0	0	0	136	12	5	0	3	156	161.5
0	0	0	0	0	0	0	0	0	0	0	30	4	0	0	0	34	34
0	0	0	0	0	0	0	0	0	0	1	45	0	0	0	0	46	45.4
0	0	0	0	0	0	0	0	0	0	0	33	5	0	0	1	39	40
0	0	0	0	0	0	0	0	0	0	1	30	5	1	0	1	38	38.9
0	0	0	0	0	0	0	0	0	0	2	138	14	1	0	2	157	158.3
0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	29	29
0	0	0	0	0	0	0	0	0	0	0	43	5	2	0	1	51	53
0	0	0	0	0	0	0	0	0	0	0	29	2	0	0	0	31	31
0	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	39	39
0	0	0	0	0	0	0	0	0	0	0	139	8	2	0	1	150	152
0	0	0	0	0	0	0	0	0	0	0	27	2	1	0	0	30	30.5
0	0	0	0	0	0	0	0	0	0	0	36	3	1	0	1	41	42.5
0	0	0	0	0	0	0	0	0	0	0	35	5	0	0	1	41	42
0	0	0	0	0	0	0	0	0	0	1	21	2	0	0	0	24	23.4
0	0	0	0	0	0	0	0	0	0	1	119	12	2	0	2	136	138.4
0	0	0	0	0	0	0	0	0	0	2	25	2	0	0	1	30	29.8
0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0	28	28
0	0	0	0	0	0	0	0	0	0	0	34	4	0	0	1	39	40
0	0	0	0	0	0	0	0	0	0	1	34	5	1	0	0	41	40.9
0	0	0	0	0	0	0	0	0	0	3	120	12	1	0	2	138	138.7
0	0	0	0	0	0	0	0	0	0	0	32	3	0	0	1	36	37
0	0	0	0	0	0	0	0	0	0	0	39	1	0	0	0	40	40
0	0	0	0	0	0	0	0	0	0	0	41	2	0	0	1	44	45
0	0	0	0	0	0	0	0	0	0	0	38	7	0	0	0	45	45
0	0	0	0	0	0	0	0	0	0	0	150	13	0	0	2	165	167
0	0	0	0	0	0	0	0	0	0	0	47	1	0	0	1	49	50
0	0	0	0	0	0	0	0	0	0	1	58	1	0	0	0	60	59.4
0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	1	28	29
0	0	0	0	0	0	0	0	0	0	0	38	2	0	0	1	41	42
0	0	0	0	0	0	0	0	0	0	1	169	5	0	0	3	178	180.4
0	0	0	0	0	0	0	0	0	0	12	1410	124	18	1	24	1589	1616

D=>D									D=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
0	0	0	0	0	0	0	0	0	1	0	13	1	0	0	0	15	14.2
0	0	0	0	0	0	0	0	0	0	0	20	2	0	0	0	22	22
0	0	0	0	0	0	0	0	0	1	0	52	6	0	0	0	59	58.2
0	0	0	0	0	0	0	0	0	0	0	12	1	2	0	0	15	16
0	0	0	0	0	0	0	0	0	0	0	18	2	1	0	0	21	21.5
0	0	0	0	0	0	0	0	0	0	0	26	4	2	0	0	32	33
0	0	0	0	0	0	0	0	0	0	1	29	2	0	1	0	33	33.7
0	0	0	0	0	0	0	0	0	0	1	85	9	5	1	0	101	104.2
0	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	22	21.9
0	0	0	0	0	0	0	0	0	0	0	16	1	0	1	0	18	19.3
0	0	0	0	0	0	0	0	0	0	0	17	3	0	0	0	20	20
0	0	0	0	0	0	0	0	0	0	0	12	1	1	0	0	14	14.5
0	0	0	0	0	0	0	0	0	0	1	64	6	2	1	0	74	75.7
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	9	1	0	1	0	11	12.3
0	0	0	0	0	0	0	0	0	0	0	16	3	2	0	0	21	22
0	0	0	0	0	0	0	0	0	0	0	38	4	2	1	0	45	47.3
0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	17	0	1	0	0	18	18.5
0	0	0	0	0	0	0	0	0	0	0	13	3	1	0	0	17	17.5
0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	55	6	2	0	0	63	64
0	0	0	0	0	0	0	0	0	1	0	8	1	0	2	0	12	13.8
0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	5	2	1	1	0	9	10.8
0	0	0	0	0	0	0	0	0	0	0	10	3	0	1	0	14	15.3
0	0	0	0	0	0	0	0	0	1	0	25	8	1	4	0	39	43.9
0	0	0	0	0	0	0	0	0	0	0	13	0	1	1	0	15	16.8
0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	12	5	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	15	0	1	1	0	17	18.8
0	0	0	0	0	0	0	0	0	0	0	49	6	2	2	0	59	62.6
0	0	0	0	0	0	0	0	0	0	0	12	2	0	1	0	15	16.3
0	0	0	0	0	0	0	0	0	0	0	13	2	2	0	0	17	18
0	0	0	0	0	0	0	0	0	0	0	13	1	3	0	0	17	18.5
0	0	0	0	0	0	0	0	0	0	0	9	3	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	47	8	5	1	0	61	64.8
0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	16
0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	19
0	0	0	0	0	0	0	0	0	0	0	62	7	0	0	0	69	69
0	0	0	0	0	0	0	0	0	0	0	21	4	0	0	0	25	25
0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	19	19
0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	61	9	0	0	0	70	70
0	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	18	18
0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	18	1	1	0	0	20	20.5
0	0	0	0	0	0	0	0	0	0	0	55	4	1	0	0	60	60.5
0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	46	2	0	0	0	48	48
0	0	0	0	0	0	0	0	0	2	2	639	75	20	10	0	748	768.2

E=>A									E=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E=>C									E=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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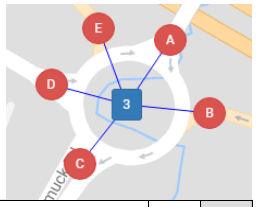
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 3
Date : 09/11/17
Location : Glenamuck Road/M50/Ballyogan Road Roundabout



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
07:15	0	0	11	1	0	0	0	12	12	0	0	0	0	0	0	0	0	0
07:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
07:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	28	1	0	0	0	29	29	0	0	0	0	0	0	0	0	0
08:00	0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
08:15	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
08:30	0	0	7	0	0	0	0	7	7	1	0	0	0	0	0	0	1	0.2
08:45	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	34	1	0	0	0	35	35	1	0	0	0	0	0	0	1	0.2
09:00	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
09:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
09:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
09:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
10:00	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
10:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:30	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
10:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	2	0	0	0	0	2	2	1	0	0	0	0	0	0	1	0.2
11:30	0	0	7	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0
11:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	11	2	0	0	0	13	13	1	0	0	0	0	0	0	1	0.2
12:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
13:45	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
14:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
14:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
15:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
15:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
15:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
15:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
16:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
16:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
17:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
17:45	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
H/TOT	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
18:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
18:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
18:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
18:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
12 TOT	0	0	159	7	0	0	0	166	166	2	0	0	0	0	0	0	2	0.4

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	16	11	1	1	0	29	30.8	0	0	5	1	0	1	2	9	12.3
1	0	39	17	3	2	0	62	65.3	0	0	10	5	0	1	0	16	17.3
0	0	51	27	2	2	1	83	87.6	0	1	15	5	1	1	1	24	26.2
1	0	89	14	4	2	0	110	113.8	0	0	23	6	0	1	0	30	31.3
2	0	195	69	10	7	1	284	297.5	0	1	53	17	1	4	3	79	87.1
1	1	66	7	3	4	1	83	89.3	0	0	34	3	1	0	0	38	38.5
0	0	87	11	3	0	0	101	102.5	1	0	44	3	0	3	1	52	56.1
0	1	119	9	2	1	1	133	135.7	0	0	51	4	0	0	0	55	55
1	0	116	9	1	2	0	129	131.3	0	0	43	4	2	0	1	50	52
2	2	388	36	9	7	2	446	458.8	1	0	172	14	3	3	2	195	201.6
0	0	130	17	1	1	0	149	150.8	1	2	56	5	0	0	1	65	64
0	0	98	10	6	1	1	116	121.3	0	0	30	3	3	1	1	38	41.8
0	1	97	10	0	3	0	111	114.3	0	0	24	2	5	0	0	31	33.5
0	0	101	13	4	2	0	120	124.6	0	0	31	2	0	0	1	34	35
0	1	426	50	11	7	1	496	511	1	2	141	12	8	1	3	168	174.3
0	0	97	3	2	2	0	104	107.6	0	0	27	3	1	0	1	32	33.5
1	0	83	12	3	2	0	101	104.3	0	0	20	3	0	0	0	23	23
1	0	87	25	4	4	1	122	129.4	0	0	11	4	0	0	1	16	17
0	1	78	9	2	2	0	92	95	0	0	16	2	2	1	0	21	23.3
2	1	345	49	11	10	1	419	436.3	0	0	74	12	3	1	2	92	96.8
1	1	110	7	2	0	0	121	120.6	0	0	16	0	2	0	0	18	19
0	1	93	5	1	3	0	103	106.8	0	0	15	2	1	1	1	20	22.8
3	1	103	12	3	1	0	123	122.8	0	0	19	4	2	0	0	25	26
0	1	117	8	4	2	0	132	136	0	0	18	5	0	0	1	24	25
4	4	423	32	10	6	0	479	486.2	0	0	68	11	5	1	2	87	92.8
0	0	136	7	4	3	2	152	159.9	0	0	11	4	1	0	0	16	16.5
1	0	126	10	5	1	0	143	146	0	0	30	9	2	1	1	43	46.3
0	2	106	10	2	1	0	121	122.1	0	0	34	9	2	0	1	46	48
0	0	135	16	3	3	0	157	162.4	0	0	32	5	2	1	0	40	42.3
1	2	503	43	14	8	2	573	590.4	0	0	107	27	7	2	2	145	153.1
3	1	108	11	3	3	0	129	131.4	0	0	34	2	3	1	0	40	42.8
0	0	138	13	4	2	1	158	163.6	0	0	20	3	1	0	1	25	26.5
0	2	113	12	3	0	0	130	130.3	0	0	31	4	2	1	0	38	40.3
2	0	144	13	4	2	1	166	170	0	0	26	4	1	1	1	33	35.8
5	3	503	49	14	7	2	583	595.3	0	0	111	13	7	3	2	136	145.4
0	0	112	8	1	3	0	124	128.4	0	0	35	5	1	0	1	42	43.5
0	0	105	10	0	5	0	120	126.5	0	0	36	3	0	1	0	40	41.3
0	1	131	11	1	4	0	148	153.1	0	0	29	3	0	1	1	34	36.3
0	0	117	21	0	5	0	143	149.5	0	0	41	4	2	0	0	47	48
0	1	465	50	2	17	0	535	557.5	0	0	141	15	3	2	2	163	169.1
0	0	128	15	1	1	1	146	148.8	0	0	29	2	0	0	0	31	31
0	0	120	9	3	2	0	134	138.1	0	0	23	1	2	1	1	28	31.3
2	0	118	14	0	1	1	136	136.7	0	0	34	4	4	0	0	42	44
1	1	113	17	1	0	0	133	132.1	0	0	35	2	1	1	2	41	44.8
3	1	479	55	5	4	2	549	555.7	0	0	121	9	7	2	3	142	151.1
1	0	150	23	0	4	0	178	182.4	0	0	38	1	1	0	0	40	40.5
0	0	178	20	1	1	0	200	201.8	0	0	46	3	1	0	0	50	50.5
0	2	168	22	0	2	0	194	195.4	0	0	46	4	0	0	1	51	52
0	0	183	17	2	1	0	203	205.3	0	0	39	3	0	1	0	43	44.3
1	2	679	82	3	8	0	775	784.9	0	0	169	11	2	1	1	184	187.3
0	0	178	18	1	0	0	197	197.5	0	0	55	2	0	0	1	58	59
0	0	212	13	0	0	0	225	225	0	0	32	5	0	0	1	38	39
1	1	205	15	0	0	0	222	220.6	0	0	34	4	0	0	0	38	38
0	0	140	5	0	0	1	146	147	0	0	36	1	0	0	0	37	37
1	1	735	51	1	0	1	790	790.1	0	0	157	12	0	0	2	171	173
0	1	153	7	1	0	0	162	161.9	0	0	35	1	0	0	1	37	38
0	2	147	8	0	0	1	158	157.8	2	0	33	2	0	0	0	37	35.4
0	1	124	3	0	1	0	129	129.7	0	0	19	0	1	0	0	20	20.5
0	0	139	6	1	0	0	146	146.5	0	0	24	2	0	1	1	28	30.3
0	4	563	24	2	1	1	595	595.9	2	0	111	5	1	1	2	122	124.2
21	22	5704	590	92	82	13	6524	6660	4	3	1425	158	47	21	26	1684	1756

A=>E									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	52	2	0	0	0	54	54	2	0	30	3	0	0	0	35	33.4
0	0	56	3	0	0	0	59	59	0	0	61	4	0	0	0	65	65
0	0	50	2	0	0	0	52	52	0	0	63	5	0	0	0	68	68
0	0	64	1	0	0	0	65	65	0	0	82	2	0	0	0	84	84
0	0	222	8	0	0	0	230	230	2	0	236	14	0	0	0	252	250.4
0	0	72	5	0	0	0	77	77	0	0	107	2	0	0	0	109	109
0	0	34	1	0	0	0	35	35	0	0	119	2	0	0	0	121	121
0	1	44	1	0	0	0	46	45.4	0	1	135	3	0	0	0	139	138.4
0	0	33	2	1	0	0	36	36.5	0	1	122	6	0	0	0	129	128.4
0	1	183	9	1	0	0	194	193.9	0	2	483	13	0	0	0	498	496.8
0	0	32	0	0	0	0	32	32	0	0	95	1	0	0	0	96	96
0	0	38	3	0	0	2	43	45	0	0	71	1	0	0	0	72	72
0	0	36	4	1	1	0	42	43.8	0	0	48	3	0	0	0	51	51
0	0	42	3	1	0	0	46	46.5	0	0	41	1	0	0	0	42	42
0	0	148	10	2	1	2	163	167.3	0	0	255	6	0	0	0	261	261
0	0	44	3	1	0	0	48	48.5	0	0	31	1	0	0	0	32	32
0	0	33	3	0	0	0	36	36	0	0	36	1	1	0	0	38	38.5
0	0	31	3	1	0	0	35	35.5	0	0	20	1	0	2	0	23	25.6
0	0	42	3	0	0	0	45	45	0	0	22	0	0	0	0	22	22
0	0	150	12	2	0	0	164	165	0	0	109	3	1	2	0	115	118.1
0	0	32	3	0	0	0	35	35	0	0	12	2	0	0	0	14	14
0	0	22	2	0	0	0	24	24	0	0	21	1	1	0	0	23	23.5
0	0	29	6	0	0	0	35	35	0	0	27	2	1	0	0	30	30.5
0	0	31	1	0	0	0	32	32	0	0	13	0	0	0	0	13	13
0	0	114	12	0	0	0	126	126	0	0	73	5	2	0	0	80	81
0	0	25	4	0	0	0	29	29	0	0	21	1	0	0	0	22	22
0	0	30	4	0	0	0	34	34	0	0	21	0	0	0	0	21	21
0	0	37	4	0	1	0	42	43.3	0	0	20	4	0	0	0	24	24
0	0	27	6	1	0	0	34	34.5	0	0	26	2	0	0	0	28	28
0	0	119	18	1	1	0	139	140.8	0	0	88	7	0	0	0	95	95
0	0	23	3	1	0	0	27	27.5	0	0	12	0	0	0	0	12	12
0	0	24	2	1	0	0	27	27.5	0	0	17	0	0	0	0	17	17
0	0	31	2	1	0	0	34	34.5	0	0	15	2	0	0	0	17	17
0	0	20	7	1	0	0	28	28.5	0	0	22	2	0	0	0	24	24
0	0	98	14	4	0	0	116	118	0	0	66	4	0	0	0	70	70
0	0	31	4	2	0	0	37	38	0	0	23	1	0	0	0	24	24
0	0	32	2	1	0	0	35	35.5	0	0	21	1	0	0	0	22	22
0	0	19	4	2	0	0	25	26	0	1	14	1	0	0	0	16	15.4
0	0	45	5	2	1	1	54	57.3	0	0	24	0	0	0	0	24	24
0	0	127	15	7	1	1	151	156.8	0	1	82	3	0	0	0	86	85.4
0	0	23	4	0	0	0	27	27	0	0	13	1	0	0	0	14	14
0	1	38	4	0	0	0	43	42.4	0	0	24	0	0	0	0	24	24
0	1	40	3	0	0	0	44	43.4	0	0	19	0	0	0	0	19	19
0	0	51	5	1	0	0	57	57.5	0	0	31	1	0	0	0	32	32
0	2	152	16	1	0	0	171	170.3	0	0	87	2	0	0	0	89	89
0	0	61	9	0	0	1	71	72	0	0	17	0	0	0	0	17	17
0	0	54	2	0	0	0	56	56	0	0	23	0	0	0	0	23	23
0	0	60	8	0	0	0	68	68	0	0	21	1	0	0	0	22	22
0	0	33	6	1	0	0	40	40.5	0	0	20	0	0	0	1	21	22
0	0	208	25	1	0	1	235	236.5	0	0	81	1	0	0	1	83	84
0	0	40	1	0	0	0	41	41	0	0	21	0	1	0	0	22	22.5
0	0	38	5	0	0	0	43	43	0	0	14	0	0	0	0	14	14
0	0	30	3	0	0	0	33	33	0	0	22	0	0	0	0	22	22
0	0	46	1	0	0	0	47	47	0	0	11	1	0	0	0	12	12
0	0	154	10	0	0	0	164	164	0	0	68	1	1	0	0	70	70.5
0	0	52	5	0	0	0	57	57	0	0	7	0	0	0	0	7	7
0	1	46	1	0	0	0	48	47.4	0	0	16	0	0	0	0	16	16
0	0	31	1	0	0	0	32	32	0	0	11	0	0	0	0	11	11
0	0	31	0	0	0	0	31	31	0	0	19	0	0	0	0	19	19
0	1	160	7	0	0	0	168	167.4	0	0	53	0	0	0	0	53	53
0	4	1835	156	19	3	4	2021	2036	2	3	1681	59	4	2	1	1752	1754

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	16	5	0	2	0	23	25.6
0	0	0	0	0	0	0	0	0	0	0	10	5	1	0	0	16	16.5
0	0	0	0	0	0	0	0	0	0	0	14	2	1	1	0	18	19.8
0	0	0	0	0	0	0	0	0	1	0	20	6	1	0	0	28	27.7
0	0	0	0	0	0	0	0	0	1	0	60	18	3	3	0	85	89.6
0	0	0	0	0	0	0	0	0	0	0	17	0	2	1	0	20	22.3
0	0	0	0	0	0	0	0	0	0	0	17	0	1	1	0	19	20.8
0	0	0	0	0	0	0	0	0	1	0	27	1	3	0	0	32	32.7
0	0	0	0	0	0	0	0	0	1	0	20	2	2	0	0	25	25.2
0	0	0	0	0	0	0	0	0	2	0	81	3	8	2	0	96	101
0	0	0	0	0	0	0	0	0	0	0	39	0	2	1	0	42	44.3
0	0	0	0	0	0	0	0	0	0	0	29	1	3	1	0	34	36.8
0	0	0	0	0	0	0	0	0	0	0	38	6	1	0	0	45	45.5
0	0	0	0	0	0	0	0	0	0	0	46	3	2	1	0	52	54.3
0	0	0	0	0	0	0	0	0	0	0	152	10	8	3	0	173	180.9
0	0	0	0	0	0	0	0	0	0	0	66	3	0	0	0	69	69
0	0	0	0	0	0	0	0	0	0	0	49	0	1	0	0	50	50.5
0	0	0	0	0	0	0	0	0	0	0	40	6	0	2	0	48	50.6
0	0	0	0	0	0	0	0	0	0	0	59	5	2	0	0	66	67
0	0	0	0	0	0	0	0	0	0	0	214	14	3	2	0	233	237.1
0	0	0	0	0	0	0	0	0	0	0	59	2	3	0	0	64	65.5
0	0	0	0	0	0	0	0	0	0	0	57	1	1	0	0	59	59.5
0	0	0	0	0	0	0	0	0	1	0	43	4	1	0	0	49	48.7
0	0	0	0	0	0	0	0	0	0	0	50	2	0	0	0	52	52
0	0	0	0	0	0	0	0	0	1	0	209	9	5	0	0	224	225.7
0	0	0	0	0	0	0	0	0	0	0	54	3	2	1	1	61	64.3
0	0	0	0	0	0	0	0	0	0	0	55	3	1	2	0	61	64.1
0	0	0	0	0	0	0	0	0	0	0	51	4	0	0	0	55	55
0	0	0	0	0	0	0	0	0	0	0	55	7	2	0	0	64	65
0	0	0	0	0	0	0	0	0	0	0	215	17	5	3	1	241	248.4
0	0	0	0	0	0	0	0	0	0	0	53	7	0	0	0	60	60
0	0	0	0	0	0	0	0	0	0	0	56	0	0	1	0	57	58.3
0	0	0	0	0	0	0	0	0	0	0	40	1	2	0	0	43	44
0	0	0	0	0	0	0	0	0	0	0	45	5	2	1	0	53	55.3
0	0	0	0	0	0	0	0	0	0	0	194	13	4	2	0	213	217.6
0	0	0	0	0	0	0	0	0	0	0	29	1	0	0	0	30	30
0	0	0	0	0	0	0	0	0	0	0	33	4	0	1	0	38	39.3
0	0	0	0	0	0	0	0	0	0	0	50	1	1	0	0	52	52.5
0	0	0	0	0	0	0	0	0	0	0	45	3	0	0	0	48	48
0	0	0	0	0	0	0	0	0	0	0	157	9	1	1	0	168	169.8
0	0	0	0	0	0	0	0	0	0	0	38	3	1	2	0	44	47.1
0	0	0	0	0	0	0	0	0	0	0	36	2	1	0	0	39	39.5
0	0	0	0	0	0	0	0	0	0	0	38	2	1	1	0	42	43.8
0	0	0	0	0	0	0	0	0	0	0	43	1	2	0	0	46	47
0	0	0	0	0	0	0	0	0	0	0	155	8	5	3	0	171	177.4
0	0	0	0	0	0	0	0	0	0	0	18	2	1	1	0	22	23.8
0	0	0	0	0	0	0	0	0	0	0	26	1	1	0	0	28	28.5
0	0	0	0	0	0	0	0	0	0	0	35	3	0	0	0	38	38
0	0	0	0	0	0	0	0	0	0	0	34	3	0	0	0	37	37
0	0	0	0	0	0	0	0	0	0	0	113	9	2	1	0	125	127.3
0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	32	32
0	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	39	39
0	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	34	34
0	0	0	0	0	0	0	0	0	0	0	126	6	0	0	0	132	132
0	0	0	0	0	0	0	0	0	0	0	32	1	0	0	0	33	33
0	0	0	0	0	0	0	0	0	0	0	35	2	0	0	0	37	37
0	0	0	0	0	0	0	0	0	0	0	34	2	0	0	0	36	36
0	0	0	0	0	0	0	0	0	0	0	30	5	0	0	0	35	35
0	0	0	0	0	0	0	0	0	0	0	131	10	0	0	0	141	141
0	0	0	0	0	0	0	0	0	4	0	1807	126	44	20	1	2002	2048

B=>D									B=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	23	0	1	0	0	24	24.5	0	0	0	0	0	0	0	0	0
0	0	21	1	1	0	0	23	23.5	0	0	4	0	0	0	0	4	4
0	0	13	2	0	0	0	15	15	0	0	17	4	0	0	0	21	21
0	0	31	5	0	0	0	36	36	0	0	14	1	0	0	0	15	15
0	0	88	8	2	0	0	98	99	0	0	35	5	0	0	0	40	40
0	0	32	7	0	1	0	40	41.3	0	0	13	0	0	0	0	13	13
0	0	27	4	2	1	0	34	36.3	0	0	9	1	0	0	0	10	10
0	0	26	0	1	0	1	28	29.5	0	0	6	0	0	0	0	6	6
0	0	29	3	0	0	0	32	32	0	0	7	0	0	0	0	7	7
0	0	114	14	3	2	1	134	139.1	0	0	35	1	0	0	0	36	36
0	1	32	4	1	0	0	38	37.9	0	0	1	0	0	0	0	1	1
0	0	43	6	0	0	0	49	49	0	0	2	0	0	0	0	2	2
0	0	40	3	3	1	0	47	49.8	0	0	1	0	0	0	0	1	1
0	0	28	1	0	0	0	29	29	0	0	3	0	0	0	0	3	3
0	1	143	14	4	1	0	163	165.7	0	0	7	0	0	0	0	7	7
0	0	16	1	0	0	0	17	17	0	0	1	0	0	0	0	1	1
0	0	21	3	0	2	0	26	28.6	0	0	1	0	0	0	0	1	1
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	24	3	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	78	7	0	2	0	87	89.6	0	0	2	0	0	0	0	2	2
0	0	17	2	0	0	0	19	19	0	0	0	0	0	0	0	0	0
0	0	10	2	1	1	0	14	15.8	0	0	0	0	0	0	0	0	0
0	0	18	1	1	2	0	22	25.1	0	0	1	0	0	0	0	1	1
0	0	23	0	1	0	0	24	24.5	0	0	0	0	0	0	0	0	0
0	0	68	5	3	3	0	79	84.4	0	0	1	0	0	0	0	1	1
0	0	19	3	3	1	0	26	28.8	0	0	0	1	0	0	0	1	1
0	0	31	5	0	0	0	36	36	0	0	0	0	0	0	0	0	0
0	0	30	3	0	0	0	33	33	0	0	1	0	0	0	0	1	1
0	0	19	1	0	0	0	20	20	0	0	1	0	0	0	0	1	1
0	0	99	12	3	1	0	115	117.8	0	0	2	1	0	0	0	3	3
0	0	16	2	0	3	0	21	24.9	0	0	2	0	0	0	0	2	2
0	0	9	0	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
0	0	17	3	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	1	8	2	0	0	0	11	10.4	0	0	1	0	0	0	0	1	1
0	1	50	7	1	3	0	62	65.8	0	0	3	0	0	0	0	3	3
0	0	21	2	1	1	0	25	26.8	0	0	0	0	0	0	0	0	0
0	0	12	1	0	1	0	14	15.3	0	0	1	0	0	0	0	1	1
0	0	17	2	0	0	0	19	19	0	0	1	0	0	0	0	1	1
0	0	11	2	1	1	0	15	16.8	0	0	0	0	0	0	0	0	0
0	0	61	7	2	3	0	73	77.9	0	0	2	0	0	0	0	2	2
0	0	23	0	1	0	0	24	24.5	0	0	0	0	0	0	0	0	0
0	0	14	2	1	1	0	18	19.8	0	0	0	0	0	0	0	0	0
0	0	18	3	2	0	0	23	24	0	0	0	0	0	0	0	0	0
0	0	17	1	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
0	0	72	6	5	1	0	84	87.8	0	0	0	0	0	0	0	0	0
0	0	15	2	2	0	0	19	20	0	0	1	0	0	0	0	1	1
0	0	22	3	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	40	2	0	0	0	42	42	0	0	3	0	0	0	0	3	3
0	0	30	2	0	0	0	32	32	0	0	1	0	0	0	0	1	1
0	0	107	9	2	0	0	118	119	0	0	5	0	0	0	0	5	5
0	0	27	1	0	0	0	28	28	0	0	1	0	0	0	0	1	1
0	0	30	1	0	0	0	31	31	0	0	0	1	0	0	0	1	1
0	0	32	1	1	0	0	34	34.5	0	0	0	0	0	0	0	0	0
0	0	27	1	0	0	0	28	28	0	0	1	1	0	0	0	2	2
0	0	116	4	1	0	0	121	121.5	0	0	2	2	0	0	0	4	4
0	0	20	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	20	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	29	0	0	0	0	29	29	0	0	1	1	0	0	0	2	2
0	0	23	3	0	0	0	26	26	0	0	1	0	0	0	0	1	1
0	0	92	6	0	0	0	98	98	0	0	2	1	0	0	0	3	3
0	2	1088	99	26	16	1	1232	1266	0	0	96	10	0	0	0	106	106

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	9	2	1	0	0	13	12.7	0	0	0	0	0	0	0	0	0
1	0	18	0	3	1	0	23	25	0	0	0	0	0	0	0	0	0
1	0	57	2	3	0	0	63	63.7	0	0	0	0	0	0	0	0	0
0	1	74	4	1	0	0	80	79.9	0	0	0	0	0	0	0	0	0
3	1	158	8	8	1	0	179	181.3	0	0	0	0	0	0	0	0	0
1	0	55	0	2	1	2	61	64.5	0	0	0	0	0	0	0	0	0
3	2	77	16	0	1	0	99	96.7	0	0	0	0	0	0	0	0	0
2	0	78	3	4	1	2	90	93.7	0	0	0	0	0	0	0	0	0
1	1	74	4	5	1	0	86	88.4	0	0	0	0	0	0	0	0	0
7	3	284	23	11	4	4	336	343.3	0	0	0	0	0	0	0	0	0
0	1	53	3	4	0	0	61	62.4	0	0	0	0	0	0	0	0	0
0	2	51	4	5	0	0	62	63.3	0	0	0	0	0	0	0	0	0
2	1	18	6	2	0	0	29	27.8	0	0	0	0	0	0	0	0	0
0	0	52	4	2	0	0	58	59	0	0	0	0	0	0	0	0	0
2	4	174	17	13	0	0	210	212.5	0	0	0	0	0	0	0	0	0
1	0	46	0	2	0	0	49	49.2	0	0	0	0	0	0	0	0	0
0	0	69	3	1	2	0	75	78.1	0	0	0	0	0	0	0	0	0
1	0	54	0	2	1	0	58	59.5	0	0	0	0	0	0	0	0	0
0	0	53	1	1	1	0	56	57.8	0	0	0	0	0	0	0	0	0
2	0	222	4	6	4	0	238	244.6	0	0	0	0	0	0	0	0	0
1	0	82	0	3	0	0	86	86.7	0	0	0	0	0	0	0	0	0
1	1	77	1	1	0	0	81	80.1	0	0	0	0	0	0	0	0	0
0	1	79	4	5	0	0	89	90.9	0	0	0	0	0	0	0	0	0
0	0	103	12	4	0	0	119	121	0	0	0	0	0	0	0	0	0
2	2	341	17	13	0	0	375	378.7	0	0	0	0	0	0	0	0	0
0	3	108	10	2	0	0	123	122.2	0	0	0	0	0	0	0	0	0
0	0	92	10	6	0	0	108	111	0	0	0	0	0	0	0	0	0
2	0	95	0	4	0	1	102	103.4	0	0	0	0	0	0	0	0	0
0	0	130	0	3	0	0	133	134.5	0	0	0	0	0	0	0	0	0
2	3	425	20	15	0	1	466	471.1	0	0	0	0	0	0	0	0	0
1	0	119	0	6	1	0	127	130.5	0	0	0	0	0	0	0	0	0
1	0	120	3	1	0	0	125	124.7	0	0	0	0	0	0	0	0	0
0	1	121	8	1	1	0	132	133.2	0	0	0	0	0	0	0	0	0
1	2	110	8	3	0	0	124	123.5	0	0	0	0	0	0	0	0	0
3	3	470	19	11	2	0	508	511.9	0	0	0	0	0	0	0	0	0
0	2	116	1	1	0	1	121	121.3	0	0	0	0	0	0	0	0	0
2	0	129	5	0	1	0	137	136.7	0	0	0	0	0	0	0	0	0
1	0	90	5	0	0	0	96	95.2	0	0	0	0	0	0	0	0	0
1	0	118	10	1	0	0	130	129.7	0	0	0	0	0	0	0	0	0
4	2	453	21	2	1	1	484	482.9	0	0	0	0	0	0	0	0	0
0	0	114	7	0	0	0	121	121	0	0	0	0	0	0	0	0	0
0	0	115	0	1	0	0	116	116.5	0	0	0	0	0	0	0	0	0
0	0	119	4	2	1	0	126	128.3	0	0	0	0	0	0	0	0	0
2	0	112	13	0	0	0	127	125.4	0	0	0	0	0	0	0	0	0
2	0	460	24	3	1	0	490	491.2	0	0	0	0	0	0	0	0	0
2	1	109	2	3	0	1	118	118.3	0	0	0	0	0	0	0	0	0
0	0	99	7	1	0	0	107	107.5	0	0	0	0	0	0	0	0	0
0	0	98	10	1	0	0	109	109.5	0	0	0	0	0	0	0	0	0
0	0	78	0	1	0	0	79	79.5	0	0	0	0	0	0	0	0	0
2	1	384	19	6	0	1	413	414.8	0	0	0	0	0	0	0	0	0
0	0	91	4	2	1	0	98	100.3	0	0	0	0	0	0	0	0	0
3	0	69	6	1	0	1	80	79.1	0	0	0	0	0	0	0	0	0
1	2	110	1	0	0	0	114	112	0	0	0	0	0	0	0	0	0
2	0	71	0	1	0	0	74	72.9	0	0	0	0	0	0	0	0	0
6	2	341	11	4	1	1	366	364.3	0	0	0	0	0	0	0	0	0
0	2	94	1	0	0	0	97	95.8	0	0	0	0	0	0	0	0	0
0	0	52	0	1	0	0	53	53.5	0	0	0	0	0	0	0	0	0
0	1	59	1	0	0	0	61	60.4	0	0	0	0	0	0	0	0	0
0	0	44	1	0	0	0	45	45	0	0	0	0	0	0	0	0	0
0	3	249	3	1	0	0	256	254.7	0	0	0	0	0	0	0	0	0
35	24	3961	186	93	14	8	4321	4351	0	0	0	0	0	0	0	0	0

C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	8	2	0	0	0	10	10
0	0	2	0	0	0	0	2	2	0	0	10	3	0	0	1	14	15
0	0	1	0	0	0	0	1	1	0	0	15	2	0	0	1	18	19
0	0	3	0	0	0	0	3	3	0	1	22	2	0	0	2	27	28.4
0	0	6	0	0	0	0	6	6	0	1	55	9	0	0	4	69	72.4
0	0	5	0	0	0	0	5	5	0	0	15	2	0	0	1	18	19
0	0	2	0	0	0	0	2	2	0	0	39	0	0	0	1	40	41
0	0	3	1	0	0	1	5	6	0	0	41	2	0	0	0	43	43
0	0	1	0	0	0	1	2	3	0	0	32	0	1	0	1	34	35.5
0	0	11	1	0	0	2	14	16	0	0	127	4	1	0	3	135	138.5
0	0	5	0	0	0	0	5	5	0	0	42	1	0	0	0	43	43
0	0	5	0	1	0	0	6	6.5	0	0	39	5	1	0	1	46	47.5
0	0	2	1	0	0	1	4	5	0	0	30	4	0	0	0	34	34
0	0	9	1	0	0	1	11	12	0	0	24	0	0	0	1	25	26
0	0	21	2	1	0	2	26	28.5	0	0	135	10	1	0	2	148	150.5
0	0	10	0	0	0	0	10	10	0	0	19	5	0	0	0	24	24
0	0	7	1	0	0	1	9	10	0	0	24	2	0	0	1	27	28
0	1	4	5	0	0	0	10	9.4	0	0	19	2	1	0	0	22	22.5
0	0	2	1	0	0	1	4	5	0	0	19	3	0	2	1	25	28.6
0	1	23	7	0	0	2	33	34.4	0	0	81	12	1	2	2	98	103.1
0	0	10	2	0	0	0	12	12	0	0	24	0	0	1	0	25	26.3
0	0	6	0	0	0	0	6	6	0	0	23	1	0	0	1	25	26
0	0	3	1	0	0	1	5	6	0	0	19	1	1	0	0	21	21.5
0	0	13	2	0	0	0	15	15	0	0	32	2	1	1	1	37	39.8
0	0	32	5	0	0	1	38	39	0	0	98	4	2	2	2	108	113.6
0	1	7	2	1	0	1	12	12.9	0	0	51	1	1	0	0	53	53.5
0	0	13	1	0	0	1	15	16	0	0	45	3	0	0	1	49	50
0	0	10	3	0	0	0	13	13	0	1	25	7	1	0	0	34	33.9
0	0	12	0	0	0	1	13	14	0	0	46	5	0	0	1	52	53
0	1	42	6	1	0	3	53	55.9	0	1	167	16	2	0	2	188	190.4
0	0	7	0	0	0	0	7	7	0	1	42	2	0	0	0	45	44.4
0	0	8	5	0	0	0	13	13	1	0	42	4	0	0	1	48	48.2
0	0	13	4	0	0	1	18	19	0	1	44	5	0	0	0	50	49.4
0	0	6	2	0	0	0	8	8	0	1	42	1	0	0	1	45	45.4
0	0	34	11	0	0	1	46	47	1	3	170	12	0	0	2	188	187.4
0	0	10	0	0	0	1	11	12	0	0	41	1	2	0	0	44	45
0	0	9	2	0	0	1	12	13	0	0	36	1	0	0	1	38	39
0	0	11	1	1	0	0	13	13.5	0	0	33	1	0	1	0	35	36.3
0	0	5	2	0	0	1	8	9	0	0	44	2	1	0	1	48	49.5
0	0	35	5	1	0	3	44	47.5	0	0	154	5	3	1	2	165	169.8
0	0	6	1	0	0	0	7	7	0	0	44	3	0	0	0	47	47
0	0	14	1	0	0	0	15	15	0	0	42	3	1	0	1	47	48.5
0	0	11	1	1	0	1	14	15.5	0	0	42	2	0	0	0	44	44
0	0	6	0	0	0	0	6	6	0	0	55	4	0	0	1	60	61
0	0	37	3	1	0	1	42	43.5	0	0	183	12	1	0	2	198	200.5
0	0	11	2	0	0	1	14	15	0	0	38	2	1	0	0	41	41.5
0	0	11	1	0	0	0	12	12	0	0	42	1	0	0	1	44	45
0	0	5	0	0	0	0	5	5	0	0	44	8	0	0	0	52	52
0	0	15	1	0	0	1	17	18	0	0	44	2	0	0	0	46	46
0	0	42	4	0	0	2	48	50	0	0	168	13	1	0	1	183	184.5
0	0	11	2	0	0	1	14	15	0	0	58	5	0	0	1	64	65
0	0	8	1	0	0	0	9	9	0	1	47	4	0	0	0	52	51.4
0	0	10	1	0	0	0	11	11	0	0	50	1	1	0	0	52	52.5
0	0	5	0	0	0	0	5	5	0	0	71	4	0	0	0	75	75
0	0	34	4	0	0	1	39	40	0	1	226	14	1	0	1	243	243.9
0	0	11	2	0	0	1	14	15	0	0	43	4	0	0	1	48	49
0	0	12	0	0	0	0	12	12	0	0	25	1	0	0	2	28	30
0	0	8	1	0	0	0	9	9	0	0	36	1	0	0	0	37	37
0	0	7	0	0	0	0	7	7	0	0	28	1	0	0	1	30	31
0	0	38	3	0	0	1	42	43	0	0	132	7	0	0	4	143	147
0	2	355	51	4	0	19	431	450.8	1	6	1696	118	13	5	27	1866	1902

C=>E									D=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	30	1	0	0	0	31	31	0	0	17	1	3	0	0	21	22.5
0	1	44	8	0	1	0	54	54.7	0	1	21	1	0	0	0	23	22.4
0	0	58	5	0	1	0	64	65.3	1	0	38	3	1	0	0	43	42.7
0	0	51	6	0	1	0	58	59.3	0	0	74	4	2	0	1	81	83
0	1	183	20	0	3	0	207	210.3	1	1	150	9	6	0	1	168	170.6
0	1	55	3	0	2	0	61	63	0	0	89	5	3	0	1	98	100.5
0	0	52	4	0	1	0	57	58.3	1	0	81	6	8	0	1	97	101.2
0	0	58	3	0	2	0	63	65.6	0	1	68	4	6	1	1	81	85.7
0	0	30	6	2	1	0	39	41.3	0	0	68	5	1	0	0	74	74.5
0	1	195	16	2	6	0	220	228.2	1	1	306	20	18	1	3	350	361.9
0	0	37	4	0	0	0	41	41	0	0	57	7	2	0	1	67	69
0	1	48	5	2	4	0	60	65.6	1	0	48	4	2	0	1	56	57.2
0	0	38	7	1	1	0	47	48.8	0	0	31	4	1	1	0	37	38.8
0	0	49	5	0	4	0	58	63.2	0	0	41	6	0	0	1	48	49
0	1	172	21	3	9	0	206	218.6	1	0	177	21	5	1	3	208	214
0	0	38	6	1	2	0	47	50.1	0	0	23	2	2	0	0	27	28
0	0	50	6	0	1	0	57	58.3	0	0	32	3	5	0	1	41	44.5
0	0	49	5	1	2	0	57	60.1	0	0	24	0	3	0	0	27	28.5
0	0	37	14	1	2	0	54	57.1	0	1	27	5	3	0	1	37	38.9
0	0	174	31	3	7	0	215	225.6	0	1	106	10	13	0	2	132	139.9
0	0	42	5	1	1	0	49	50.8	1	0	24	4	0	0	0	29	28.2
0	0	58	7	0	1	0	66	67.3	0	0	24	5	2	0	1	32	34
0	0	50	5	0	1	0	56	57.3	0	1	24	4	4	1	0	34	36.7
0	0	56	9	0	2	0	67	69.6	0	0	37	5	2	0	0	44	45
0	0	206	26	1	5	0	238	245	1	1	109	18	8	1	1	139	143.9
0	0	48	6	2	3	0	59	63.9	0	0	28	3	2	0	1	34	36
0	0	55	9	0	1	0	65	66.3	0	0	36	4	1	0	0	41	41.5
0	0	71	7	2	3	0	83	87.9	0	0	32	3	0	0	0	35	35
0	0	69	7	0	2	0	78	80.6	0	0	40	2	1	0	1	44	45.5
0	0	243	29	4	9	0	285	298.7	0	0	136	12	4	0	2	154	158
0	0	54	7	1	1	0	63	64.8	0	0	43	5	2	0	0	50	51
0	0	72	11	0	3	0	86	89.9	0	0	48	4	0	0	1	53	54
0	0	97	8	1	2	0	108	111.1	0	0	42	6	7	2	0	57	63.1
0	0	64	10	1	4	0	79	84.7	0	0	33	3	3	0	0	39	40.5
0	0	287	36	3	10	0	336	350.5	0	0	166	18	12	2	1	199	208.6
0	0	64	5	1	3	0	73	77.4	0	0	45	6	1	0	1	53	54.5
0	1	56	11	0	4	1	73	78.6	0	0	53	4	0	1	1	59	61.3
0	0	50	11	0	3	0	64	67.9	0	0	43	4	2	0	1	50	52
0	0	72	11	1	3	0	87	91.4	0	0	50	4	0	0	2	56	58
0	1	242	38	2	13	1	297	315.3	0	0	191	18	3	1	5	218	225.8
0	0	70	9	0	5	0	84	90.5	0	0	49	5	2	0	0	56	57
0	0	68	10	1	3	0	82	86.4	0	0	35	4	2	0	1	42	44
0	0	79	7	1	3	0	90	94.4	0	0	47	4	0	1	1	53	55.3
0	0	73	15	0	2	1	91	94.6	0	0	56	3	1	0	0	60	60.5
0	0	290	41	2	13	1	347	365.9	0	0	187	16	5	1	2	211	216.8
0	0	70	19	1	2	1	93	97.1	0	0	35	9	0	0	0	44	44
0	0	67	14	2	2	1	86	90.6	0	1	45	4	1	0	1	52	52.9
0	0	57	7	0	1	0	65	66.3	0	0	44	3	1	1	0	49	50.8
0	2	75	11	0	2	0	90	91.4	0	0	50	4	0	0	1	55	56
0	2	269	51	3	7	2	334	345.4	0	1	174	20	2	1	2	200	203.7
0	0	68	7	1	1	0	77	78.8	0	0	32	4	1	0	0	37	37.5
0	0	68	8	0	1	0	77	78.3	1	0	36	2	0	0	1	40	40.2
0	0	101	8	0	0	0	109	109	0	0	36	1	0	0	0	37	37
0	0	62	8	0	0	0	70	70	0	0	47	1	0	0	0	48	48
0	0	299	31	1	2	0	333	336.1	1	0	151	8	1	0	1	162	162.7
0	0	75	5	0	0	0	80	80	0	0	62	1	0	0	1	64	65
0	1	58	0	0	0	0	59	58.4	0	0	45	1	0	0	0	46	46
0	0	89	4	1	0	0	94	94.5	0	0	35	2	1	0	1	39	40.5
0	0	55	0	0	2	0	57	59.6	0	0	32	2	0	0	0	34	34
0	1	277	9	1	2	0	290	292.5	0	0	174	6	1	0	2	183	185.5
0	7	2837	349	25	86	4	3308	3432	5	5	2027	176	78	8	25	2324	2391

D=>B									D=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	6	6.5
0	0	0	0	0	0	0	0	0	0	0	6	1	2	0	1	10	12
0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	9	2	1	0	1	13	14.5
0	0	0	0	0	0	0	0	0	0	0	30	5	4	0	2	41	45
0	0	0	0	0	0	0	0	0	0	0	11	1	2	0	0	14	15
0	0	0	0	0	0	0	0	0	0	0	13	4	1	1	1	20	22.8
0	0	0	0	0	0	0	0	0	0	0	23	2	3	0	0	28	29.5
0	0	0	0	0	0	0	0	0	0	0	30	3	0	2	0	35	37.6
0	0	0	0	0	0	0	0	0	0	0	77	10	6	3	1	97	104.9
0	0	0	0	0	0	0	0	0	1	0	23	1	0	0	0	25	24.2
0	0	0	0	0	0	0	0	0	0	0	22	1	1	0	0	24	24.5
0	0	0	0	0	0	0	0	0	0	0	16	0	1	0	1	18	19.5
0	0	0	0	0	0	0	0	0	0	1	25	1	0	0	1	28	28.4
0	0	0	0	0	0	0	0	0	1	1	86	3	2	0	2	95	96.6
0	0	0	0	0	0	0	0	0	0	0	33	1	0	0	0	34	34
0	0	0	0	0	0	0	0	0	0	0	28	3	0	0	1	32	33
0	0	0	0	0	0	0	0	0	0	0	25	0	0	1	0	26	27.3
0	0	0	0	0	0	0	0	0	0	0	31	4	0	0	1	36	37
0	0	0	0	0	0	0	0	0	0	0	117	8	0	1	2	128	131.3
0	0	0	0	0	0	0	0	0	0	0	22	1	0	0	0	23	23
0	0	0	0	0	0	0	0	0	0	0	16	1	1	0	1	19	20.5
0	0	0	0	0	0	0	0	0	0	0	24	7	1	0	0	32	32.5
0	0	0	0	0	0	0	0	0	0	1	25	3	1	0	0	30	29.9
0	0	0	0	0	0	0	0	0	0	1	87	12	3	0	1	104	105.9
0	0	0	0	0	0	0	0	0	0	0	30	6	1	0	1	38	39.5
0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	1	33	34
0	0	0	0	0	0	0	0	0	0	1	36	3	0	1	0	41	41.7
0	0	0	0	0	0	0	0	0	1	0	35	8	0	0	1	45	45.2
0	0	0	0	0	0	0	0	0	1	1	133	17	1	1	3	157	160.4
0	0	0	0	0	0	0	0	0	0	0	35	1	0	0	0	36	36
0	0	0	0	0	0	0	0	0	0	2	34	1	0	0	0	37	35.8
0	0	0	0	0	0	0	0	0	0	1	30	3	0	0	1	35	35.4
0	0	0	0	0	0	0	0	0	0	1	33	3	1	0	0	38	37.9
0	0	0	0	0	0	0	0	0	0	4	132	8	1	0	1	146	145.1
0	0	0	0	0	0	0	0	0	0	0	25	2	0	0	0	27	27
0	0	0	0	0	0	0	0	0	0	0	34	2	0	0	1	37	38
0	0	0	0	0	0	0	0	0	0	0	35	2	0	0	0	37	37
0	0	0	0	0	0	0	0	0	0	0	46	5	0	0	1	52	53
0	0	0	0	0	0	0	0	0	0	0	140	11	0	0	2	153	155
0	0	0	0	0	0	0	0	0	0	0	34	1	0	0	0	35	35
0	0	0	0	0	0	0	0	0	0	0	38	3	0	0	1	42	43
0	0	0	0	0	0	0	0	0	0	0	21	2	0	0	1	24	25
0	0	0	0	0	0	0	0	0	0	0	32	1	0	0	0	33	33
0	0	0	0	0	0	0	0	0	0	0	125	7	0	0	2	134	136
0	0	0	0	0	0	0	0	0	1	0	29	1	0	0	1	32	32.2
0	0	0	0	0	0	0	0	0	0	0	26	2	0	0	0	28	28
0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	1	33	34
0	0	0	0	0	0	0	0	0	0	0	44	2	0	0	0	46	46
0	0	0	0	0	0	0	0	0	1	0	131	5	0	0	2	139	140.2
0	0	0	0	0	0	0	0	0	0	0	29	2	0	0	1	32	33
0	0	0	0	0	0	0	0	0	2	0	28	4	0	0	1	35	34.4
0	0	0	0	0	0	0	0	0	0	0	32	3	0	0	0	35	35
0	0	0	0	0	0	0	0	0	0	0	52	1	0	0	0	53	53
0	0	0	0	0	0	0	0	0	2	0	141	10	0	0	2	155	155.4
0	0	0	0	0	0	0	0	0	0	0	39	0	1	0	1	41	42.5
0	0	0	0	0	0	0	0	0	0	1	49	0	0	0	0	50	49.4
0	0	0	0	0	0	0	0	0	0	0	36	1	0	0	0	37	37
0	0	0	0	0	0	0	0	0	0	0	28	0	1	0	1	30	31.5
0	0	0	0	0	0	0	0	0	0	1	152	1	2	0	2	158	160.4
0	0	0	0	0	0	0	0	0	5	8	1351	97	19	5	22	1507	1536

D=>D									D=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	12	2	0	0	0	14	14
0	0	0	0	0	0	0	0	0	2	0	8	1	0	0	0	11	9.4
0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	13	2	0	1	0	16	17.3
0	0	0	0	0	0	0	0	0	2	0	48	7	0	1	0	58	57.7
0	0	1	0	0	0	0	1	1	1	0	17	0	2	0	0	20	20.2
0	0	1	0	0	0	0	1	1	1	0	16	1	0	0	0	18	17.2
0	0	0	0	0	0	0	0	0	0	0	19	2	2	0	0	23	24
0	0	0	0	0	0	0	0	0	0	0	21	1	0	0	0	22	22
0	0	2	0	0	0	0	2	2	2	0	73	4	4	0	0	83	83.4
0	0	0	0	0	0	0	0	0	0	0	8	0	0	1	1	10	12.3
0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	16
0	0	0	0	0	0	0	0	0	1	0	10	1	0	1	0	13	13.5
0	0	3	0	0	0	0	3	3	0	0	12	1	0	0	0	13	13
0	0	3	0	0	0	0	3	3	1	0	46	2	0	2	1	52	54.8
0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	10	1	1	1	0	13	14.8
0	0	0	0	0	0	0	0	0	0	0	7	1	2	0	0	10	11
0	0	0	0	0	0	0	0	0	0	0	31	3	3	1	0	38	40.8
0	0	0	0	0	0	0	0	0	1	0	7	2	0	0	0	10	9.2
0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	8	8.5
0	0	0	0	0	0	0	0	0	0	0	6	1	0	1	0	8	9.3
0	0	0	0	0	0	0	0	0	0	0	13	1	1	1	0	16	17.8
0	0	0	0	0	0	0	0	0	1	0	32	5	2	2	0	42	44.8
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	11	1	1	1	0	14	15.8
0	0	0	0	0	0	0	0	0	1	0	15	1	1	0	0	18	17.7
0	0	0	0	0	0	0	0	0	0	0	12	3	0	0	0	15	15
0	0	0	0	0	0	0	0	0	1	0	42	5	2	1	0	51	52.5
0	0	0	0	0	0	0	0	0	0	0	8	2	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	20	4	1	1	0	26	27.8
0	0	0	0	1	0	0	1	1.5	0	0	7	2	0	1	0	10	11.3
0	0	0	0	0	0	0	0	0	0	0	12	2	2	0	0	16	17
0	0	0	0	1	0	0	1	1.5	0	0	47	10	3	2	0	62	66.1
0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
0	0	0	0	0	0	0	0	0	1	0	19	2	0	0	0	22	21.2
0	0	0	0	1	0	0	1	1.5	0	0	9	1	1	1	0	12	13.8
0	0	0	0	0	0	0	0	0	0	0	8	1	0	1	0	10	11.3
0	0	0	0	1	0	0	1	1.5	1	0	47	6	1	2	0	57	59.3
0	0	1	0	0	0	0	1	1	0	0	15	1	2	1	0	19	21.3
0	0	0	0	0	0	0	0	0	0	0	13	4	0	0	0	17	17
0	0	1	0	0	0	0	1	1	0	0	9	5	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	22	6	0	0	0	28	28
0	0	2	0	0	0	0	2	2	0	0	59	16	2	1	0	78	80.3
0	0	1	0	0	0	0	1	1	0	0	23	5	1	0	0	29	29.5
0	0	1	0	0	0	0	1	1	0	0	12	1	1	0	0	14	14.5
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
0	0	2	0	0	0	0	2	2	0	0	61	7	2	0	0	70	71
0	0	0	0	0	0	0	0	0	0	0	12	2	0	0	0	14	14
0	0	0	0	0	0	0	0	0	1	0	13	2	0	1	0	17	17.5
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	1	0	0	0	0	1	1	1	0	12	1	0	0	0	14	13.2
0	0	1	0	0	0	0	1	1	2	0	49	5	0	1	0	57	56.7
0	0	0	0	0	0	0	0	0	0	0	14	4	0	0	0	18	18
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	39	7	0	0	0	46	46
0	0	10	0	2	0	0	12	13	10	0	574	77	19	13	1	694	713.4

E=>A									E=>B								
PCL	**MCL**	**CAR**	**LGV**	**OGV1**	**OGV2**	**SV (BU**	**TOT**	**PCU**	**PCL**	**MCL**	**CAR**	**LGV**	**OGV1**	**OGV2**	**SV (BU**	**TOT**	**PCU**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E=>C									E=>D									
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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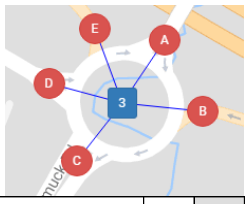
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 3
Date : 11/11/17
Location : Glenamuck Road/M50/Ballyogan Road Roundabout



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
08:00	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
08:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
08:45	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	2	0	0	0	10	10	0	0	0	0	0	0	0	0	0
09:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
09:15	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
09:30	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
09:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
10:00	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
10:15	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
10:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:45	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	0	19	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0
11:00	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
12:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
13:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
13:15	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
13:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
14:00	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
14:15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
14:30	0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
14:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0
15:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
15:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
16:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
16:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
16:30	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
16:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
17:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
17:15	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
17:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
17:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
18:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
18:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
18:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
18:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
12 TOT	0	0	128	4	0	0	0	132	132	0	0	0	0	0	0	0	0	0

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	12	5	1	1	0	19	20.8	0	0	2	0	0	0	0	2	2
0	0	22	3	0	0	0	25	25	0	0	4	1	1	0	1	7	8.5
0	0	19	3	0	0	0	22	22	0	0	3	2	1	0	0	6	6.5
0	0	8	11	0	1	0	20	21.3	0	0	7	1	2	1	0	11	13.3
0	0	61	22	1	2	0	86	89.1	0	0	16	4	4	1	1	26	30.3
0	0	12	5	2	1	0	20	22.3	0	0	10	2	0	0	1	13	14
0	0	23	0	0	0	0	23	23	0	0	16	2	1	0	0	19	19.5
0	0	35	1	0	2	0	38	40.6	0	0	12	4	1	0	0	17	17.5
5	0	49	3	2	0	0	59	56	0	0	24	0	1	1	1	27	29.8
5	0	119	9	4	3	0	140	141.9	0	0	62	8	3	1	2	76	80.8
1	0	49	4	0	0	0	54	53.2	0	0	17	1	0	1	0	19	20.3
0	0	55	6	0	0	0	61	61	1	0	20	1	2	0	0	24	24.2
0	1	66	4	0	0	0	71	70.4	0	0	23	1	0	0	1	25	26
0	1	115	2	2	0	0	120	120.4	0	0	28	0	0	0	0	28	28
1	2	285	16	2	0	0	306	305	1	0	88	3	2	1	1	96	98.5
0	0	118	8	2	0	0	128	129	0	1	24	3	0	0	0	28	27.4
0	0	117	2	2	0	0	121	122	0	0	36	2	0	0	0	38	38
1	0	152	6	2	0	0	161	161.2	0	0	26	0	0	0	1	27	28
0	0	172	5	0	0	0	177	177	0	0	32	2	0	0	0	34	34
1	0	559	21	6	0	0	587	589.2	0	1	118	7	0	0	1	127	127.4
0	0	175	3	2	1	0	181	183.3	0	1	26	2	0	0	0	29	28.4
0	1	188	7	0	0	0	196	195.4	0	0	23	1	1	0	1	26	27.5
0	0	165	4	0	1	0	170	171.3	0	0	38	0	0	1	0	39	40.3
0	0	156	2	1	0	0	159	159.5	0	0	44	2	0	0	0	46	46
0	1	684	16	3	2	0	706	709.5	0	1	131	5	1	1	1	140	142.2
0	1	211	7	0	0	0	219	218.4	0	0	37	0	0	0	1	38	39
1	1	229	6	1	0	0	238	237.1	0	0	46	4	0	0	0	50	50
1	1	194	7	2	0	0	205	204.6	0	0	28	1	2	0	0	31	32
0	0	215	9	0	0	1	225	226	0	0	46	2	0	1	0	49	50.3
2	3	849	29	3	0	1	887	886.1	0	0	157	7	2	1	1	168	171.3
0	0	196	7	0	0	1	204	205	0	0	31	0	0	0	0	31	31
0	1	191	2	0	0	0	194	193.4	0	0	20	3	0	0	0	23	23
0	0	208	6	1	0	0	215	215.5	0	0	20	2	0	0	0	22	22
0	0	212	4	1	0	1	218	219.5	0	0	24	2	0	1	0	27	28.3
0	1	807	19	2	0	2	831	833.4	0	0	95	7	0	1	0	103	104.3
0	0	221	10	0	0	0	231	231	0	0	22	0	0	0	2	24	26
0	0	211	0	1	0	0	212	212.5	0	0	19	2	0	0	1	22	23
0	0	187	5	1	0	0	193	193.5	0	0	20	1	0	0	0	21	21
0	0	150	9	1	0	0	160	160.5	0	0	39	2	0	0	0	41	41
0	0	769	24	3	0	0	796	797.5	0	0	100	5	0	0	3	108	111
0	0	183	8	1	0	1	193	194.5	0	0	19	2	0	0	0	21	21
0	0	209	10	0	0	0	219	219	0	0	23	2	0	0	0	25	25
1	0	177	3	1	0	1	183	183.7	0	0	15	2	0	0	0	17	17
0	1	170	5	0	0	0	176	175.4	0	0	19	1	0	0	1	21	22
1	1	739	26	2	0	2	771	772.6	0	0	76	7	0	0	1	84	85
0	0	202	5	1	0	0	208	208.5	0	0	18	3	0	0	0	21	21
0	0	172	0	0	0	0	172	172	0	0	22	1	0	0	0	23	23
0	0	170	4	0	0	1	175	176	0	0	16	0	0	0	0	16	16
0	0	138	4	0	0	0	142	142	0	0	15	0	0	0	0	15	15
0	0	682	13	1	0	1	697	698.5	0	0	71	4	0	0	0	75	75
0	0	117	1	2	0	0	120	121	0	0	16	0	0	0	0	16	16
0	0	108	2	0	0	0	110	110	0	0	13	0	0	0	0	13	13
0	0	98	1	1	1	0	101	102.8	0	0	13	0	0	0	1	14	15
0	0	68	3	0	0	0	71	71	0	0	21	0	0	0	0	21	21
0	0	391	7	3	1	0	402	404.8	0	0	63	0	0	0	1	64	65
0	2	47	0	0	0	0	49	47.8	0	0	20	2	0	0	1	23	24
0	0	51	1	0	0	0	52	52	0	0	25	0	0	0	0	25	25
0	0	54	0	0	0	0	54	54	0	0	15	1	0	0	0	16	16
0	1	50	2	0	0	0	53	52.4	0	0	20	0	0	0	1	21	22
0	3	202	3	0	0	0	208	206.2	0	0	80	3	0	0	2	85	87
10	11	6147	205	30	8	6	6417	6434	1	2	1057	60	12	6	14	1152	1178

A=>E									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
0	0	11	2	0	0	0	13	13	0	0	5	1	0	0	0	6	6
0	0	18	2	0	0	0	20	20	0	0	13	2	0	0	0	15	15
0	0	19	2	0	0	0	21	21	0	0	11	2	0	0	0	13	13
0	0	55	6	0	0	0	61	61	0	0	30	5	0	0	0	35	35
0	0	24	0	1	0	0	25	25.5	0	0	11	1	0	0	0	12	12
0	0	23	3	0	0	0	26	26	0	0	14	0	0	0	0	14	14
0	0	25	1	0	0	0	26	26	0	0	11	0	0	0	0	11	11
0	0	26	1	0	0	0	27	27	0	0	24	0	0	0	0	24	24
0	0	98	5	1	0	0	104	104.5	0	0	60	1	0	0	0	61	61
0	0	40	1	0	0	0	41	41	0	0	20	0	0	0	0	20	20
0	0	49	1	0	0	0	50	50	0	0	13	0	0	0	0	13	13
0	0	30	1	0	0	0	31	31	0	0	14	1	0	0	0	15	15
0	0	26	2	0	0	0	28	28	0	0	23	0	0	0	0	23	23
0	0	145	5	0	0	0	150	150	0	0	70	1	0	0	0	71	71
0	0	34	0	1	0	0	35	35.5	0	0	18	2	0	0	0	20	20
0	0	32	4	0	0	0	36	36	0	0	19	1	0	0	0	20	20
0	0	37	0	0	0	0	37	37	0	0	18	0	0	0	0	18	18
0	0	21	2	0	0	0	23	23	0	0	33	1	0	0	0	34	34
0	0	124	6	1	0	0	131	131.5	0	0	88	4	0	0	0	92	92
0	0	31	1	0	0	0	32	32	0	0	24	0	0	0	0	24	24
0	0	33	0	1	0	0	34	34.5	0	0	28	0	0	0	0	28	28
0	0	21	1	1	0	0	23	23.5	0	0	19	1	0	0	0	20	20
0	0	19	2	1	0	0	22	22.5	0	0	38	0	0	0	0	38	38
0	0	104	4	3	0	0	111	112.5	0	0	109	1	0	0	0	110	110
0	0	13	3	0	0	0	16	16	0	0	20	0	0	0	0	20	20
0	0	20	4	0	0	0	24	24	0	0	38	0	0	0	0	38	38
0	0	20	1	1	0	0	22	22.5	0	0	39	1	0	0	0	40	40
0	0	19	1	0	0	0	20	20	0	0	22	0	0	0	0	22	22
0	0	72	9	1	0	0	82	82.5	0	0	119	1	0	0	0	120	120
0	0	29	4	0	0	0	33	33	0	0	16	0	0	0	0	16	16
0	0	25	2	0	0	0	27	27	0	0	22	1	0	0	0	23	23
0	0	26	1	0	0	0	27	27	0	0	19	0	0	0	0	19	19
0	0	14	1	0	0	0	15	15	0	0	22	0	0	0	0	22	22
0	0	94	8	0	0	0	102	102	0	0	79	1	0	0	0	80	80
0	0	20	0	0	0	0	20	20	0	0	20	1	0	0	0	21	21
0	0	18	3	0	0	0	21	21	0	0	30	0	0	0	0	30	30
0	0	31	0	0	0	0	31	31	0	0	25	0	0	0	0	25	25
0	0	31	3	0	0	0	34	34	0	0	19	0	0	0	0	19	19
0	0	100	6	0	0	0	106	106	0	0	94	1	0	0	0	95	95
0	0	18	0	0	0	0	18	18	0	0	13	0	0	0	0	13	13
0	0	16	4	0	0	0	20	20	0	0	19	0	0	0	0	19	19
0	0	29	2	0	0	0	31	31	0	0	4	0	0	0	0	4	4
0	0	21	2	0	0	0	23	23	0	0	11	0	0	0	0	11	11
0	0	84	8	0	0	0	92	92	0	0	47	0	0	0	0	47	47
0	0	18	0	0	0	0	18	18	0	0	11	0	0	0	0	11	11
0	0	26	2	0	0	0	28	28	0	0	5	0	0	0	0	5	5
0	0	29	1	0	0	0	30	30	0	0	14	0	0	0	0	14	14
0	0	20	0	0	0	0	20	20	0	0	11	0	0	0	0	11	11
0	0	93	3	0	0	0	96	96	0	0	41	0	0	0	0	41	41
0	0	22	1	0	0	0	23	23	0	0	14	0	0	0	0	14	14
0	0	23	0	0	0	0	23	23	0	0	14	0	0	0	0	14	14
0	0	18	0	1	0	0	19	19.5	0	0	8	0	0	0	0	8	8
0	0	33	1	0	0	0	34	34	0	0	8	0	0	0	0	8	8
0	0	96	2	1	0	0	99	99.5	0	0	44	0	0	0	0	44	44
0	0	26	1	0	0	0	27	27	0	0	14	0	0	0	0	14	14
0	0	21	1	0	0	0	22	22	0	0	8	1	0	0	0	9	9
0	0	28	0	0	0	0	28	28	0	0	11	0	0	0	0	11	11
0	0	22	2	0	0	0	24	24	0	0	13	0	0	0	0	13	13
0	0	97	4	0	0	0	101	101	0	0	46	1	0	0	0	47	47
0	0	1162	66	7	0	0	1235	1239	0	0	827	16	0	0	0	843	843

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	23	3	2	0	0	28	29
0	0	0	0	0	0	0	0	0	0	0	25	4	0	0	0	29	29
0	0	0	0	0	0	0	0	0	0	0	74	9	2	0	0	85	86
0	0	0	0	0	0	0	0	0	0	0	17	3	0	0	0	20	20
0	0	0	0	0	0	0	0	0	0	0	23	3	0	0	0	26	26
0	0	0	0	0	0	0	0	0	0	0	36	1	0	0	0	37	37
0	0	0	0	0	0	0	0	0	2	0	60	2	1	0	0	65	63.9
0	0	0	0	0	0	0	0	0	2	0	136	9	1	0	0	148	146.9
0	0	0	0	0	0	0	0	0	0	0	63	4	0	0	0	67	67
0	0	0	0	0	0	0	0	0	0	0	64	2	0	0	0	66	66
0	0	0	0	0	0	0	0	0	0	0	84	1	1	0	0	86	86.5
0	0	0	0	0	0	0	0	0	0	0	95	1	1	0	0	97	97.5
0	0	0	0	0	0	0	0	0	0	0	306	8	2	0	0	316	317
0	0	0	0	0	0	0	0	0	0	0	94	4	1	0	0	99	99.5
0	0	0	0	0	0	0	0	0	0	0	77	3	2	0	0	82	83
0	0	0	0	0	0	0	0	0	1	0	69	5	0	0	0	75	74.2
0	0	0	0	0	0	0	0	0	0	0	59	1	0	0	0	60	60
0	0	0	0	0	0	0	0	0	1	0	299	13	3	0	0	316	316.7
0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	70	70
0	0	0	0	0	0	0	0	0	0	0	60	4	2	0	0	66	67
0	0	0	0	0	0	0	0	0	0	0	72	3	0	0	0	75	75
0	0	0	0	0	0	0	0	0	0	0	89	3	1	0	0	93	93.5
0	0	0	0	0	0	0	0	0	0	0	291	10	3	0	0	304	305.5
0	0	0	0	0	0	0	0	0	0	0	89	4	0	0	0	93	93
0	0	0	0	0	0	0	0	0	0	0	92	3	0	0	0	95	95
0	0	0	0	0	0	0	0	0	0	0	73	3	0	0	0	76	76
0	0	0	0	0	0	0	0	0	0	0	71	5	1	0	0	77	77.5
0	0	0	0	0	0	0	0	0	0	0	325	15	1	0	0	341	341.5
0	0	0	0	0	0	0	0	0	0	0	74	3	0	0	0	77	77
0	0	0	0	0	0	0	0	0	0	0	117	3	0	0	0	120	120
0	0	0	0	0	0	0	0	0	0	1	89	2	0	0	0	92	91.4
0	0	0	0	0	0	0	0	0	0	0	93	3	1	0	0	97	97.5
0	0	0	0	0	0	0	0	0	0	1	373	11	1	0	0	386	385.9
0	0	0	0	0	0	0	0	0	0	0	101	4	0	0	0	105	105
0	0	0	0	0	0	0	0	0	0	0	86	3	0	0	0	89	89
0	0	0	0	0	0	0	0	0	0	0	63	3	0	0	0	66	66
0	0	0	0	0	0	0	0	0	0	0	72	4	1	0	0	77	77.5
0	0	0	0	0	0	0	0	0	0	0	322	14	1	0	0	337	337.5
0	0	0	0	0	0	0	0	0	0	0	73	4	0	0	0	77	77
0	0	0	0	0	0	0	0	0	0	0	89	5	0	0	0	94	94
0	0	0	0	0	0	0	0	0	0	0	82	3	0	0	0	85	85
0	0	0	0	0	0	0	0	0	0	0	68	3	0	0	0	71	71
0	0	0	0	0	0	0	0	0	0	0	312	15	0	0	0	327	327
0	0	0	0	0	0	0	0	0	0	0	67	2	1	0	0	70	70.5
0	0	0	0	0	0	0	0	0	0	0	68	2	0	0	0	70	70
0	0	0	0	0	0	0	0	0	0	0	59	2	0	0	0	61	61
0	0	0	0	0	0	0	0	0	0	0	56	2	0	0	0	58	58
0	0	0	0	0	0	0	0	0	0	0	250	8	1	0	0	259	259.5
0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	0	42	42
0	0	0	0	0	0	0	0	0	0	0	43	1	0	0	0	44	44
0	0	0	0	0	0	0	0	0	0	0	30	0	1	0	0	31	31.5
0	0	0	0	0	0	0	0	0	0	0	25	1	0	0	0	26	26
0	0	0	0	0	0	0	0	0	0	0	139	3	1	0	0	143	143.5
0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	32
0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	32
0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	29	29
0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	27	27
0	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	120	120
0	0	0	0	0	0	0	0	0	3	1	2947	115	16	0	0	3082	3087

B=>D									B=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	1	0	0	0	0	1	1
0	0	8	1	1	0	0	10	10.5	0	0	1	0	0	0	0	1	1
0	0	24	2	1	0	0	27	27.5	0	0	2	0	0	0	0	2	2
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	9	2	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	2	0	0	0	0	2	2
0	0	19	0	0	0	1	20	21	0	0	2	1	0	0	0	3	3
0	0	46	3	0	0	1	50	51	0	0	4	1	0	0	0	5	5
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
1	0	12	2	0	0	0	15	14.2	0	0	1	0	0	0	0	1	1
0	0	15	3	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
0	0	24	1	0	1	0	26	27.3	0	0	1	0	0	0	0	1	1
1	0	64	6	1	1	0	73	74	0	0	2	0	0	0	0	2	2
0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	20	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0
1	0	15	1	0	0	0	17	16.2	0	0	0	0	0	0	0	0	0
0	0	30	0	1	2	0	33	36.1	0	0	0	0	0	0	0	0	0
1	0	86	1	1	2	0	91	93.3	0	0	0	0	0	0	0	0	0
0	0	26	1	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	10	2	0	0	0	12	12	0	0	1	0	0	0	0	1	1
0	0	18	2	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	21	1	0	0	0	22	22	0	0	0	1	0	0	0	1	1
0	0	75	6	0	0	0	81	81	0	0	1	1	0	0	0	2	2
0	0	26	1	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	29	1	0	0	0	30	30	0	0	1	0	0	0	0	1	1
0	0	28	3	1	0	0	32	32.5	0	0	0	0	0	0	0	0	0
0	0	29	2	0	0	0	31	31	0	0	0	0	0	0	0	0	0
0	0	112	7	1	0	0	120	120.5	0	0	1	0	0	0	0	1	1
0	0	26	1	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	19	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0
0	0	23	1	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	20	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	88	2	0	0	0	90	90	0	0	0	0	0	0	0	0	0
0	1	12	0	0	0	0	13	12.4	0	0	0	0	0	0	0	0	0
0	0	27	1	0	0	0	28	28	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	29	0	0	0	0	29	29	0	0	0	0	0	0	0	0	0
0	1	83	1	0	0	0	85	84.4	0	0	0	0	0	0	0	0	0
0	0	19	0	0	0	0	19	19	0	0	2	0	0	0	0	2	2
0	0	24	0	0	0	0	24	24	0	0	3	0	0	0	0	3	3
0	0	21	1	0	1	0	23	24.3	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	78	1	0	1	0	80	81.3	0	0	5	0	0	0	0	5	5
0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	18	2	1	0	0	21	21.5	0	0	1	0	0	0	0	1	1
0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	26	1	0	0	0	27	27	0	0	1	0	0	0	0	1	1
0	0	80	4	1	0	0	85	85.5	0	0	2	0	0	0	0	2	2
0	0	21	0	0	0	0	21	21	0	0	3	0	0	0	0	3	3
0	0	24	0	1	0	0	25	25.5	0	0	1	0	0	0	0	1	1
0	0	21	3	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	16	16	0	0	2	0	0	0	0	2	2
0	0	82	3	1	0	0	86	86.5	0	0	6	0	0	0	0	6	6
0	1	16	0	0	0	0	17	16.4	0	0	3	0	0	0	0	3	3
0	0	20	1	0	0	0	21	21	0	0	1	0	0	0	0	1	1
0	0	18	0	0	0	0	18	18	0	0	3	0	0	0	0	3	3
0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	1	71	1	0	0	0	73	72.4	0	0	7	0	0	0	0	7	7
2	2	889	37	6	4	1	941	947.4	0	0	30	2	0	0	0	32	32

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	5	0	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0
0	0	7	0	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0
0	0	4	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0
0	0	5	4	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	21	4	3	0	0	28	29.5	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
1	0	21	6	0	0	0	28	27.2	0	0	0	0	0	0	0	0	0
1	0	16	3	1	0	0	21	20.7	0	0	0	0	0	0	0	0	0
0	0	26	0	1	1	0	28	29.8	0	0	0	0	0	0	0	0	0
2	0	73	10	2	1	0	88	88.7	0	0	0	0	0	0	0	0	0
0	0	25	4	0	0	0	29	29	0	0	0	0	0	0	0	0	0
1	0	29	3	1	0	0	34	33.7	0	0	0	0	0	0	0	0	0
0	0	68	0	0	0	0	68	68	0	0	0	0	0	0	0	0	0
0	0	66	1	0	0	0	67	67	0	0	0	0	0	0	0	0	0
1	0	188	8	1	0	0	198	197.7	0	0	0	0	0	0	0	0	0
0	0	43	0	1	0	0	44	44.5	0	0	0	0	0	0	0	0	0
0	0	92	7	1	1	1	102	104.8	0	0	0	0	0	0	0	0	0
1	0	94	3	1	0	0	99	98.7	0	0	0	0	0	0	0	0	0
0	0	89	5	2	0	0	96	97	0	0	0	0	0	0	0	0	0
1	0	318	15	5	1	1	341	345	0	0	0	0	0	0	0	0	0
0	2	119	4	0	0	0	125	123.8	0	0	0	0	0	0	0	0	0
2	0	113	8	0	0	0	123	121.4	0	0	0	0	0	0	0	0	0
7	0	127	6	1	0	0	141	135.9	0	0	0	0	0	0	0	0	0
2	0	89	8	0	0	0	99	97.4	0	0	0	0	0	0	0	0	0
11	2	448	26	1	0	0	488	478.5	0	0	0	0	0	0	0	0	0
0	1	150	10	2	0	0	163	163.4	0	0	0	0	0	0	0	0	0
0	0	119	0	2	0	0	121	122	0	0	0	0	0	0	0	0	0
1	0	131	6	0	0	0	138	137.2	0	0	0	0	0	0	0	0	0
2	0	162	4	0	0	0	168	166.4	0	0	0	0	0	0	0	0	0
3	1	562	20	4	0	0	590	589	0	0	0	0	0	0	0	0	0
0	0	141	6	0	0	0	147	147	0	0	0	0	0	0	0	0	0
0	1	188	5	1	0	0	195	194.9	0	0	0	0	0	0	0	0	0
2	0	164	9	0	0	0	175	173.4	0	0	0	0	0	0	0	0	0
1	1	151	3	0	0	0	156	154.6	0	0	0	0	0	0	0	0	0
3	2	644	23	1	0	0	673	669.9	0	0	0	0	0	0	0	0	0
0	1	166	2	2	0	0	171	171.4	0	0	0	0	0	0	0	0	0
0	1	119	5	0	0	0	125	124.4	0	0	0	0	0	0	0	0	0
0	0	173	1	1	0	1	176	177.5	0	0	0	0	0	0	0	0	0
1	0	157	6	1	0	0	165	164.7	0	0	0	0	0	0	0	0	0
1	2	615	14	4	0	1	637	638	0	0	0	0	0	0	0	0	0
0	0	213	2	1	0	0	216	216.5	0	0	0	0	0	0	0	0	0
0	0	185	1	0	0	0	186	186	0	0	0	0	0	0	0	0	0
0	0	218	0	0	0	0	218	218	0	0	0	0	0	0	0	0	0
0	0	216	1	2	0	0	219	220	0	0	0	0	0	0	0	0	0
0	0	832	4	3	0	0	839	840.5	0	0	0	0	0	0	0	0	0
0	0	178	2	0	0	0	180	180	0	0	0	0	0	0	0	0	0
1	1	200	1	1	0	0	204	203.1	0	0	0	0	0	0	0	0	0
0	0	167	3	1	0	0	171	171.5	0	0	0	0	0	0	0	0	0
1	0	171	0	1	0	0	173	172.7	0	0	0	0	0	0	0	0	0
2	1	716	6	3	0	0	728	727.3	0	0	0	0	0	0	0	0	0
0	0	156	2	2	0	0	160	161	0	0	0	0	0	0	0	0	0
1	0	161	0	0	0	0	162	161.2	0	0	0	0	0	0	0	0	0
0	0	124	1	0	0	0	125	125	0	0	0	0	0	0	0	0	0
0	0	129	0	1	0	0	130	130.5	0	0	0	0	0	0	0	0	0
1	0	570	3	3	0	0	577	577.7	0	0	0	0	0	0	0	0	0
0	1	138	0	0	0	0	139	138.4	0	0	0	0	0	0	0	0	0
0	0	92	0	0	0	0	92	92	0	0	0	0	0	0	0	0	0
0	0	88	5	0	0	0	93	93	0	0	0	0	0	0	0	0	0
0	0	69	2	0	0	0	71	71	0	0	0	0	0	0	0	0	0
0	1	387	7	0	0	0	395	394.4	0	0	0	0	0	0	0	0	0
25	9	5374	140	30	2	2	5582	5576	0	0	0	0	0	0	0	0	0

C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	2	1	0	0	0	3	3	0	0	5	0	0	0	1	6	7
0	0	6	2	0	0	0	8	8	0	0	9	0	0	0	1	10	11
0	0	2	0	0	0	0	2	2	0	0	1	1	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	9	10
0	0	2	0	0	0	0	2	2	0	0	18	0	0	0	0	18	18
0	0	6	0	0	0	0	6	6	0	0	34	1	0	0	1	36	37
0	1	4	2	0	0	0	7	6.4	0	0	18	1	0	0	0	19	19
0	0	3	0	0	0	0	3	3	0	0	21	1	0	0	1	23	24
0	0	3	0	0	0	0	3	3	0	0	29	1	0	0	0	30	30
0	0	4	0	0	0	1	5	6	0	0	25	1	0	0	0	26	26
0	1	14	2	0	0	1	18	18.4	0	0	93	4	0	0	1	98	99
0	0	13	1	0	0	1	15	16	0	0	21	2	0	0	1	24	25
0	0	9	1	0	0	0	10	10	0	0	34	3	0	0	0	37	37
0	0	12	1	0	0	1	14	15	0	0	33	2	1	0	0	36	36.5
0	0	10	0	0	0	0	10	10	0	0	41	1	1	0	1	44	45.5
0	0	44	3	0	0	2	49	51	0	0	129	8	2	0	2	141	144
0	0	13	3	0	0	0	16	16	0	0	40	2	0	0	0	42	42
0	0	14	1	0	0	0	15	15	0	1	48	2	0	0	0	51	50.4
0	0	10	0	0	0	1	11	12	0	0	41	0	0	0	0	41	41
0	0	12	0	0	0	0	12	12	0	0	64	0	0	0	0	64	64
0	0	49	4	0	0	1	54	55	0	1	193	4	0	0	0	198	197.4
0	0	19	1	0	0	0	20	20	0	0	47	2	0	0	0	49	49
0	0	6	0	0	0	1	7	8	0	0	61	0	0	0	0	61	61
0	0	10	2	0	0	0	12	12	0	0	65	3	1	0	1	70	71.5
0	0	16	2	0	0	0	18	18	0	1	69	3	0	0	0	73	72.4
0	0	51	5	0	0	1	57	58	0	1	242	8	1	0	1	253	253.9
0	0	16	1	0	0	0	17	17	0	0	47	2	0	0	1	50	51
0	0	19	2	0	0	1	22	23	0	0	47	1	0	0	0	48	48
0	0	18	1	0	0	0	19	19	0	0	52	2	0	0	0	54	54
0	0	18	2	0	0	0	20	20	0	0	51	3	0	0	1	55	56
0	0	71	6	0	0	1	78	79	0	0	197	8	0	0	2	207	209
0	0	20	0	0	0	1	21	22	0	0	55	2	0	0	0	57	57
0	0	15	0	0	0	1	16	17	0	0	57	0	1	0	0	58	58.5
0	0	17	1	0	0	0	18	18	0	0	51	1	0	0	0	52	52
0	0	15	0	0	0	0	15	15	0	0	59	1	1	0	0	61	61.5
0	0	67	1	0	0	2	70	72	0	0	222	4	2	0	0	228	229
0	0	20	0	0	0	0	20	20	0	0	64	2	0	0	0	66	66
0	0	25	3	0	0	1	29	30	0	0	70	0	0	0	1	71	72
0	0	26	0	0	0	0	26	26	0	0	64	1	0	0	0	65	65
0	0	29	1	0	0	0	30	30	0	0	59	3	1	0	0	63	63.5
0	0	100	4	0	0	1	105	106	0	0	257	6	1	0	1	265	266.5
0	0	23	2	0	0	1	26	27	0	0	58	1	1	0	0	60	60.5
0	0	25	2	0	0	0	27	27	0	0	69	5	0	0	1	75	76
0	0	23	2	0	0	0	25	25	0	0	58	1	0	0	0	59	59
0	0	24	0	0	0	1	25	26	0	0	54	0	0	0	0	54	54
0	0	95	6	0	0	2	103	105	0	0	239	7	1	0	1	248	249.5
0	0	22	2	0	0	0	24	24	0	0	49	0	0	0	1	50	51
0	0	16	1	0	0	0	17	17	0	0	57	0	0	0	0	57	57
0	0	25	0	0	0	1	26	27	0	0	32	0	0	0	0	32	32
0	0	20	0	0	0	0	20	20	0	0	32	0	0	0	0	32	32
0	0	83	3	0	0	1	87	88	0	0	170	0	0	0	1	171	172
0	0	14	1	0	0	0	15	15	0	0	45	2	0	0	1	48	49
0	0	15	0	0	0	0	15	15	0	1	34	0	0	0	1	36	36.4
0	0	13	0	0	0	0	13	13	0	0	31	0	0	0	0	31	31
0	0	7	0	0	0	0	7	7	0	0	20	0	0	0	0	20	20
0	0	49	1	0	0	0	50	50	0	1	130	2	0	0	2	135	136.4
0	1	635	37	0	0	12	685	696.4	0	3	1915	52	7	0	13	1990	2005

C=>E									D=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	8	2	0	1	0	11	12.3	0	0	5	2	1	0	0	8	8.5
0	0	7	1	0	0	0	8	8	0	0	3	2	0	0	0	5	5
0	0	4	1	0	0	0	5	5	0	0	8	0	1	0	0	9	9.5
0	0	8	7	0	0	0	15	15	0	0	5	0	0	0	1	6	7
0	0	27	11	0	1	0	39	40.3	0	0	21	4	2	0	1	28	30
0	0	12	1	0	0	0	13	13	0	0	16	0	0	0	0	16	16
0	0	11	2	0	0	0	13	13	0	0	20	2	0	0	0	22	22
0	0	20	1	1	0	0	22	22.5	0	0	24	2	0	0	1	27	28
0	0	36	1	0	0	0	37	37	0	0	19	1	0	0	0	20	20
0	0	79	5	1	0	0	85	85.5	0	0	79	5	0	0	1	85	86
0	0	26	1	0	0	0	27	27	0	0	26	2	1	0	0	29	29.5
0	0	32	2	0	0	0	34	34	0	0	34	6	0	1	1	42	44.3
0	0	46	1	0	1	0	48	49.3	0	0	36	4	0	0	0	40	40
0	0	41	10	0	0	0	51	51	0	0	55	2	0	0	0	57	57
0	0	145	14	0	1	0	160	161.3	0	0	151	14	1	1	1	168	170.8
0	0	38	3	0	1	0	42	43.3	0	0	35	6	1	0	0	42	42.5
0	0	57	3	0	2	0	62	64.6	0	0	35	1	0	0	0	36	36
0	0	71	2	0	2	0	75	77.6	0	0	34	3	0	0	0	37	37
0	0	67	2	0	0	0	69	69	0	0	21	2	0	0	0	23	23
0	0	233	10	0	5	0	248	254.5	0	0	125	12	1	0	0	138	138.5
0	0	65	7	0	0	0	72	72	0	0	50	2	0	0	1	53	54
0	0	75	7	0	0	0	82	82	0	0	39	2	0	0	0	41	41
0	0	87	4	0	1	0	92	93.3	0	0	51	3	0	0	0	54	54
0	1	98	6	1	1	0	107	108.2	0	0	41	1	0	0	1	43	44
0	1	325	24	1	2	0	353	355.5	0	0	181	8	0	0	2	191	193
0	0	83	7	0	1	0	91	92.3	0	0	60	4	0	0	0	64	64
0	0	99	5	0	0	0	104	104	0	0	44	3	0	0	0	47	47
0	0	115	5	0	0	0	120	120	0	0	47	8	0	0	0	55	55
0	0	115	4	0	1	0	120	121.3	0	0	45	3	0	0	1	49	50
0	0	412	21	0	2	0	435	437.6	0	0	196	18	0	0	1	215	216
0	0	101	4	0	0	0	105	105	0	0	53	3	0	0	0	56	56
0	0	108	3	0	0	0	111	111	0	0	53	3	0	0	1	57	58
0	0	108	6	1	0	0	115	115.5	0	0	50	2	0	0	0	52	52
0	0	85	6	0	0	0	91	91	0	0	37	1	0	0	0	38	38
0	0	402	19	1	0	0	422	422.5	0	0	193	9	0	0	1	203	204
0	0	103	3	0	0	0	106	106	0	0	30	0	0	0	1	31	32
0	0	112	9	0	1	0	122	123.3	0	0	39	2	0	0	0	41	41
0	0	108	8	1	1	0	118	119.8	0	0	38	2	0	0	0	40	40
0	0	101	2	1	0	0	104	104.5	0	0	37	0	0	0	0	37	37
0	0	424	22	2	2	0	450	453.6	0	0	144	4	0	0	1	149	150
0	0	102	13	2	0	0	117	118	0	0	28	4	0	0	0	32	32
0	0	95	5	0	0	0	100	100	0	0	45	5	0	0	0	50	50
0	0	92	4	0	1	1	98	100.3	0	0	36	0	0	0	1	37	38
0	0	115	8	0	0	0	123	123	0	0	41	2	0	0	0	43	43
0	0	404	30	2	1	1	438	441.3	0	0	150	11	0	0	1	162	163
0	0	88	12	0	0	0	100	100	0	0	28	0	0	0	0	28	28
0	0	113	8	0	0	0	121	121	0	0	39	1	0	0	1	41	42
0	0	100	4	0	0	0	104	104	0	0	26	4	1	0	0	31	31.5
0	0	88	4	0	0	0	92	92	0	0	40	0	0	0	0	40	40
0	0	389	28	0	0	0	417	417	0	0	133	5	1	0	1	140	141.5
0	0	99	1	2	0	0	102	103	0	0	33	0	0	0	1	34	35
0	0	105	2	0	0	0	107	107	0	0	40	0	0	0	0	40	40
0	0	77	0	0	0	0	77	77	0	0	37	0	0	0	0	37	37
0	0	95	3	0	1	0	99	100.3	0	0	32	0	0	0	0	32	32
0	0	376	6	2	1	0	385	387.3	0	0	142	0	0	0	1	143	144
0	0	89	1	1	0	0	91	91.5	0	0	34	1	0	0	1	36	37
0	1	55	0	0	1	0	57	57.7	0	0	35	0	0	0	0	35	35
0	0	42	0	0	0	1	43	44	0	0	22	1	0	0	1	24	25
0	0	36	0	0	0	0	36	36	0	0	30	0	0	0	0	30	30
0	1	222	1	1	1	1	227	229.2	0	0	121	2	0	0	2	125	127
0	2	3438	191	10	16	2	3659	3686	0	0	1636	92	5	1	13	1747	1764

D=>B									D=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	3
0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	1	14	15
0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	1	6	7
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	16	16
0	0	0	0	0	0	0	0	0	0	0	41	5	0	0	1	47	48
0	0	0	0	0	0	0	0	0	0	0	30	2	0	0	1	33	34
0	0	0	0	0	0	0	0	0	1	0	31	1	0	0	0	33	32.2
0	0	0	0	0	0	0	0	0	0	0	37	2	1	0	1	41	42.5
0	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	43	43
0	0	0	0	0	0	0	0	0	1	0	141	5	1	0	2	150	151.7
0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	32
0	0	0	0	0	0	0	0	0	0	0	43	3	0	0	0	46	46
0	0	0	0	0	0	0	0	0	0	0	39	4	0	0	1	44	45
0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	32	32
0	0	0	0	0	0	0	0	0	0	0	145	8	0	0	1	154	155
0	0	0	0	0	0	0	0	0	0	0	46	0	1	0	0	47	47.5
0	0	0	0	0	0	0	0	0	0	0	40	1	0	0	1	42	43
0	0	0	0	0	0	0	0	0	0	0	49	2	0	0	0	51	51
0	0	0	0	0	0	0	0	0	0	0	39	2	0	0	0	41	41
0	0	0	0	0	0	0	0	0	0	0	174	5	1	0	1	181	182.5
0	0	0	0	0	0	0	0	0	0	0	52	1	0	0	0	53	53
0	0	0	0	0	0	0	0	0	0	0	37	1	0	0	2	40	42
0	0	0	0	0	0	0	0	0	0	0	45	2	0	0	0	47	47
0	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	39	39
0	0	0	0	0	0	0	0	0	0	0	172	5	0	0	2	179	181
0	0	0	0	0	0	0	0	0	0	0	37	3	0	0	1	41	42
0	0	0	0	0	0	0	0	0	0	0	37	1	0	0	0	38	38
0	0	0	0	0	0	0	0	0	0	0	46	3	0	0	0	49	49
0	0	0	0	0	0	0	0	0	1	0	50	2	1	0	0	54	53.7
0	0	0	0	0	0	0	0	0	1	0	170	9	1	0	1	182	182.7
0	0	0	0	0	0	0	0	0	0	0	46	4	0	0	1	51	52
0	0	0	0	0	0	0	0	0	1	0	40	1	0	0	1	43	43.2
0	0	0	0	0	0	0	0	0	0	0	39	1	0	0	0	40	40
0	0	0	0	0	0	0	0	0	0	0	40	2	0	0	0	42	42
0	0	0	0	0	0	0	0	0	1	0	165	8	0	0	2	176	177.2
0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	34	34
0	0	0	0	0	0	0	0	0	0	0	39	2	0	0	2	43	45
0	0	0	0	0	0	0	0	0	0	0	47	1	0	0	0	48	48
0	0	0	0	0	0	0	0	0	0	0	39	2	0	0	0	41	41
0	0	0	0	0	0	0	0	0	0	0	159	5	0	0	2	166	168
0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	1	46	47
0	0	0	0	0	0	0	0	0	0	0	32	2	0	0	0	34	34
0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	35	35
0	0	0	0	0	0	0	0	0	0	0	35	1	1	0	1	38	39.5
0	0	0	0	0	0	0	0	0	0	0	147	3	1	0	2	153	155.5
0	0	0	0	0	0	0	0	0	0	0	22	1	0	0	0	23	23
0	0	0	0	0	0	0	0	0	0	0	28	2	0	0	0	30	30
0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	1	31	32
0	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	25	25
0	0	0	0	0	0	0	0	0	0	0	104	4	0	0	1	109	110
0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	25	25
0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	1	20	21
0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26	26
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	82	0	0	0	1	83	84
0	0	0	0	0	0	0	0	0	3	0	1512	58	4	0	17	1594	1611

D=>D									D=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	4	5.3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3	4.3
0	0	0	0	0	0	0	0	0	0	0	9	1	0	2	0	12	14.6
0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
0	0	1	0	0	0	0	1	1	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	3	0	0	0	0	3	3	0	0	16	2	1	0	0	19	19.5
0	0	2	0	0	0	0	2	2	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	6	0	1	1	0	8	9.8
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	2	0	0	0	0	2	2	0	0	30	0	1	1	0	32	33.8
0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	4	5.8
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	26	3	1	1	0	31	32.8
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	2	0	0	0	0	2	2	0	0	8	1	0	0	0	9	9
0	0	0	1	0	0	0	1	1	1	0	8	3	0	1	0	13	13.5
0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	7	8.3
0	0	2	1	0	0	0	3	3	1	0	35	4	0	2	0	42	43.8
0	0	2	0	0	0	0	2	2	0	0	14	0	0	0	0	14	14
0	0	2	0	0	0	0	2	2	0	0	14	0	0	0	0	14	14
0	0	2	0	0	0	0	2	2	0	0	12	2	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
0	0	6	0	0	0	0	6	6	0	0	54	3	0	0	0	57	57
0	0	0	0	0	0	0	0	0	0	0	21	1	0	1	0	23	24.3
0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	9
0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	1	0	0	0	0	1	1	0	0	41	3	0	1	0	45	46.3
0	0	1	0	0	0	0	1	1	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	7	8.3
0	0	3	0	0	0	0	3	3	0	1	12	2	0	0	0	15	14.4
0	0	1	0	0	0	0	1	1	0	0	8	3	0	0	0	11	11
0	0	5	0	0	0	0	5	5	0	1	34	5	0	1	0	41	41.7
0	0	1	0	0	0	0	1	1	0	0	10	2	0	0	0	12	12
0	0	1	0	0	0	0	1	1	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
0	0	1	0	0	0	0	1	1	0	0	15	1	0	0	0	16	16
0	0	3	0	0	0	0	3	3	0	0	37	5	0	0	0	42	42
0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
0	0	1	0	0	0	0	1	1	0	0	6	0	0	0	0	6	6
0	0	1	0	0	0	0	1	1	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	2	0	0	0	0	2	2	0	0	37	2	0	0	0	39	39
0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	1	0	0	0	0	1	1	0	0	9	0	0	0	0	9	9
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	25	1	0	0	0	26	26
0	0	1	0	0	0	0	1	1	0	0	6	0	0	0	0	6	6
0	0	1	0	0	0	0	1	1	0	0	10	1	0	0	0	11	11
0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	3	0	0	0	0	3	3	0	0	25	1	0	0	0	26	26
0	0	30	1	0	0	0	31	31	1	1	369	30	3	8	0	412	422.5

E=>A									E=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E=>C									E=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E=>E								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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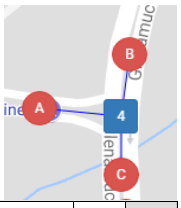
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 4
Date : 07/11/17
Location : Glenamuck Road/The Park Carrickmines



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
07:15	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
07:30	0	0	0	0	0	0	0	0	0	0	0	12	0	0	2	0	14	16.6
07:45	0	0	0	0	0	0	0	0	0	0	0	14	1	1	0	0	16	16.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	38	1	1	2	0	42	45.1
08:00	0	0	0	0	0	0	0	0	0	0	0	9	4	0	0	0	13	13
08:15	0	0	0	0	0	0	0	0	0	0	0	14	4	0	0	0	18	18
08:30	0	0	0	0	0	0	0	0	0	0	0	13	1	2	0	1	17	19
08:45	0	0	0	0	0	0	0	0	0	0	0	20	7	2	0	0	29	30
H/TOT	0	0	0	0	0	0	0	0	0	0	0	56	16	4	0	1	77	80
09:00	0	0	0	0	0	0	0	0	0	0	0	33	3	1	0	1	38	39.5
09:15	0	0	0	0	0	0	0	0	0	0	0	35	4	1	0	1	41	42.5
09:30	0	0	0	0	0	0	0	0	0	0	0	43	6	1	1	0	51	52.8
09:45	0	0	0	0	0	0	0	0	0	0	0	66	6	1	1	1	75	77.8
H/TOT	0	0	0	0	0	0	0	0	0	0	0	177	19	4	2	3	205	212.6
10:00	0	0	0	0	0	0	0	0	0	0	0	86	3	2	0	0	91	92
10:15	0	0	0	0	0	0	0	0	0	0	0	80	7	3	0	1	91	93.5
10:30	0	0	0	0	0	0	0	0	0	0	0	93	12	6	0	0	111	114
10:45	0	0	0	0	0	0	0	0	0	0	0	103	8	2	0	1	114	116
H/TOT	0	0	0	0	0	0	0	0	0	0	0	362	30	13	0	2	407	415.5
11:00	0	0	0	0	0	0	0	0	0	0	1	120	10	1	0	0	132	131.9
11:15	0	0	0	0	0	0	0	0	0	1	2	126	10	1	0	1	141	140.5
11:30	0	0	0	0	0	0	0	0	0	0	2	151	7	1	0	0	161	160.3
11:45	0	0	0	0	0	0	0	0	0	0	0	167	9	3	1	0	180	182.8
H/TOT	0	0	0	0	0	0	0	0	0	1	5	564	36	6	1	1	614	615.5
12:00	0	0	0	0	0	0	0	0	0	0	0	132	9	2	0	1	144	146
12:15	0	0	0	0	0	0	0	0	0	0	1	185	12	0	0	1	199	199.4
12:30	0	0	0	0	0	0	0	0	0	0	1	167	9	5	0	0	182	183.9
12:45	0	0	0	0	0	0	0	0	0	1	0	192	8	0	0	1	202	202.2
H/TOT	0	0	0	0	0	0	0	0	0	1	2	676	38	7	0	3	727	731.5
13:00	0	0	0	0	0	0	0	0	0	0	1	215	13	6	0	0	235	237.4
13:15	0	0	0	0	0	0	0	0	0	0	0	204	12	1	1	0	218	219.8
13:30	0	0	0	0	0	0	0	0	0	0	1	196	11	1	1	1	211	213.2
13:45	0	0	0	0	0	0	0	0	0	0	2	181	9	2	0	2	196	197.8
H/TOT	0	0	0	0	0	0	0	0	0	0	4	796	45	10	2	3	860	868.2
14:00	0	0	0	0	0	0	0	0	0	0	1	200	8	1	0	0	210	209.9
14:15	0	0	0	0	0	0	0	0	0	0	0	169	8	0	1	2	180	183.3
14:30	0	0	0	0	0	0	0	0	0	0	0	160	13	1	0	1	175	176.5
14:45	0	0	0	0	0	0	0	0	0	2	0	158	10	2	0	1	173	173.4
H/TOT	0	0	0	0	0	0	0	0	0	2	1	687	39	4	1	4	738	743.1
15:00	0	0	0	0	0	0	0	0	0	0	0	155	14	1	0	0	170	170.5
15:15	0	0	0	0	0	0	0	0	0	0	0	179	9	4	2	1	195	200.6
15:30	0	0	0	0	0	0	0	0	0	0	0	186	8	0	0	1	195	196
15:45	0	0	0	0	0	0	0	0	0	0	0	198	11	0	0	0	209	209
H/TOT	0	0	0	0	0	0	0	0	0	0	0	718	42	5	2	2	769	776.1
16:00	0	0	0	0	0	0	0	0	0	0	1	184	18	0	1	1	205	206.7
16:15	0	0	0	0	0	0	0	0	0	0	0	187	12	0	0	0	199	199
16:30	0	0	0	0	0	0	0	0	0	0	0	181	16	1	0	1	199	200.5
16:45	0	0	0	0	0	0	0	0	0	1	0	173	7	3	0	1	185	186.7
H/TOT	0	0	0	0	0	0	0	0	0	1	1	725	53	4	1	3	788	792.9
17:00	0	0	0	0	0	0	0	0	0	0	1	177	6	0	0	1	185	185.4
17:15	0	0	0	0	0	0	0	0	0	0	1	150	6	2	0	0	159	159.4
17:30	0	0	0	0	0	0	0	0	0	1	1	187	5	0	0	1	195	194.6
17:45	0	0	0	0	0	0	0	0	0	1	1	150	4	0	0	0	156	154.6
H/TOT	0	0	0	0	0	0	0	0	0	2	4	664	21	2	0	2	695	694
18:00	0	0	0	0	0	0	0	0	0	0	2	166	4	1	0	1	174	174.3
18:15	0	0	0	0	0	0	0	0	0	0	0	124	6	0	0	1	131	132
18:30	0	0	0	0	0	0	0	0	0	0	1	88	2	2	0	1	94	95.4
18:45	0	0	0	0	0	0	0	0	0	0	0	80	3	0	0	0	83	83
H/TOT	0	0	0	0	0	0	0	0	0	0	3	458	15	3	0	3	482	484.7
12 TOT	0	0	0	0	0	0	0	0	0	7	20	5921	355	63	11	27	6404	6459

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

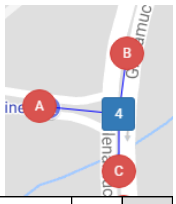
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	1	0	63	14	2	0	1	81	82.2
0	0	0	0	0	0	0	0	0	1	0	81	30	3	2	0	117	120.3
0	0	0	0	0	0	0	0	0	0	0	95	22	3	2	2	124	130.1
0	0	0	0	0	0	0	0	0	0	0	138	26	2	2	0	168	171.6
0	0	0	0	0	0	0	0	0	2	0	377	92	10	6	3	490	504.2
0	0	0	0	0	0	0	0	0	0	0	116	17	3	0	1	137	139.5
0	0	0	0	0	0	0	0	0	0	2	134	11	6	4	0	157	164
0	0	0	0	0	0	0	0	0	0	0	155	9	5	1	2	172	177.8
0	0	0	0	0	0	0	0	0	1	1	191	19	2	3	0	217	220.5
0	0	0	0	0	0	0	0	0	1	3	596	56	16	8	3	683	701.8
0	0	0	0	0	0	0	0	0	0	1	193	21	1	4	3	223	231.1
0	0	0	0	0	0	0	0	0	0	0	162	9	7	2	0	180	186.1
0	0	0	0	0	0	0	0	0	0	0	162	17	2	1	1	183	186.3
0	0	0	0	0	0	0	0	0	0	0	170	9	4	7	2	192	205.1
0	0	0	0	0	0	0	0	0	0	1	687	56	14	14	6	778	808.6
0	0	0	0	0	0	0	0	0	0	1	212	19	6	2	0	240	245
0	0	0	0	0	0	0	0	0	0	1	183	12	5	1	2	204	209.2
0	0	0	0	0	0	0	0	0	1	3	167	22	4	2	0	199	201
0	0	0	0	0	0	0	0	0	0	1	198	17	2	3	2	223	229.3
0	0	0	0	0	0	0	0	0	1	6	760	70	17	8	4	866	884.5
0	0	0	0	0	0	0	0	0	1	1	197	16	3	3	0	221	225
0	0	0	0	0	0	0	0	0	0	0	186	20	5	1	2	214	219.8
0	0	0	0	0	0	0	0	0	1	4	241	14	7	3	1	271	276.2
0	0	0	0	0	0	0	0	0	0	2	212	25	6	1	0	246	249.1
0	0	0	0	0	0	0	0	0	2	7	836	75	21	8	3	952	970.1
0	0	0	0	0	0	0	0	0	1	1	232	26	2	0	2	264	265.6
0	0	0	0	0	0	0	0	0	1	0	232	10	12	3	2	260	271.1
0	0	0	0	0	0	0	0	0	0	1	225	16	11	2	0	255	262.5
0	0	0	0	0	0	0	0	0	0	0	230	22	4	1	1	258	262.3
0	0	0	0	0	0	0	0	0	2	2	919	74	29	6	5	1037	1062
0	0	0	0	0	0	0	0	0	0	0	243	13	4	4	1	265	273.2
0	0	0	0	0	0	0	0	0	1	1	259	6	4	5	1	277	285.1
0	0	0	0	0	0	0	0	0	0	2	204	15	4	2	2	229	234.4
0	0	0	0	0	0	0	0	0	1	1	219	24	4	2	2	253	258.2
0	0	0	0	0	0	0	0	0	2	4	925	58	16	13	6	1024	1051
0	0	0	0	0	0	0	0	0	0	1	248	13	1	0	0	263	262.9
0	0	0	0	0	0	0	0	0	0	0	218	14	6	3	2	243	251.9
0	0	0	0	0	0	0	0	0	0	0	195	17	4	1	1	218	222.3
0	0	0	0	0	0	0	0	0	0	0	238	11	6	3	1	259	266.9
0	0	0	0	0	0	0	0	0	0	1	899	55	17	7	4	983	1004
0	0	0	0	0	0	0	0	0	0	0	201	15	2	3	1	222	227.9
0	0	0	0	0	0	0	0	0	0	0	207	21	3	1	1	233	236.8
0	0	0	0	0	0	0	0	0	0	0	210	16	1	1	2	230	233.8
0	0	0	0	0	0	0	0	0	1	2	175	16	2	5	0	201	206.5
0	0	0	0	0	0	0	0	0	1	2	793	68	8	10	4	886	905
0	0	0	0	0	0	0	0	0	0	2	223	21	1	1	3	251	254.6
0	0	0	0	0	0	0	0	0	2	1	228	19	4	1	0	255	256.1
0	0	0	0	0	0	0	0	0	1	0	252	23	2	0	2	280	282.2
0	0	0	0	0	0	0	0	0	0	2	226	31	1	2	1	263	265.9
0	0	0	0	0	0	0	0	0	3	5	929	94	8	4	6	1049	1059
0	0	0	0	0	0	0	0	0	2	3	279	20	2	0	2	308	307.6
0	0	0	0	0	0	0	0	0	1	0	261	16	4	0	0	282	283.2
0	0	0	0	0	0	0	0	0	0	0	227	11	0	0	1	239	240
0	0	0	0	0	0	0	0	0	2	1	213	18	1	1	1	237	237.6
0	0	0	0	0	0	0	0	0	5	4	980	65	7	1	4	1066	1068
0	0	0	0	0	0	0	0	0	1	0	265	4	1	1	3	275	279
0	0	0	0	0	0	0	0	0	0	1	243	12	1	0	0	257	256.9
0	0	0	0	0	0	0	0	0	2	0	232	6	2	0	2	244	245.4
0	0	0	0	0	0	0	0	0	0	0	187	8	0	0	1	196	197
0	0	0	0	0	0	0	0	0	3	1	927	30	4	1	6	972	978.3
0	0	0	0	0	0	0	0	0	22	36	9628	793	167	86	54	10786	10996

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	27	6	0	0	0	33	33	1	0	32	4	0	1	0	38	38.5
0	0	33	6	0	1	0	40	41.3	1	0	86	9	1	2	1	100	103.3
0	0	35	7	1	1	0	44	45.8	2	0	120	11	3	1	0	137	138.2
1	0	46	7	0	0	0	54	53.2	0	0	112	8	2	2	3	127	133.6
1	0	141	26	1	2	0	171	173.3	4	0	350	32	6	6	4	402	413.6
1	0	52	6	0	0	0	59	58.2	2	1	153	6	1	5	2	170	176.8
0	0	68	8	2	2	0	80	83.6	2	2	190	15	5	0	1	215	215.7
1	0	105	3	3	0	1	113	114.7	4	1	200	10	6	1	2	224	226.5
0	1	134	5	1	0	0	141	140.9	1	4	136	5	3	1	1	151	151.6
2	1	359	22	6	2	1	393	397.4	9	8	679	36	15	7	6	760	770.6
1	0	151	10	1	0	1	164	164.7	0	1	96	2	4	2	0	105	109
0	1	147	7	2	0	1	158	159.4	1	0	73	8	2	1	0	85	86.5
0	0	131	6	2	0	0	139	140	1	1	77	5	1	2	1	88	90.7
0	0	139	3	3	0	1	146	148.5	0	0	39	9	0	1	1	50	52.3
1	1	568	26	8	0	3	607	612.6	2	2	285	24	7	6	2	328	338.5
0	1	183	5	4	0	0	193	194.4	0	1	30	11	4	1	0	47	49.7
0	0	147	6	3	0	1	157	159.5	0	2	45	6	3	4	1	61	67.5
0	2	135	9	3	0	0	149	149.3	1	0	23	8	0	3	0	35	38.1
0	1	159	10	1	1	1	173	175.2	2	1	33	3	1	2	1	43	44.9
0	4	624	30	11	1	2	672	678.4	3	4	131	28	8	10	2	186	200.2
0	1	160	11	0	0	0	172	171.4	0	1	45	3	2	3	0	54	58.3
0	0	134	12	1	0	1	148	149.5	0	0	46	0	5	4	1	56	64.7
0	1	183	7	2	0	0	193	193.4	0	0	22	9	3	3	0	37	42.4
0	3	158	5	4	0	0	170	170.2	0	0	41	8	2	1	1	53	56.3
0	5	635	35	7	0	1	683	684.5	0	1	154	20	12	11	2	200	221.7
0	1	166	15	1	0	1	184	184.9	2	0	47	1	3	4	0	57	62.1
1	0	180	9	2	1	1	194	196.5	2	0	39	4	2	0	2	49	50.4
0	0	201	10	6	0	0	217	220	1	0	38	10	3	1	0	53	55
0	2	174	12	2	1	2	193	196.1	0	0	37	3	7	1	0	48	52.8
1	3	721	46	11	2	4	788	797.5	5	0	161	18	15	6	2	207	220.3
0	1	186	8	2	1	0	198	199.7	0	0	49	4	2	2	1	58	62.6
0	0	198	10	3	0	1	212	214.5	1	0	58	7	4	3	0	73	78.1
1	1	180	8	1	0	1	192	192.1	0	0	45	10	8	0	0	63	67
1	1	171	6	0	0	1	180	179.6	0	0	52	5	3	4	0	64	70.7
2	3	735	32	6	1	3	782	785.9	1	0	204	26	17	9	1	258	278.4
0	0	198	9	0	0	0	207	207	1	1	92	2	6	2	0	104	108.2
0	0	170	15	2	0	2	189	192	0	0	55	5	3	1	0	64	66.8
0	0	151	5	2	0	0	158	159	0	0	28	4	1	2	1	36	40.1
0	0	183	4	2	0	1	190	192	0	0	64	3	2	2	1	72	76.6
0	0	702	33	6	0	3	744	750	1	1	239	14	12	7	2	276	291.7
0	0	153	6	2	2	0	163	166.6	1	0	50	3	5	2	0	61	65.3
0	0	145	10	0	0	1	156	157	1	0	55	6	2	3	0	67	71.1
0	0	137	11	0	0	1	149	150	1	1	66	5	6	2	0	81	85.2
0	0	125	12	1	1	0	139	140.8	1	0	60	11	2	3	1	78	83.1
0	0	560	39	3	3	2	607	614.4	4	1	231	25	15	10	1	287	304.7
0	0	124	9	0	0	1	134	135	0	0	70	15	3	1	0	89	91.8
0	0	114	7	1	0	0	122	122.5	0	1	67	7	2	3	2	82	88.3
0	0	115	7	0	0	1	123	124	2	0	40	9	3	1	0	55	56.2
0	2	84	8	1	0	1	96	96.3	0	0	70	21	2	1	0	94	96.3
0	2	437	31	2	0	3	475	477.8	2	1	247	52	10	6	2	320	332.6
0	0	88	5	1	0	1	95	96.5	3	0	36	7	0	0	1	47	45.6
0	0	101	7	0	0	0	108	108	1	1	80	11	2	0	0	95	94.6
0	1	85	4	0	0	2	92	93.4	0	2	48	16	1	0	0	67	66.3
0	0	67	7	1	0	0	75	75.5	0	1	55	4	1	0	1	62	62.9
0	1	341	23	2	0	3	370	373.4	4	4	219	38	4	0	2	271	269.4
0	0	67	2	1	1	1	72	74.8	2	0	23	8	0	0	1	34	33.4
0	0	57	5	1	0	0	63	63.5	1	0	39	1	0	0	0	41	40.2
0	0	68	2	0	0	1	71	72	4	0	57	16	0	0	0	77	73.8
0	0	57	4	0	0	0	61	61	0	0	40	2	1	0	1	44	45.5
0	0	249	13	2	1	2	267	271.3	7	0	159	27	1	0	2	196	192.9
7	20	6072	356	65	12	27	6559	6617	42	22	3059	340	122	78	28	3691	3835

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 4
Date : 09/11/17
Location : Glenamuck Road/The Park Carrickmines



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
07:15	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	7	7
07:30	0	0	0	0	0	0	0	0	0	0	0	12	3	0	0	0	15	15
07:45	0	0	0	0	0	0	0	0	0	0	0	11	4	0	0	0	15	15
H/TOT	0	0	0	0	0	0	0	0	0	0	0	38	10	0	0	0	48	48
08:00	0	0	0	0	0	0	0	0	0	0	0	16	1	2	0	0	19	20
08:15	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	1	10	11
08:30	0	0	0	0	0	0	0	0	0	0	0	15	3	0	1	1	20	22.3
08:45	0	0	0	0	0	0	0	0	0	0	0	17	1	2	1	2	23	27.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	56	6	4	2	4	72	80.6
09:00	0	0	0	0	0	0	0	0	0	0	0	46	4	3	0	0	53	54.5
09:15	0	0	0	0	0	0	0	0	0	0	2	48	5	5	1	0	61	63.6
09:30	0	0	0	0	0	0	0	0	0	0	0	41	9	1	0	1	52	53.5
09:45	0	0	0	0	0	0	0	0	0	0	0	71	3	1	1	2	78	81.8
H/TOT	0	0	0	0	0	0	0	0	0	0	2	206	21	10	2	3	244	253.4
10:00	0	0	0	0	0	0	0	0	0	1	0	70	11	3	0	0	85	85.7
10:15	0	0	0	0	0	0	0	0	0	0	0	104	8	1	0	2	115	117.5
10:30	0	0	0	0	0	0	0	0	0	0	0	92	9	2	1	0	104	106.3
10:45	0	0	0	0	0	0	0	0	0	0	0	83	11	2	0	2	98	101
H/TOT	0	0	0	0	0	0	0	0	0	1	0	349	39	8	1	4	402	410.5
11:00	0	0	0	0	0	0	0	0	0	0	0	110	5	2	0	0	117	118
11:15	0	0	0	0	0	0	0	0	0	0	0	130	7	1	0	1	139	140.5
11:30	0	0	0	0	0	0	0	0	0	0	0	117	8	3	0	0	128	129.5
11:45	0	0	0	0	0	0	0	0	0	0	0	184	13	2	1	1	201	204.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	541	33	8	1	2	585	592.3
12:00	0	0	0	0	0	0	0	0	0	0	2	153	10	4	0	1	170	171.8
12:15	0	0	0	0	0	0	0	0	0	0	0	160	10	3	0	2	175	178.5
12:30	0	0	0	0	0	0	0	0	0	0	1	175	13	3	2	0	194	197.5
12:45	0	0	0	0	0	0	0	0	0	0	0	192	12	0	1	2	207	210.3
H/TOT	0	0	0	0	0	0	0	0	0	0	3	680	45	10	3	5	746	758.1
13:00	0	0	0	0	0	0	0	0	0	0	0	185	9	2	0	0	196	197
13:15	0	0	0	0	0	0	0	0	0	0	0	218	18	1	0	1	238	239.5
13:30	0	0	0	0	0	0	0	0	0	0	1	210	12	0	0	1	224	224.4
13:45	0	0	0	0	0	0	0	0	0	0	3	172	9	2	0	1	187	187.2
H/TOT	0	0	0	0	0	0	0	0	0	0	4	785	48	5	0	3	845	848.1
14:00	0	0	0	0	0	0	0	0	0	0	2	185	6	3	0	1	197	198.3
14:15	0	0	0	0	0	0	0	0	0	1	0	171	14	0	3	2	191	196.1
14:30	0	0	0	0	0	0	0	0	0	0	0	156	7	1	2	0	166	169.1
14:45	0	0	0	0	0	0	0	0	0	0	0	164	13	3	0	2	182	185.5
H/TOT	0	0	0	0	0	0	0	0	0	1	2	676	40	7	5	5	736	749
15:00	0	0	0	0	0	0	0	0	0	0	0	181	14	0	0	0	195	195
15:15	0	0	0	0	0	0	0	0	0	0	0	179	14	1	0	1	195	196.5
15:30	0	0	0	0	0	0	0	0	0	0	0	190	11	1	0	1	203	204.5
15:45	0	0	0	0	0	0	0	0	0	0	0	191	14	0	0	1	206	207
H/TOT	0	0	0	0	0	0	0	0	0	0	0	741	53	2	0	3	799	803
16:00	0	0	0	0	0	0	0	0	0	1	1	177	12	4	0	1	196	197.6
16:15	0	0	0	0	0	0	0	0	0	0	0	186	13	0	1	1	201	203.3
16:30	0	0	0	0	0	0	0	0	0	0	0	167	10	0	0	0	177	177
16:45	0	0	0	0	0	0	0	0	0	0	0	183	5	0	1	1	190	192.3
H/TOT	0	0	0	0	0	0	0	0	0	1	1	713	40	4	2	3	764	770.2
17:00	0	0	0	0	0	0	0	0	0	0	0	172	9	1	0	2	184	186.5
17:15	0	0	0	0	0	0	0	0	0	1	1	127	12	0	0	0	141	139.6
17:30	0	0	0	0	0	0	0	0	0	1	1	188	9	1	0	0	200	199.1
17:45	0	0	0	0	0	0	0	0	0	0	0	137	8	0	0	0	145	145
H/TOT	0	0	0	0	0	0	0	0	0	2	2	624	38	2	0	2	670	670.2
18:00	0	0	0	0	0	0	0	0	0	0	0	165	10	0	0	2	177	179
18:15	0	0	0	0	0	0	0	0	0	0	0	115	1	0	0	1	117	118
18:30	0	0	0	0	0	0	0	0	0	0	1	111	7	0	0	0	119	118.4
18:45	0	0	0	0	0	0	0	0	0	0	0	81	2	0	0	1	84	85
H/TOT	0	0	0	0	0	0	0	0	0	0	1	472	20	0	0	4	497	500.4
12 TOT	0	0	0	0	0	0	0	0	0	5	15	5881	393	60	16	38	6408	6484

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	37	16	2	3	0	58	62.9
0	0	0	0	0	0	0	0	0	1	0	57	23	6	2	1	90	95.8
0	0	0	0	0	0	0	0	0	0	0	76	31	3	3	1	114	120.4
0	0	0	0	0	0	0	0	0	2	0	121	22	6	2	1	154	159
0	0	0	0	0	0	0	0	0	3	0	291	92	17	10	3	416	438.1
0	0	0	0	0	0	0	0	0	1	1	99	8	7	5	1	122	131.6
0	0	0	0	0	0	0	0	0	0	0	119	15	5	2	1	142	148.1
0	0	0	0	0	0	0	0	0	1	1	172	13	8	1	2	198	203.9
0	0	0	0	0	0	0	0	0	2	0	167	14	3	4	1	191	197.1
0	0	0	0	0	0	0	0	0	4	2	557	50	23	12	5	653	680.7
0	0	0	0	0	0	0	0	0	1	0	197	18	3	2	0	221	224.3
0	0	0	0	0	0	0	0	0	0	0	154	12	11	2	1	180	189.1
0	0	0	0	0	0	0	0	0	0	1	153	17	2	3	2	178	184.3
0	0	0	0	0	0	0	0	0	0	1	181	18	6	3	2	211	219.3
0	0	0	0	0	0	0	0	0	1	2	685	65	22	10	5	790	817
0	0	0	0	0	0	0	0	0	0	0	206	7	2	2	0	217	220.6
0	0	0	0	0	0	0	0	0	1	0	167	16	4	2	2	192	197.8
0	0	0	0	0	0	0	0	0	1	1	156	36	4	7	1	206	216.7
0	0	0	0	0	0	0	0	0	0	1	170	19	4	2	2	198	204
0	0	0	0	0	0	0	0	0	2	2	699	78	14	13	5	813	839.1
0	0	0	0	0	0	0	0	0	1	1	201	12	5	0	0	220	221.1
0	0	0	0	0	0	0	0	0	0	1	172	7	3	3	1	187	192.8
0	0	0	0	0	0	0	0	0	4	1	173	24	5	1	1	209	210
0	0	0	0	0	0	0	0	0	0	2	205	15	5	2	0	229	232.9
0	0	0	0	0	0	0	0	0	5	5	751	58	18	6	2	845	856.8
0	0	0	0	0	0	0	0	0	0	1	227	18	8	4	5	263	276.6
0	0	0	0	0	0	0	0	0	1	0	226	14	6	3	2	252	260.1
0	0	0	0	0	0	0	0	0	0	3	203	20	2	2	0	230	231.8
0	0	0	0	0	0	0	0	0	1	0	237	31	5	3	2	279	286.6
0	0	0	0	0	0	0	0	0	2	4	893	83	21	12	9	1024	1055
0	0	0	0	0	0	0	0	0	3	1	203	19	3	3	0	232	234.4
0	0	0	0	0	0	0	0	0	0	2	236	19	4	3	1	265	270.7
0	0	0	0	0	0	0	0	0	0	3	196	20	5	0	2	226	228.7
0	0	0	0	0	0	0	0	0	2	1	228	23	7	3	1	265	271.2
0	0	0	0	0	0	0	0	0	5	7	863	81	19	9	4	988	1005
0	0	0	0	0	0	0	0	0	0	0	176	11	1	3	1	192	197.4
0	0	0	0	0	0	0	0	0	0	0	181	18	0	6	2	207	216.8
0	0	0	0	0	0	0	0	0	0	1	227	15	3	4	0	250	256.1
0	0	0	0	0	0	0	0	0	0	0	213	31	0	5	2	251	259.5
0	0	0	0	0	0	0	0	0	0	1	797	75	4	18	5	900	929.8
0	0	0	0	0	0	0	0	0	0	0	206	20	2	3	1	232	237.9
0	0	0	0	0	0	0	0	0	0	0	208	15	4	2	1	230	235.6
0	0	0	0	0	0	0	0	0	2	0	188	19	2	2	3	216	221
0	0	0	0	0	0	0	0	0	1	1	194	19	3	0	0	218	218.1
0	0	0	0	0	0	0	0	0	3	1	796	73	11	7	5	896	912.6
0	0	0	0	0	0	0	0	0	2	0	208	28	1	5	2	246	253.4
0	0	0	0	0	0	0	0	0	0	0	241	24	2	1	0	268	270.3
0	0	0	0	0	0	0	0	0	0	2	240	25	0	2	1	270	272.4
0	0	0	0	0	0	0	0	0	0	0	276	23	2	1	1	303	306.3
0	0	0	0	0	0	0	0	0	2	2	965	100	5	9	4	1087	1102
0	0	0	0	0	0	0	0	0	0	0	244	23	1	0	2	270	272.5
0	0	0	0	0	0	0	0	0	2	0	279	19	0	0	1	301	300.4
0	0	0	0	0	0	0	0	0	1	1	285	20	0	0	0	307	305.6
0	0	0	0	0	0	0	0	0	0	0	228	9	0	0	1	238	239
0	0	0	0	0	0	0	0	0	3	1	1036	71	1	0	4	1116	1118
0	0	0	0	0	0	0	0	0	0	1	235	10	2	0	2	250	252.4
0	0	0	0	0	0	0	0	0	0	3	243	10	0	0	1	257	256.2
0	0	0	0	0	0	0	0	0	0	1	202	7	0	1	0	211	211.7
0	0	0	0	0	0	0	0	0	0	0	204	11	2	0	1	218	220
0	0	0	0	0	0	0	0	0	0	5	884	38	4	1	4	936	940.3
0	0	0	0	0	0	0	0	0	30	32	9217	864	159	107	55	10464	10694

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	28	7	1	0	0	36	36.5	1	0	36	5	1	0	0	43	42.7
0	0	38	9	0	0	0	47	47	1	1	70	8	3	2	1	86	89.7
0	0	35	11	0	0	0	46	46	1	0	119	6	3	1	1	131	134
0	0	52	7	3	0	0	62	63.5	0	2	139	8	1	1	2	153	155.6
0	0	153	34	4	0	0	191	193	3	3	364	27	8	4	4	413	422
1	0	45	2	1	1	0	50	51	1	1	114	4	0	3	3	126	131.5
0	0	44	5	2	0	2	53	56	3	2	162	19	0	2	0	188	187
1	0	119	2	0	1	0	123	123.5	2	0	165	6	4	2	2	181	186
1	1	173	5	0	2	2	184	187.2	1	1	120	9	6	1	0	138	140.9
3	1	381	14	3	4	4	410	417.7	7	4	561	38	10	8	5	633	645.4
0	2	160	9	4	0	0	175	175.8	0	1	91	4	1	0	0	97	96.9
0	0	118	6	3	0	0	127	128.5	0	1	95	9	4	3	1	113	119.3
0	1	125	6	1	0	1	134	134.9	2	1	47	9	2	1	0	62	62.1
0	2	165	14	3	0	2	186	188.3	0	0	63	7	1	3	0	74	78.4
0	5	568	35	11	0	3	622	627.5	2	3	296	29	8	7	1	346	356.7
0	1	142	5	2	0	0	150	150.4	0	0	43	0	0	2	0	45	47.6
0	0	135	9	2	1	2	149	153.3	0	0	46	4	0	3	0	53	56.9
0	0	136	10	2	0	0	148	149	1	1	34	3	2	2	0	43	45.2
0	0	141	10	1	0	2	154	156.5	0	0	28	8	0	5	0	41	47.5
0	1	554	34	7	1	4	601	609.2	1	1	151	15	2	12	0	182	197.2
1	0	177	10	2	0	0	190	190.2	1	0	48	2	2	2	0	55	57.8
0	0	123	5	3	0	1	132	134.5	1	1	34	2	0	1	0	39	38.9
1	0	144	18	7	1	0	171	175	0	1	34	3	3	1	1	43	46.2
0	3	179	7	2	0	1	192	192.2	0	0	20	12	3	2	0	37	41.1
2	3	623	40	14	1	2	685	691.9	2	2	136	19	8	6	1	174	184
0	0	182	8	3	0	1	194	196.5	0	2	61	9	2	3	0	77	80.7
0	0	208	10	2	2	2	224	229.6	0	0	45	13	3	1	0	62	64.8
0	2	181	8	0	1	0	192	192.1	2	0	26	4	4	1	1	38	40.7
0	0	171	18	3	0	2	194	197.5	0	0	65	0	3	1	0	69	71.8
0	2	742	44	8	3	5	804	815.7	2	2	197	26	12	6	1	246	258
0	0	181	18	0	0	0	199	199	1	1	37	0	5	2	0	46	49.7
0	2	182	11	2	1	1	199	201.1	2	0	24	5	0	3	0	34	36.3
0	2	163	9	3	0	1	178	179.3	0	1	65	13	2	3	0	84	88.3
1	1	179	12	1	1	2	197	199.4	1	0	50	12	2	4	0	69	74.4
1	5	705	50	6	2	4	773	778.8	4	2	176	30	9	12	0	233	248.7
0	0	155	8	1	1	0	165	166.8	0	0	46	1	1	3	1	52	57.4
0	0	147	10	2	2	2	163	168.6	1	1	59	5	0	2	1	69	71.2
0	0	169	8	4	1	1	183	187.3	1	0	28	11	0	2	0	42	43.8
0	0	185	25	0	0	1	211	212	1	0	75	12	0	3	0	91	94.1
0	0	656	51	7	4	4	722	734.7	3	1	208	29	1	10	2	254	266.5
0	0	165	8	1	0	0	174	174.5	0	0	53	6	0	5	0	64	70.5
0	0	162	8	1	0	2	173	175.5	0	0	60	0	2	3	0	65	69.9
0	0	136	10	0	0	0	146	146	0	0	61	3	3	4	0	71	77.7
0	0	161	9	2	0	1	173	175	2	0	55	18	0	2	1	78	80
0	0	624	35	4	0	3	666	671	2	0	229	27	5	14	1	278	298.1
0	1	112	12	0	1	1	127	128.7	1	0	51	13	1	2	2	70	74.3
1	0	121	10	1	0	1	134	134.7	0	0	33	10	3	1	1	48	51.8
0	0	113	5	0	0	0	118	118	0	0	37	15	1	1	0	54	55.8
0	0	114	8	1	0	1	124	125.5	0	2	29	9	1	1	0	42	42.6
1	1	460	35	2	1	3	503	506.9	1	2	150	47	6	5	3	214	224.5
0	1	82	7	1	0	2	93	94.9	0	0	56	9	2	2	0	69	72.6
0	1	115	6	0	0	0	122	121.4	2	0	65	7	1	1	1	77	78.2
0	0	94	7	0	0	0	101	101	0	1	83	2	0	0	0	86	85.4
0	0	111	8	0	0	1	120	121	2	0	72	4	1	0	0	79	77.9
0	2	402	28	1	0	3	436	438.3	4	1	276	22	4	3	1	311	314.1
0	0	84	6	0	0	1	91	92	0	2	58	2	0	0	0	62	60.8
0	1	67	8	1	0	1	78	78.9	0	1	32	0	1	0	1	35	35.9
0	0	58	10	0	0	0	68	68	0	0	81	0	1	0	0	82	82.5
0	0	48	4	1	0	2	55	57.5	0	0	53	0	0	2	0	55	57.6
0	1	257	28	2	0	4	292	296.4	0	3	224	2	2	2	1	234	236.8
7	21	6125	428	69	16	39	6705	6781	31	24	2968	311	75	89	20	3518	3652

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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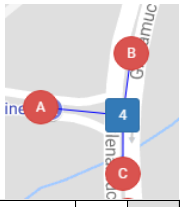
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 4
Date : 11/11/17
Location : Glenamuck Road/The Park Carrickmines



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	0	7	7.5
07:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3	4.3
07:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
07:45	0	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	16
H/TOT	0	0	0	0	0	0	0	0	0	0	0	26	4	1	1	0	32	33.8
08:00	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	9
08:15	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
08:30	0	0	0	0	0	0	0	0	0	0	0	18	1	1	0	0	20	20.5
08:45	0	0	0	0	0	0	0	0	0	0	0	30	0	0	1	0	31	32.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	58	5	1	1	0	65	66.8
09:00	0	0	0	0	0	0	0	0	0	0	1	33	6	0	0	0	40	39.4
09:15	0	0	0	0	0	0	0	0	0	0	0	35	1	0	0	0	36	36
09:30	0	0	0	0	0	0	0	0	0	0	0	72	2	0	0	0	74	74
09:45	0	0	0	0	0	0	0	0	0	0	0	67	5	0	0	1	73	74
H/TOT	0	0	0	0	0	0	0	0	0	0	1	207	14	0	0	1	223	223.4
10:00	0	0	0	0	0	0	0	0	0	0	0	78	3	0	1	1	83	85.3
10:15	0	0	0	0	0	0	0	0	0	0	0	92	6	1	1	0	100	101.8
10:30	0	0	0	0	0	0	0	0	0	0	0	135	5	1	1	1	143	145.8
10:45	0	0	0	0	0	0	0	0	0	0	0	150	8	3	0	1	162	164.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	455	22	5	3	3	488	497.4
11:00	0	0	0	0	0	0	0	0	0	0	0	162	9	0	0	0	171	171
11:15	0	0	0	0	0	0	0	0	0	0	1	190	8	0	0	0	199	198.4
11:30	0	0	0	0	0	0	0	0	0	0	0	186	9	1	1	1	198	200.8
11:45	0	0	0	0	0	0	0	0	0	0	0	239	7	1	1	0	248	249.8
H/TOT	0	0	0	0	0	0	0	0	0	0	1	777	33	2	2	1	816	820
12:00	0	0	0	0	0	0	0	0	0	0	1	222	12	1	0	0	236	235.9
12:15	0	0	0	0	0	0	0	0	0	0	0	229	5	2	0	1	237	239
12:30	0	0	0	0	0	0	0	0	0	0	0	231	11	0	0	1	243	244
12:45	0	0	0	0	0	0	0	0	0	0	0	276	11	0	1	0	288	289.3
H/TOT	0	0	0	0	0	0	0	0	0	0	1	958	39	3	1	2	1004	1008
13:00	0	0	0	0	0	0	0	0	0	0	0	242	12	0	0	1	255	256
13:15	0	0	0	0	0	0	0	0	0	0	0	286	8	0	0	1	295	296
13:30	0	0	0	0	0	0	0	0	0	0	0	262	11	0	0	0	273	273
13:45	0	0	0	0	0	0	0	0	0	0	1	226	11	0	0	1	239	239.4
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1016	42	0	0	3	1062	1064
14:00	0	0	0	0	0	0	0	0	0	0	1	265	4	1	0	1	272	272.9
14:15	0	0	0	0	0	0	0	0	0	0	0	260	8	1	0	1	270	271.5
14:30	0	0	0	0	0	0	0	0	0	0	0	275	9	0	0	0	284	284
14:45	0	0	0	0	0	0	0	0	0	0	0	267	4	0	0	0	271	271
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1067	25	2	0	2	1097	1099
15:00	0	0	0	0	0	0	0	0	0	0	0	297	7	0	0	0	304	304
15:15	0	0	0	0	0	0	0	0	0	0	0	258	8	0	0	2	268	270
15:30	0	0	0	0	0	0	0	0	0	0	0	298	5	0	0	0	303	303
15:45	0	0	0	0	0	0	0	0	0	0	0	336	5	0	0	0	341	341
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1189	25	0	0	2	1216	1218
16:00	0	0	0	0	0	0	0	0	0	0	0	281	7	0	0	1	289	290
16:15	0	0	0	0	0	0	0	0	0	0	0	303	10	0	0	1	314	315
16:30	0	0	0	0	0	0	0	0	0	0	0	262	7	0	0	0	269	269
16:45	0	0	0	0	0	0	0	0	0	0	0	260	4	0	0	1	265	266
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1106	28	0	0	3	1137	1140
17:00	0	0	0	0	0	0	0	0	0	0	0	255	5	1	0	1	262	263.5
17:15	0	0	0	0	0	0	0	0	0	1	0	275	3	0	0	0	279	278.2
17:30	0	0	0	0	0	0	0	0	0	0	0	209	1	0	0	1	211	212
17:45	0	0	0	0	0	0	0	0	0	0	0	242	3	1	0	0	246	246.5
H/TOT	0	0	0	0	0	0	0	0	0	1	0	981	12	2	0	2	998	1000
18:00	0	0	0	0	0	0	0	0	0	0	0	239	3	1	0	1	244	245.5
18:15	0	0	0	0	0	0	0	0	0	0	2	142	0	0	0	0	144	142.8
18:30	0	0	0	0	0	0	0	0	0	0	0	131	1	0	0	0	132	132
18:45	0	0	0	0	0	0	0	0	0	0	0	97	1	0	0	0	98	98
H/TOT	0	0	0	0	0	0	0	0	0	0	2	609	5	1	0	1	618	618.3
12 TOT	0	0	0	0	0	0	0	0	0	1	7	8449	254	17	8	20	8756	8790

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	ʖV (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	ʖV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	27	7	1	1	0	36	37.8
0	0	0	0	0	0	0	0	0	0	0	37	4	0	0	1	42	43
0	0	0	0	0	0	0	0	0	0	0	50	7	2	0	0	59	60
0	0	0	0	0	0	0	0	0	0	0	39	16	0	1	0	56	57.3
0	0	0	0	0	0	0	0	0	0	0	153	34	3	2	1	193	198.1
0	0	0	0	0	0	0	0	0	0	0	34	10	2	1	1	48	51.3
0	0	0	0	0	0	0	0	0	0	0	56	3	0	0	0	59	59
0	0	0	0	0	0	0	0	0	0	0	88	2	0	2	0	92	94.6
0	0	0	0	0	0	0	0	0	7	0	124	8	3	0	0	142	137.9
0	0	0	0	0	0	0	0	0	7	0	302	23	5	3	1	341	342.8
0	0	0	0	0	0	0	0	0	1	1	146	12	0	0	1	161	160.6
0	0	0	0	0	0	0	0	0	1	0	153	9	0	0	0	163	162.2
0	0	0	0	0	0	0	0	0	0	1	190	7	2	0	1	201	202.4
0	0	0	0	0	0	0	0	0	0	1	257	3	3	0	1	265	266.9
0	0	0	0	0	0	0	0	0	2	3	746	31	5	0	3	790	792.1
0	0	0	0	0	0	0	0	0	0	0	257	13	3	0	1	274	276.5
0	0	0	0	0	0	0	0	0	0	0	246	9	4	0	0	259	261
0	0	0	0	0	0	0	0	0	2	0	272	16	2	0	2	294	295.4
0	0	0	0	0	0	0	0	0	0	0	272	7	0	0	0	279	279
0	0	0	0	0	0	0	0	0	2	0	1047	45	9	0	3	1106	1112
0	0	0	0	0	0	0	0	0	0	0	304	6	3	1	0	314	316.8
0	0	0	0	0	0	0	0	0	0	1	302	13	2	0	1	319	320.4
0	0	0	0	0	0	0	0	0	0	0	296	9	0	1	1	307	309.3
0	0	0	0	0	0	0	0	0	0	0	296	7	2	0	0	305	306
0	0	0	0	0	0	0	0	0	0	1	1198	35	7	2	2	1245	1253
0	0	0	0	0	0	0	0	0	0	1	371	13	0	0	0	385	384.4
0	0	0	0	0	0	0	0	0	1	1	364	10	1	0	3	380	382.1
0	0	0	0	0	0	0	0	0	1	1	322	14	2	0	0	340	339.6
0	0	0	0	0	0	0	0	0	0	0	340	17	1	0	1	359	360.5
0	0	0	0	0	0	0	0	0	2	3	1397	54	4	0	4	1464	1467
0	0	0	0	0	0	0	0	0	0	0	323	14	0	0	2	339	341
0	0	0	0	0	0	0	0	0	0	1	364	8	0	0	1	374	374.4
0	0	0	0	0	0	0	0	0	0	1	361	12	1	0	0	375	374.9
0	0	0	0	0	0	0	0	0	1	0	373	11	3	0	1	389	390.7
0	0	0	0	0	0	0	0	0	1	2	1421	45	4	0	4	1477	1481
0	0	0	0	0	0	0	0	0	0	0	388	18	0	0	2	408	410
0	0	0	0	0	0	0	0	0	1	0	352	4	1	0	2	360	361.7
0	0	0	0	0	0	0	0	0	0	0	306	10	1	0	0	317	317.5
0	0	0	0	0	0	0	0	0	0	0	277	15	2	0	0	294	295
0	0	0	0	0	0	0	0	0	1	0	1323	47	4	0	4	1379	1384
0	0	0	0	0	0	0	0	0	0	0	310	12	1	0	1	324	325.5
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0	0	0	0	0	0	0	0	0	0	1	306	11	0	0	0	318	317.4
0	0	0	0	0	0	0	0	0	1	1	1310	50	2	0	5	1369	1374
0	0	0	0	0	0	0	0	0	0	0	337	9	2	0	2	350	353
0	0	0	0	0	0	0	0	0	0	0	297	6	0	0	0	303	303
0	0	0	0	0	0	0	0	0	0	0	287	8	0	0	1	296	297
0	0	0	0	0	0	0	0	0	0	0	253	7	1	0	2	263	265.5
0	0	0	0	0	0	0	0	0	0	0	1174	30	3	0	5	1212	1219
0	0	0	0	0	0	0	0	0	0	0	202	5	2	0	0	209	210
0	0	0	0	0	0	0	0	0	0	0	195	6	0	0	0	201	201
0	0	0	0	0	0	0	0	0	0	0	183	1	2	1	2	189	193.3
0	0	0	0	0	0	0	0	0	0	0	137	5	0	0	0	142	142
0	0	0	0	0	0	0	0	0	0	0	717	17	4	1	2	741	746.3
0	0	0	0	0	0	0	0	0	0	2	118	1	0	0	0	121	119.8
0	0	0	0	0	0	0	0	0	0	0	117	1	0	0	1	119	120
0	0	0	0	0	0	0	0	0	0	0	122	0	0	0	0	122	122
0	0	0	0	0	0	0	0	0	0	1	96	2	0	0	0	99	98.4
0	0	0	0	0	0	0	0	0	0	3	453	4	0	0	1	461	460.2
0	0	0	0	0	0	0	0	0	16	13	11241	415	50	8	35	11778	11828

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	7	1	0	0	0	8	8	0	0	10	1	0	1	0	12	13.3
0	0	20	3	0	1	0	24	25.3	0	0	15	1	1	0	0	17	17.5
0	0	17	4	0	0	0	21	21	0	0	6	1	1	0	0	8	8.5
1	0	26	6	0	0	0	33	32.2	0	0	6	10	0	0	1	17	18
1	0	70	14	0	1	0	86	86.5	0	0	37	13	2	1	1	54	57.3
0	0	13	4	1	1	0	19	20.8	0	0	18	1	0	0	0	19	19
0	0	21	1	0	0	0	22	22	1	0	38	6	0	0	0	45	44.2
0	0	52	3	0	0	1	56	57	1	0	26	3	1	0	1	32	32.7
0	1	95	3	0	0	0	99	98.4	0	0	52	1	1	0	0	54	54.5
0	1	181	11	1	1	1	196	198.2	2	0	134	11	2	0	1	150	150.4
0	0	101	4	1	0	0	106	106.5	0	0	40	2	0	0	0	42	42
0	0	115	3	0	0	0	118	118	1	0	50	5	1	0	1	58	58.7
0	0	95	7	0	1	0	103	104.3	0	0	74	0	0	1	0	75	76.3
1	0	179	2	0	0	1	183	183.2	0	0	69	7	0	0	0	76	76
1	0	490	16	1	1	1	510	512	1	0	233	14	1	1	1	251	253
0	0	212	6	2	1	1	222	225.3	0	0	37	3	1	0	1	42	43.5
0	0	210	7	2	0	0	219	220	0	0	100	8	0	2	1	111	114.6
1	1	202	13	3	0	1	221	222.1	1	0	75	3	1	1	0	81	82
0	0	237	9	0	0	1	247	248	0	0	57	0	0	0	0	57	57
1	1	861	35	7	1	3	909	915.4	1	0	269	14	2	3	2	291	297.1
0	0	239	5	1	0	0	245	245.5	0	2	75	7	0	0	0	84	82.8
0	1	240	13	1	2	1	258	261.5	2	0	60	10	0	0	0	72	70.4
0	0	246	11	0	0	1	258	259	7	0	79	1	0	0	0	87	81.4
0	0	259	5	2	0	0	266	267	2	1	24	7	0	0	0	34	31.8
0	1	984	34	4	2	2	1027	1033	11	3	238	25	0	0	0	277	266.4
0	1	273	9	1	0	0	284	283.9	0	0	77	8	1	1	0	87	88.8
0	0	253	11	0	0	1	265	266	0	0	56	0	0	0	0	56	56
0	1	270	6	0	0	1	278	278.4	1	0	90	5	1	0	0	97	96.7
0	0	281	12	0	0	0	293	293	2	1	86	2	0	0	0	91	88.8
0	2	1077	38	1	0	2	1120	1121	3	1	309	15	2	1	0	331	330.3
0	0	258	9	0	0	1	268	269	0	0	63	1	0	0	0	64	64
0	1	290	7	0	0	1	299	299.4	0	1	76	3	1	0	0	81	80.9
0	1	290	13	0	0	0	304	303.4	2	0	80	7	1	0	0	90	88.9
0	0	281	8	2	0	1	292	294	1	0	79	3	0	0	0	83	82.2
0	2	1119	37	2	0	3	1163	1166	3	1	298	14	2	0	0	318	316
0	0	294	7	0	0	1	302	303	0	0	79	3	1	0	0	83	83.5
0	0	288	5	1	0	1	295	296.5	0	1	43	6	0	1	0	51	51.7
0	0	238	9	0	0	0	247	247	0	0	74	2	2	1	1	80	83.3
0	0	292	7	0	0	0	299	299	1	0	65	5	3	0	0	74	74.7
0	0	1112	28	1	0	2	1143	1146	1	1	261	16	6	2	1	288	293.2
0	0	268	9	0	0	0	277	277	0	0	102	10	3	0	0	115	116.5
0	0	287	13	0	0	2	302	304	0	0	117	1	0	0	0	118	118
0	0	265	8	1	0	0	274	274.5	0	0	102	0	0	1	1	104	106.3
0	0	233	6	0	0	0	239	239	0	0	83	8	3	0	0	94	95.5
0	0	1053	36	1	0	2	1092	1095	0	0	404	19	6	1	1	431	436.3
0	0	288	5	0	0	1	294	295	0	0	66	10	1	0	0	77	77.5
0	0	205	4	0	0	1	210	211	1	1	104	6	1	0	0	113	112.1
0	0	227	6	0	0	0	233	233	0	0	86	3	1	0	0	90	90.5
0	0	174	4	1	0	1	180	181.5	1	0	77	0	1	0	0	79	78.7
0	0	894	19	1	0	3	917	920.5	2	1	333	19	4	0	0	359	358.8
0	0	143	4	1	0	1	149	150.5	0	0	71	0	3	0	0	74	75.5
0	0	135	2	0	0	0	137	137	0	0	64	0	0	0	0	64	64
0	0	105	1	2	0	1	109	111	0	0	49	0	0	0	0	49	49
0	0	76	2	0	1	1	80	82.3	0	0	34	0	0	1	0	35	36.3
0	0	459	9	3	1	3	475	480.8	0	0	218	0	3	1	0	222	224.8
0	1	57	2	0	0	0	60	59.4	0	1	47	1	0	0	0	49	48.4
0	0	57	0	0	0	0	57	57	0	0	54	0	0	1	1	56	58.3
0	0	52	2	0	0	0	54	54	0	0	43	4	0	0	1	48	49
0	0	32	0	0	0	0	32	32	0	0	35	1	0	0	0	36	36
0	1	198	4	0	0	0	203	202.4	0	1	179	6	0	1	2	189	191.7
3	8	8498	281	22	7	22	8841	8876	24	8	2913	166	30	11	9	3161	3175

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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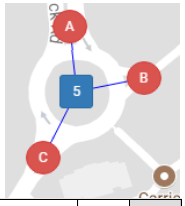
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 5
Date : 07/11/17
Location : Glenamuck Road/Golf Lane Roundabout



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	24	6	0	0	0	30	30	0	0	1	0	0	0	0	1	1
07:15	0	0	33	7	0	1	0	41	42.3	0	0	2	0	1	0	0	3	3.5
07:30	0	0	31	4	1	1	0	37	38.8	0	0	2	0	0	0	0	2	2
07:45	0	0	37	7	0	0	0	44	44	0	0	6	0	0	0	0	6	6
H/TOT	0	0	125	24	1	2	0	152	155.1	0	0	11	0	1	0	0	12	12.5
08:00	0	0	50	6	0	0	0	56	56	0	0	6	0	0	0	0	6	6
08:15	0	0	60	6	4	2	0	72	76.6	0	0	5	0	0	0	0	5	5
08:30	0	0	100	4	1	0	1	106	107.5	0	0	3	1	0	0	0	4	4
08:45	0	1	135	6	0	0	0	142	141.4	0	0	6	1	0	0	0	7	7
H/TOT	0	1	345	22	5	2	1	376	381.5	0	0	20	2	0	0	0	22	22
09:00	0	0	137	10	1	0	1	149	150.5	0	0	8	0	0	0	0	8	8
09:15	0	0	131	4	2	0	0	137	138	0	0	5	0	0	0	0	5	5
09:30	0	0	120	5	2	0	0	127	128	0	0	4	0	0	0	0	4	4
09:45	0	0	132	3	2	0	1	138	140	0	0	6	1	0	0	0	7	7
H/TOT	0	0	520	22	7	0	2	551	556.5	0	0	23	1	0	0	0	24	24
10:00	0	1	169	10	4	0	0	184	185.4	0	0	16	0	0	0	0	16	16
10:15	0	0	138	8	2	0	1	149	151	0	0	8	0	0	0	0	8	8
10:30	0	2	125	8	2	0	0	137	136.8	0	0	1	1	0	0	0	2	2
10:45	0	1	146	12	1	1	1	162	164.2	0	0	2	1	0	0	0	3	3
H/TOT	0	4	578	38	9	1	2	632	637.4	0	0	27	2	0	0	0	29	29
11:00	0	1	150	12	0	0	0	163	162.4	0	0	3	0	0	0	0	3	3
11:15	0	0	133	10	1	0	1	145	146.5	0	0	1	0	0	0	0	1	1
11:30	0	1	167	6	2	0	0	176	176.4	0	0	4	0	0	0	0	4	4
11:45	0	1	149	8	4	0	0	162	163.4	0	0	1	1	0	0	0	2	2
H/TOT	0	3	599	36	7	0	1	646	648.7	0	0	9	1	0	0	0	10	10
12:00	0	1	157	15	1	0	1	175	175.9	0	0	6	0	0	0	0	6	6
12:15	0	0	170	5	2	1	1	179	182.3	0	0	3	1	0	0	0	4	4
12:30	0	0	193	7	5	0	0	205	207.5	0	0	3	1	0	0	0	4	4
12:45	0	0	162	9	1	1	1	174	176.8	0	0	6	0	0	0	0	6	6
H/TOT	0	1	682	36	9	2	3	733	742.5	0	0	18	2	0	0	0	20	20
13:00	0	0	153	3	1	1	0	158	159.8	0	0	4	1	0	0	0	5	5
13:15	0	0	176	6	3	0	1	186	188.5	0	0	4	0	0	0	0	4	4
13:30	0	1	161	7	0	0	1	170	170.4	0	0	3	1	0	0	0	4	4
13:45	0	1	136	4	0	0	1	142	142.4	0	0	5	0	0	0	0	5	5
H/TOT	0	2	626	20	4	1	3	656	661.1	0	0	16	2	0	0	0	18	18
14:00	0	0	168	8	0	0	0	176	176	0	0	1	0	0	0	0	1	1
14:15	0	0	148	9	2	0	1	160	162	0	0	5	0	0	0	0	5	5
14:30	0	0	129	6	1	0	0	136	136.5	0	0	3	0	0	0	0	3	3
14:45	0	0	159	5	2	1	1	168	171.3	0	0	4	0	1	0	0	5	5.5
H/TOT	0	0	604	28	5	1	2	640	645.8	0	0	13	0	1	0	0	14	14.5
15:00	0	0	142	5	2	1	0	150	152.3	0	0	1	2	0	0	0	3	3
15:15	0	0	124	9	0	0	1	134	135	0	0	3	1	0	0	0	4	4
15:30	0	0	125	10	0	0	0	135	135	0	0	4	1	0	0	0	5	5
15:45	0	0	107	13	1	1	0	122	123.8	0	0	6	0	0	0	0	6	6
H/TOT	0	0	498	37	3	2	1	541	546.1	0	0	14	4	0	0	0	18	18
16:00	0	0	109	6	0	0	1	116	117	0	0	3	1	0	0	0	4	4
16:15	0	0	92	7	1	0	0	100	100.5	0	0	2	2	0	0	0	4	4
16:30	0	0	98	7	0	0	1	106	107	0	0	4	0	0	0	0	4	4
16:45	0	2	68	10	1	0	0	81	80.3	0	0	6	0	0	0	0	6	6
H/TOT	0	2	367	30	2	0	2	403	404.8	0	0	15	3	0	0	0	18	18
17:00	0	0	82	6	1	0	1	90	91.5	0	0	4	1	0	0	0	5	5
17:15	0	0	101	9	2	0	0	112	113	0	0	7	0	0	0	0	7	7
17:30	0	0	84	4	0	0	1	89	90	0	0	2	1	0	0	0	3	3
17:45	0	0	57	6	1	0	0	64	64.5	0	0	3	0	0	0	0	3	3
H/TOT	0	0	324	25	4	0	2	355	359	0	0	16	2	0	0	0	18	18
18:00	0	0	50	2	1	1	1	55	57.8	0	0	7	0	0	0	0	7	7
18:15	0	0	52	6	1	0	0	59	59.5	0	0	1	0	0	0	0	1	1
18:30	0	0	61	3	0	0	1	65	66	1	0	4	0	0	0	0	5	4.2
18:45	0	0	49	4	0	0	0	53	53	0	0	4	0	0	0	0	4	4
H/TOT	0	0	212	15	2	1	2	232	236.3	1	0	16	0	0	0	0	17	16.2
12 TOT	0	13	5480	333	58	12	21	5917	5975	1	0	198	19	2	0	0	220	220.2

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	38	8	2	0	1	50	51.2	0	0	4	1	0	0	0	5	5
1	0	46	23	2	1	0	73	74.5	0	0	3	0	0	0	0	3	3
0	0	62	18	2	1	2	85	89.3	0	0	5	1	1	0	0	7	7.5
0	0	95	19	2	2	0	118	121.6	0	0	5	0	0	0	0	5	5
2	0	241	68	8	4	3	326	336.6	0	0	17	2	1	0	0	20	20.5
0	0	60	11	3	0	1	75	77.5	2	0	5	1	0	0	0	8	6.4
0	2	69	5	2	2	0	80	82.4	0	0	7	1	0	0	0	8	8
0	0	52	4	4	1	1	62	66.3	1	0	3	1	0	0	0	5	4.2
1	0	50	12	2	3	0	68	72.1	0	0	4	0	0	0	0	4	4
1	2	231	32	11	6	2	285	298.3	3	0	19	3	0	0	0	25	22.6
0	1	48	11	0	4	2	66	72.6	0	0	3	0	0	0	0	3	3
0	0	26	5	5	2	0	38	43.1	0	0	1	0	0	0	0	1	1
0	0	38	12	0	1	1	52	54.3	0	0	2	0	0	0	0	2	2
0	0	32	5	2	7	1	47	58.1	0	0	5	0	0	0	0	5	5
0	1	144	33	7	14	4	203	228.1	0	0	11	0	0	0	0	11	11
0	0	27	9	2	2	0	40	43.6	0	0	5	0	0	0	0	5	5
0	1	37	4	3	1	1	47	50.2	0	0	3	1	0	0	0	4	4
1	1	41	13	2	2	0	60	62.2	0	0	1	0	0	0	0	1	1
0	0	50	4	1	2	1	58	62.1	0	0	2	0	0	0	0	2	2
1	2	155	30	8	7	2	205	218.1	0	0	11	1	0	0	0	12	12
1	0	44	4	3	3	0	55	59.6	0	0	7	1	0	0	0	8	8
0	0	52	10	4	1	1	68	72.3	0	0	5	0	0	0	0	5	5
1	3	70	8	5	3	1	91	95.8	0	0	1	0	0	0	0	1	1
0	1	62	16	2	1	0	82	83.7	0	0	5	0	0	0	0	5	5
2	4	228	38	14	8	2	296	311.4	0	0	18	1	0	0	0	19	19
1	0	69	11	1	0	1	83	83.7	0	0	2	1	0	0	0	3	3
1	0	59	4	10	2	1	77	84.8	0	0	3	1	0	0	0	4	4
0	1	29	8	6	2	0	46	51	0	0	2	2	0	0	0	4	4
0	0	62	13	3	0	0	78	79.5	0	0	2	0	0	0	0	2	2
2	1	219	36	20	4	2	284	299	0	0	9	4	0	0	0	13	13
0	0	86	9	3	3	1	102	108.4	0	0	3	0	0	0	0	3	3
1	1	79	0	1	5	0	87	92.6	0	0	11	1	0	0	0	12	12
0	1	40	7	4	2	1	55	60	0	0	5	0	0	0	0	5	5
1	0	78	20	4	2	1	106	110.8	0	0	1	0	0	0	0	1	1
2	2	283	36	12	12	3	350	371.8	0	0	20	1	0	0	0	21	21
0	1	79	5	1	0	0	86	85.9	0	0	8	0	0	0	0	8	8
0	0	65	5	4	3	1	78	84.9	0	0	2	0	0	0	0	2	2
0	0	63	11	3	1	1	79	82.8	0	0	4	1	0	0	0	5	5
0	0	75	6	3	2	0	86	90.1	0	0	5	0	1	0	0	6	6.5
0	1	282	27	11	6	2	329	343.7	0	0	19	1	1	0	0	21	21.5
0	0	58	8	0	2	1	69	72.6	0	0	4	1	0	0	0	5	5
0	0	80	11	3	1	0	95	97.8	0	0	8	1	0	0	0	9	9
0	0	81	5	1	1	2	90	93.8	0	0	15	1	0	0	0	16	16
1	2	62	3	1	4	0	73	76.7	0	0	9	1	0	0	0	10	10
1	2	281	27	5	8	3	327	340.9	0	0	36	4	0	0	0	40	40
0	2	111	14	1	1	2	131	133.6	0	0	6	0	0	0	0	6	6
2	1	134	10	3	1	0	151	151.6	0	0	8	0	0	0	0	8	8
1	0	150	16	2	0	1	170	171.2	0	0	2	0	0	0	0	2	2
0	0	152	21	0	2	1	176	179.6	0	0	1	0	0	0	0	1	1
3	3	547	61	6	4	4	628	636	0	0	17	0	0	0	0	17	17
2	3	193	13	1	0	1	213	211.1	0	0	2	0	0	0	0	2	2
1	0	153	7	2	0	0	163	163.2	0	0	3	1	0	0	0	4	4
0	0	141	6	0	0	0	147	147	0	0	4	1	0	0	0	5	5
2	1	153	12	0	1	1	170	170.1	0	0	3	0	0	0	0	3	3
5	4	640	38	3	1	2	693	691.4	0	0	12	2	0	0	0	14	14
1	0	208	2	0	0	2	213	214.2	0	0	2	0	0	0	0	2	2
0	1	190	6	0	0	0	197	196.4	0	0	6	0	0	0	0	6	6
1	0	167	3	2	0	1	174	175.2	0	0	5	0	0	0	0	5	5
0	0	134	4	0	0	1	139	140	0	0	4	0	0	0	0	4	4
2	1	699	15	2	0	4	723	725.8	0	0	17	0	0	0	0	17	17
21	23	3950	441	107	74	33	4649	4801	3	0	206	19	2	0	0	230	228.6

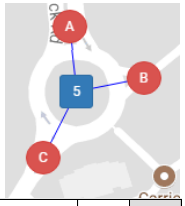
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	3	2.7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	1.4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2
0	0	0	1	0	0	0	1	1	4	0	37	3	1	0	0	45	42.3

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	31	3	0	1	0	36	36.5	0	0	0	0	0	0	0	0	0
1	0	83	8	1	2	1	96	99.3	0	0	0	0	0	0	0	0	0
2	0	119	13	2	1	0	137	137.7	0	0	0	0	0	0	0	0	0
1	0	116	8	2	2	3	132	137.8	0	0	1	0	0	0	0	1	1
5	0	349	32	5	6	4	401	411.3	0	0	1	0	0	0	0	1	1
1	1	150	5	1	5	2	165	172.6	0	0	0	0	0	0	0	0	0
2	2	191	16	3	0	1	215	214.7	0	0	0	0	0	0	0	0	0
4	1	202	8	8	1	2	226	229.5	0	0	0	0	0	0	0	0	0
1	4	131	4	4	1	1	146	147.1	0	0	0	0	0	0	0	0	0
8	8	674	33	16	7	6	752	763.9	0	0	0	0	0	0	0	0	0
1	1	107	2	4	2	0	117	120.2	0	0	1	0	0	0	0	1	1
1	1	88	11	2	1	1	105	106.9	0	0	2	0	0	0	0	2	2
1	1	86	6	1	2	1	98	100.7	0	0	1	0	0	0	0	1	1
0	0	41	9	1	1	1	53	55.8	0	0	3	0	0	0	0	3	3
3	3	322	28	8	6	3	373	383.6	0	0	7	0	0	0	0	7	7
0	1	39	6	4	1	0	51	53.7	0	0	1	0	0	0	0	1	1
0	2	51	3	4	4	1	65	72	0	0	1	0	0	0	0	1	1
1	0	32	9	1	3	0	46	49.6	0	0	0	0	0	0	0	0	0
2	1	44	1	1	2	1	52	53.9	0	0	0	0	0	0	0	0	0
3	4	166	19	10	10	2	214	229.2	0	0	2	0	0	0	0	2	2
0	1	48	1	2	3	0	55	59.3	0	0	0	0	0	0	0	0	0
0	0	42	2	5	4	1	54	62.7	0	0	0	1	0	0	0	1	1
0	0	37	10	3	3	0	53	58.4	0	0	0	0	0	0	0	0	0
0	2	45	5	2	1	1	56	58.1	0	0	0	0	1	0	0	1	1.5
0	3	172	18	12	11	2	218	238.5	0	0	0	1	1	0	0	2	2.5
2	0	54	0	3	4	0	63	68.1	0	0	0	0	0	0	0	0	0
3	0	46	7	2	0	2	60	60.6	0	0	0	0	0	0	0	0	0
1	0	44	11	4	1	0	61	63.5	0	0	0	0	0	0	0	0	0
0	2	47	6	8	1	1	65	70.1	0	0	0	0	0	0	0	0	0
6	2	191	24	17	6	3	249	262.3	0	0	0	0	0	0	0	0	0
0	1	79	9	3	2	1	95	99.5	0	0	1	0	0	0	0	1	1
1	0	69	10	4	3	0	87	92.1	0	0	2	0	0	0	0	2	2
1	0	59	11	9	0	0	80	83.7	0	0	1	0	0	0	0	1	1
1	0	86	7	3	4	0	101	106.9	0	0	0	0	0	0	0	0	0
3	1	293	37	19	9	1	363	382.2	0	0	4	0	0	0	0	4	4
1	1	114	3	6	2	0	127	131.2	0	0	1	0	0	0	0	1	1
0	0	75	11	3	1	1	91	94.8	0	0	2	0	0	0	0	2	2
0	0	46	2	2	2	1	53	57.6	0	0	0	0	0	0	0	0	0
0	0	83	2	1	1	1	88	90.8	0	0	0	0	0	0	0	0	0
1	1	318	18	12	6	3	359	374.4	0	0	3	0	0	0	0	3	3
1	0	57	3	5	3	0	69	74.6	0	0	0	0	0	0	0	0	0
1	0	68	6	2	3	0	80	84.1	0	0	2	0	0	0	0	2	2
1	1	63	5	6	2	1	79	84.2	0	0	0	0	0	0	0	0	0
1	0	69	9	2	3	1	85	90.1	0	0	0	0	0	0	0	0	0
4	1	257	23	15	11	2	313	333	0	0	2	0	0	0	0	2	2
0	0	79	18	3	1	0	101	103.8	0	0	0	1	0	0	0	1	1
0	1	81	7	2	3	2	96	102.3	0	0	2	0	0	0	0	2	2
2	0	55	9	3	1	0	70	71.2	0	0	1	0	0	0	0	1	1
0	0	85	19	2	1	1	108	111.3	0	0	1	0	0	0	0	1	1
2	1	300	53	10	6	3	375	388.6	0	0	4	1	0	0	0	5	5
3	0	40	6	0	0	1	50	48.6	0	0	0	0	0	0	0	0	0
1	1	77	8	0	0	0	87	85.6	0	0	0	0	0	0	0	0	0
0	3	45	15	1	0	1	65	64.7	0	0	0	0	0	0	0	0	0
0	1	62	5	1	0	1	70	70.9	0	0	2	0	0	0	0	2	2
4	5	224	34	2	0	3	272	269.8	0	0	2	0	0	0	0	2	2
2	0	38	8	0	0	1	49	48.4	0	0	1	0	0	0	0	1	1
1	0	38	0	0	0	0	39	38.2	0	0	0	0	0	0	0	0	0
4	0	59	15	0	0	0	78	74.8	0	0	1	0	0	0	0	1	1
0	0	44	2	1	0	1	48	49.5	0	0	0	0	0	0	0	0	0
7	0	179	25	1	0	2	214	210.9	0	0	2	0	0	0	0	2	2
46	29	3445	344	127	78	34	4103	4248	0	0	27	2	1	0	0	30	30.5

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1
0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	2	1	0	0	0	3	3
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	20	3	0	0	0	23	23

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 5
Date : 09/11/17
Location : Glenamuck Road/Golf Lane Roundabout



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	26	7	1	0	0	34	34.5	0	0	0	2	0	0	0	2	2
07:15	0	0	27	9	0	0	0	36	36	0	0	0	0	0	0	0	0	0
07:30	0	0	30	8	1	0	1	40	41.5	0	0	1	0	0	0	0	1	1
07:45	0	0	51	8	3	0	0	62	63.5	1	0	4	0	0	0	0	5	4.2
H/TOT	0	0	134	32	5	0	1	172	175.5	1	0	5	2	0	0	0	8	7.2
08:00	0	0	38	2	1	1	0	42	43.8	0	0	3	0	0	0	0	3	3
08:15	0	0	44	5	2	0	1	52	54	0	0	4	0	0	0	0	4	4
08:30	0	0	106	1	0	1	0	108	109.3	1	0	3	0	0	0	0	4	3.2
08:45	0	0	111	4	0	2	1	118	121.6	0	0	4	0	0	0	0	4	4
H/TOT	0	0	299	12	3	4	2	320	328.7	1	0	14	0	0	0	0	15	14.2
09:00	0	0	128	10	3	0	0	141	142.5	0	0	9	0	0	0	0	9	9
09:15	0	0	106	5	3	0	0	114	115.5	0	0	3	0	0	0	0	3	3
09:30	0	1	117	8	1	0	1	128	128.9	0	0	3	0	0	0	0	3	3
09:45	0	1	146	12	3	0	1	163	164.9	0	0	9	1	0	0	0	10	10
H/TOT	0	2	497	35	10	0	2	546	551.8	0	0	24	1	0	0	0	25	25
10:00	0	0	155	3	1	0	0	159	159.5	0	0	15	1	0	0	0	16	16
10:15	0	0	131	7	1	1	1	141	143.8	0	0	9	0	0	0	0	9	9
10:30	0	0	123	11	2	0	0	136	137	0	0	5	3	1	0	0	9	9.5
10:45	0	0	145	8	1	1	1	156	158.8	0	0	3	1	0	0	0	4	4
H/TOT	0	0	554	29	5	2	2	592	599.1	0	0	32	5	1	0	0	38	38.5
11:00	1	0	164	3	1	0	0	169	168.7	0	0	2	0	0	0	0	2	2
11:15	0	0	120	3	2	0	1	126	128	0	0	1	0	0	0	0	1	1
11:30	0	1	135	18	4	1	1	160	163.7	0	0	3	1	0	0	0	4	4
11:45	0	1	163	5	2	0	0	171	171.4	0	0	3	0	0	0	0	3	3
H/TOT	1	2	582	29	9	1	2	626	631.8	0	0	9	1	0	0	0	10	10
12:00	0	0	165	7	2	0	1	175	177	0	0	1	0	0	0	0	1	1
12:15	0	0	177	11	1	2	1	192	196.1	0	0	4	0	0	0	0	4	4
12:30	0	2	162	7	0	1	0	172	172.1	0	0	5	2	0	0	0	7	7
12:45	0	0	163	18	1	0	1	183	184.5	0	0	3	1	0	0	0	4	4
H/TOT	0	2	667	43	4	3	3	722	729.7	0	0	13	3	0	0	0	16	16
13:00	0	0	166	15	0	0	0	181	181	0	0	4	0	0	0	0	4	4
13:15	0	2	170	9	2	1	0	184	185.1	0	0	3	0	0	0	0	3	3
13:30	0	2	134	9	3	0	1	149	150.3	0	0	4	1	0	0	0	5	5
13:45	0	1	148	12	3	1	1	166	169.2	0	0	6	1	0	0	0	7	7
H/TOT	0	5	618	45	8	2	2	680	685.6	0	0	17	2	0	0	0	19	19
14:00	0	0	134	8	1	1	0	144	145.8	0	0	2	1	0	0	0	3	3
14:15	0	0	133	9	0	2	1	145	148.6	0	0	2	1	0	0	0	3	3
14:30	0	0	158	12	1	1	0	172	173.8	0	0	3	0	0	0	0	3	3
14:45	0	0	167	17	0	0	1	185	186	0	0	4	0	0	0	0	4	4
H/TOT	0	0	592	46	2	4	2	646	654.2	0	0	11	2	0	0	0	13	13
15:00	0	0	159	8	1	1	0	169	170.8	0	0	2	0	0	0	0	2	2
15:15	0	0	131	5	2	2	1	141	145.6	0	0	0	0	0	0	0	0	0
15:30	0	0	120	10	1	1	0	132	133.8	0	0	3	0	0	0	0	3	3
15:45	0	0	108	8	0	0	0	116	116	0	0	0	0	0	0	0	0	0
H/TOT	0	0	518	31	4	4	1	558	566.2	0	0	5	0	0	0	0	5	5
16:00	0	0	101	8	0	1	1	111	113.3	0	0	1	1	0	0	0	2	2
16:15	0	0	109	8	1	0	0	118	118.5	0	0	9	1	0	0	0	10	10
16:30	0	0	102	5	0	0	0	107	107	0	0	3	1	0	0	0	4	4
16:45	0	0	101	9	0	0	1	111	112	0	0	1	1	0	0	0	2	2
H/TOT	0	0	413	30	1	1	2	447	450.8	0	0	14	4	0	0	0	18	18
17:00	0	0	89	11	1	0	1	102	103.5	0	0	5	0	0	0	0	5	5
17:15	0	0	77	5	0	0	0	82	82	0	0	5	2	0	0	0	7	7
17:30	0	0	75	7	0	0	0	82	82	0	0	1	0	0	0	0	1	1
17:45	0	0	68	9	0	0	0	77	77	0	0	2	0	0	0	0	2	2
H/TOT	0	0	309	32	1	0	1	343	344.5	0	0	13	2	0	0	0	15	15
18:00	0	0	55	3	0	0	1	59	60	0	0	3	0	0	0	0	3	3
18:15	0	1	45	5	0	0	0	51	50.4	0	0	5	0	0	0	0	5	5
18:30	0	0	56	4	0	0	0	60	60	0	0	6	1	0	0	0	7	7
18:45	0	0	60	3	1	0	1	65	66.5	0	0	4	1	0	0	0	5	5
H/TOT	0	1	216	15	1	0	2	235	236.9	0	0	18	2	0	0	0	20	20
12 TOT	1	12	5399	379	53	21	22	5887	5955	2	0	175	24	1	0	0	202	200.9

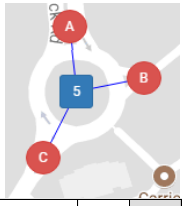
A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	11	7	1	3	0	22	26.4	0	0	3	1	0	0	0	4	4
1	0	30	14	6	2	1	54	59.8	0	0	1	0	0	0	0	1	1
0	0	45	23	2	3	0	73	77.9	0	0	4	0	0	0	0	4	4
1	0	66	14	3	2	1	87	91.3	0	0	5	0	0	0	0	5	5
2	0	152	58	12	10	2	236	255.4	0	0	13	1	0	0	0	14	14
1	1	58	6	6	4	1	77	84.8	0	0	10	0	0	0	0	10	10
0	0	71	10	3	2	0	86	90.1	0	0	6	2	0	0	0	8	8
0	1	63	12	8	0	2	86	91.4	0	0	7	0	0	0	0	7	7
2	0	52	10	3	2	0	69	71.5	0	0	5	0	0	0	0	5	5
3	2	244	38	20	8	3	318	337.8	0	0	28	2	0	0	0	30	30
1	0	60	8	0	2	0	71	72.8	0	0	4	0	0	0	0	4	4
0	0	45	7	8	2	1	63	70.6	0	0	5	0	0	0	0	5	5
0	0	33	9	1	3	1	47	52.4	0	0	3	1	0	0	0	4	4
0	0	26	5	3	3	1	38	44.4	0	0	6	0	0	0	0	6	6
1	0	164	29	12	10	3	219	240.2	0	0	18	1	0	0	0	19	19
0	0	36	3	1	2	0	42	45.1	0	0	2	0	0	0	0	2	2
1	0	27	9	3	1	1	42	45	0	0	4	1	0	0	0	5	5
1	1	28	22	1	7	1	61	70.2	0	0	4	2	0	0	0	6	6
0	1	22	10	3	1	1	38	41.2	0	0	2	2	0	0	0	4	4
2	2	113	44	8	11	3	183	201.5	0	0	12	5	0	0	0	17	17
0	1	35	9	4	0	0	49	50.4	0	0	2	0	0	0	0	2	2
0	1	51	4	1	3	0	60	63.8	0	0	1	1	0	0	0	2	2
4	0	35	5	1	0	0	45	42.3	0	0	3	0	0	0	0	3	3
0	1	39	10	3	2	0	55	58.5	0	0	3	0	0	0	0	3	3
4	3	160	28	9	5	0	209	215	0	0	9	1	0	0	0	10	10
0	1	61	11	6	4	4	87	98.6	0	0	2	1	0	0	0	3	3
1	0	45	3	5	1	1	56	60	0	0	3	1	0	0	0	4	4
0	1	36	11	2	1	0	51	52.7	0	0	3	0	0	0	0	3	3
1	0	71	12	4	3	1	92	98.1	0	0	3	0	0	0	0	3	3
2	2	213	37	17	9	6	286	309.4	0	0	11	2	0	0	0	13	13
3	1	33	4	3	3	0	47	49.4	0	0	6	0	0	0	0	6	6
0	0	63	10	2	2	1	78	82.6	0	0	3	0	0	1	0	4	5.3
0	1	58	10	2	0	1	72	73.4	0	0	5	4	0	0	0	9	9
2	0	74	10	4	2	0	92	95	0	0	2	0	0	0	0	2	2
5	2	228	34	11	7	2	289	300.4	0	0	16	4	0	1	0	21	22.3
0	0	40	2	0	2	1	45	48.6	0	0	6	1	0	0	0	7	7
0	0	46	8	0	4	1	59	65.2	0	0	5	0	0	0	0	5	5
0	1	66	3	2	3	0	75	79.3	0	0	7	1	0	0	0	8	8
0	0	42	14	0	5	1	62	69.5	0	0	5	1	0	0	0	6	6
0	1	194	27	2	14	3	241	262.6	0	0	23	3	0	0	0	26	26
0	0	45	12	1	2	1	61	65.1	0	0	2	0	0	0	0	2	2
0	0	77	10	2	0	0	89	90	0	0	13	0	0	0	0	13	13
2	0	65	9	1	1	3	81	84.2	0	0	12	0	0	0	0	12	12
1	1	86	11	3	0	0	102	102.1	0	0	6	0	0	0	0	6	6
3	1	273	42	7	3	4	333	341.4	0	0	33	0	0	0	0	33	33
2	0	106	19	1	4	1	133	138.1	0	0	0	0	0	0	0	0	0
0	0	123	15	1	1	0	140	141.8	0	0	1	0	0	0	0	1	1
0	2	135	19	0	2	1	159	161.4	0	0	2	1	0	0	0	3	3
0	0	174	13	2	1	0	190	192.3	0	0	2	2	0	0	0	4	4
2	2	538	66	4	8	2	622	633.6	0	0	5	3	0	0	0	8	8
0	0	150	12	0	0	1	163	164	0	0	6	0	0	0	0	6	6
2	0	197	12	0	0	1	212	211.4	0	0	0	1	0	0	0	1	1
1	1	209	13	0	0	0	224	222.6	0	0	9	0	0	0	0	9	9
0	0	158	0	0	0	1	159	160	0	0	5	1	0	0	0	6	6
3	1	714	37	0	0	3	758	758	0	0	20	2	0	0	0	22	22
0	1	177	7	2	0	1	188	189.4	0	0	0	0	0	0	0	0	0
0	2	193	5	0	0	1	201	200.8	0	0	3	0	0	0	0	3	3
0	1	140	2	0	1	0	144	144.7	0	0	1	0	0	0	0	1	1
0	0	140	7	1	0	0	148	148.5	0	0	2	0	0	0	0	2	2
0	4	650	21	3	1	2	681	683.4	0	0	6	0	0	0	0	6	6
27	20	3643	461	105	86	33	4375	4539	0	0	194	24	0	1	0	219	220.3

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	3	2.2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3	3.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	31	10	1	0	0	43	42.7

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	35	4	1	0	0	41	40.7	0	0	0	0	0	0	0	0	0
1	1	80	8	3	2	1	96	99.7	0	0	0	0	0	0	0	0	0
1	0	120	9	2	1	0	133	134.5	0	0	0	0	0	0	0	0	0
0	2	135	7	1	1	2	148	150.6	0	0	3	0	0	0	0	3	3
3	3	370	28	7	4	3	418	425.5	0	0	3	0	0	0	0	3	3
2	1	111	4	0	3	3	124	128.7	0	0	0	0	0	0	0	0	0
3	2	156	17	0	2	1	181	181	0	0	0	0	0	0	0	0	0
3	0	171	7	4	2	2	189	193.2	0	0	0	0	0	0	0	0	0
2	2	177	10	6	1	1	199	201.5	0	0	0	0	0	0	0	0	0
10	5	615	38	10	8	7	693	704.4	0	0	0	0	0	0	0	0	0
0	3	119	3	2	0	0	127	126.2	0	0	2	0	0	0	0	2	2
0	1	102	10	4	3	1	121	127.3	0	0	2	0	0	0	0	2	2
2	1	52	6	2	1	0	64	64.1	0	0	0	0	0	0	0	0	0
0	1	76	9	1	3	1	91	95.8	0	0	1	0	0	0	0	1	1
2	6	349	28	9	7	2	403	413.4	0	0	5	0	0	0	0	5	5
0	1	28	2	1	2	0	34	36.5	0	0	0	0	0	0	0	0	0
0	0	46	5	1	3	1	56	61.4	0	0	0	1	0	0	0	1	1
1	1	43	0	2	2	0	49	51.2	0	0	0	0	0	0	0	0	0
0	0	22	8	0	4	1	35	41.2	0	0	0	0	0	0	0	0	0
1	2	139	15	4	11	2	174	190.3	0	0	0	1	0	0	0	1	1
1	0	59	9	3	2	0	74	77.3	0	0	0	0	0	0	0	0	0
1	1	36	3	1	1	0	43	43.4	0	0	1	0	0	0	0	1	1
1	0	40	3	6	1	0	51	54.5	0	0	0	0	0	0	0	0	0
0	2	33	14	3	2	1	55	58.9	0	0	0	0	0	0	0	0	0
3	3	168	29	13	6	1	223	234.1	0	0	1	0	0	0	0	1	1
0	2	76	9	3	3	0	93	97.2	0	0	0	0	0	0	0	0	0
0	0	73	11	4	1	1	90	94.3	0	0	0	0	0	1	0	1	2.3
2	0	42	5	4	1	1	55	57.7	0	0	0	0	0	0	0	0	0
0	0	70	0	5	1	1	77	81.8	0	0	0	0	1	0	0	1	1.5
2	2	261	25	16	6	3	315	331	0	0	0	0	1	1	0	2	3.8
1	1	46	3	5	2	0	58	61.7	0	0	1	0	0	0	0	1	1
2	0	33	7	0	2	1	45	47	0	0	2	0	0	0	0	2	2
0	1	89	9	2	3	0	104	108.3	0	0	0	0	0	0	0	0	0
2	0	79	12	0	4	1	98	102.6	0	0	1	0	0	0	0	1	1
5	2	247	31	7	11	2	305	319.6	0	0	4	0	0	0	0	4	4
0	0	61	0	1	3	1	66	71.4	0	0	0	0	0	0	0	0	0
1	1	68	6	2	2	2	82	86.2	0	0	0	0	0	0	0	0	0
1	0	32	6	3	2	1	45	49.3	0	0	1	0	0	0	0	1	1
1	0	88	19	0	3	0	111	114.1	0	0	0	0	0	0	0	0	0
3	1	249	31	6	10	4	304	321	0	0	1	0	0	0	0	1	1
0	0	57	6	0	4	0	67	72.2	0	0	0	0	0	0	0	0	0
0	0	78	3	1	1	1	84	86.8	0	0	2	0	0	0	0	2	2
0	0	65	3	2	3	0	73	77.9	0	0	0	0	0	0	0	0	0
2	0	102	19	2	2	2	129	133	0	0	0	0	0	0	0	0	0
2	0	302	31	5	10	3	353	369.9	0	0	2	0	0	0	0	2	2
1	1	62	17	1	2	2	86	89.7	0	0	2	0	0	0	0	2	2
1	0	44	12	3	1	2	63	67	0	0	1	0	0	0	0	1	1
0	0	46	14	1	1	0	62	63.8	0	0	1	0	0	0	0	1	1
0	2	40	6	2	1	0	51	52.1	0	0	1	1	0	0	0	2	2
2	3	192	49	7	5	4	262	272.6	0	0	5	1	0	0	0	6	6
0	1	43	5	2	2	1	54	58	0	0	1	0	0	0	0	1	1
2	1	103	7	1	1	1	116	116.6	0	0	1	2	0	0	0	3	3
0	1	93	2	0	0	0	96	95.4	0	0	1	0	0	0	0	1	1
2	0	110	2	1	0	1	116	115.9	0	0	0	0	0	0	0	0	0
4	3	349	16	4	3	3	382	385.9	0	0	3	2	0	0	0	5	5
0	2	87	5	0	0	0	94	92.8	0	0	0	0	0	0	0	0	0
0	1	51	3	2	0	2	59	61.4	0	0	0	0	0	0	0	0	0
0	0	82	6	1	0	0	89	89.5	0	0	0	0	0	0	0	0	0
0	0	39	1	0	2	1	43	46.6	0	0	1	0	0	0	0	1	1
0	3	259	15	3	2	3	285	290.3	0	0	1	0	0	0	0	1	1
37	33	3500	336	91	83	37	4117	4258	0	0	25	4	1	1	0	31	32.8

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2
0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3
0	0	2	1	0	0	0	3	3
0	0	10	1	0	0	0	11	11
0	0	23	2	0	0	0	25	25

IDASO



Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 5
Date : 11/11/17
Location : Glenamuck Road/Golf Lane Roundabout

	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
07:15	0	0	16	2	0	0	0	18	18	0	0	1	0	0	0	0	1	1
07:30	0	0	15	3	0	0	0	18	18	0	0	6	0	0	0	0	6	6
07:45	0	0	26	5	0	0	0	31	31	0	0	1	0	0	0	0	1	1
H/TOT	0	0	65	11	0	0	0	76	76	0	0	8	0	0	0	0	8	8
08:00	0	0	10	4	1	1	0	16	17.8	0	0	13	0	0	0	0	13	13
08:15	0	0	20	0	0	0	0	20	20	0	0	7	0	0	0	0	7	7
08:30	0	0	47	2	0	0	0	49	49	0	0	3	0	0	0	0	3	3
08:45	0	0	91	0	1	0	0	92	92.5	0	0	1	0	0	0	0	1	1
H/TOT	0	0	168	6	2	1	0	177	179.3	0	0	24	0	0	0	0	24	24
09:00	0	0	91	4	0	0	0	95	95	0	0	3	0	0	0	0	3	3
09:15	0	0	92	3	0	0	0	95	95	0	0	2	0	0	0	0	2	2
09:30	0	0	83	6	0	0	0	89	89	0	0	3	0	1	0	0	4	4.5
09:45	0	0	162	3	0	0	0	165	165	0	0	4	0	0	0	0	4	4
H/TOT	0	0	428	16	0	0	0	444	444	0	0	12	0	1	0	0	13	13.5
10:00	0	0	174	6	2	0	1	183	185	0	0	5	0	0	0	0	5	5
10:15	0	0	186	9	2	0	0	197	198	0	0	4	0	0	0	0	4	4
10:30	0	0	179	12	1	0	1	193	194.5	0	0	15	0	0	0	0	15	15
10:45	0	0	196	5	0	0	0	201	201	0	0	10	0	0	0	0	10	10
H/TOT	0	0	735	32	5	0	2	774	778.5	0	0	34	0	0	0	0	34	34
11:00	0	0	219	5	0	0	0	224	224	0	0	4	0	1	0	0	5	5.5
11:15	0	1	224	9	0	0	1	235	235.4	0	0	9	0	0	0	0	9	9
11:30	0	0	212	7	0	0	0	219	219	0	0	3	0	0	0	0	3	3
11:45	0	0	238	6	1	0	0	245	245.5	0	0	5	0	0	0	0	5	5
H/TOT	0	1	893	27	1	0	1	923	923.9	0	0	21	0	1	0	0	22	22.5
12:00	0	1	250	7	0	0	0	258	257.4	0	0	4	0	0	0	0	4	4
12:15	0	0	235	4	0	0	1	240	241	0	0	7	0	0	0	0	7	7
12:30	0	1	237	4	0	0	0	242	241.4	0	0	5	1	0	0	0	6	6
12:45	0	0	259	11	0	0	0	270	270	0	0	2	0	0	0	0	2	2
H/TOT	0	2	981	26	0	0	1	1010	1010	0	0	18	1	0	0	0	19	19
13:00	0	0	226	10	0	0	1	237	238	0	0	7	0	0	0	0	7	7
13:15	0	1	252	7	0	0	0	260	259.4	0	0	4	0	0	0	0	4	4
13:30	0	1	261	10	1	0	0	273	272.9	0	0	6	0	0	0	0	6	6
13:45	0	0	254	5	2	0	0	261	262	0	0	4	0	1	0	0	5	5.5
H/TOT	0	2	993	32	3	0	1	1031	1032	0	0	21	0	1	0	0	22	22.5
14:00	0	0	275	7	0	0	1	283	284	0	0	4	0	0	0	0	4	4
14:15	0	0	262	1	1	0	1	265	266.5	0	0	5	0	0	0	0	5	5
14:30	0	0	228	4	0	0	0	232	232	0	0	4	0	0	0	0	4	4
14:45	0	0	249	5	0	0	0	254	254	0	0	4	0	0	0	0	4	4
H/TOT	0	0	1014	17	1	0	2	1034	1037	0	0	17	0	0	0	0	17	17
15:00	0	0	249	8	0	0	0	257	257	0	0	2	0	0	0	0	2	2
15:15	0	0	257	13	0	0	1	271	272	0	0	3	0	0	0	0	3	3
15:30	0	0	230	4	0	0	0	234	234	0	0	6	0	0	0	0	6	6
15:45	0	0	217	6	0	0	0	223	223	0	0	9	0	0	0	0	9	9
H/TOT	0	0	953	31	0	0	1	985	986	0	0	20	0	0	0	0	20	20
16:00	0	0	265	4	0	0	1	270	271	0	0	0	0	0	0	0	0	0
16:15	0	0	190	3	0	0	0	193	193	0	0	2	0	0	0	0	2	2
16:30	0	0	204	3	0	0	0	207	207	0	0	7	0	0	0	0	7	7
16:45	0	0	154	4	1	0	1	160	161.5	0	0	4	0	0	0	0	4	4
H/TOT	0	0	813	14	1	0	2	830	832.5	0	0	13	0	0	0	0	13	13
17:00	0	0	131	2	1	0	0	134	134.5	0	0	3	0	0	0	0	3	3
17:15	0	0	121	2	0	0	0	123	123	0	0	5	0	0	0	0	5	5
17:30	0	0	90	0	2	0	1	93	95	0	0	4	0	0	0	0	4	4
17:45	0	0	65	2	0	0	0	67	67	0	0	3	0	0	0	0	3	3
H/TOT	0	0	407	6	3	0	1	417	419.5	0	0	15	0	0	0	0	15	15
18:00	0	1	55	0	0	0	0	56	55.4	0	0	2	0	0	0	0	2	2
18:15	0	0	49	0	0	0	0	49	49	0	0	5	0	0	0	0	5	5
18:30	0	0	43	0	0	0	0	43	43	0	0	2	0	0	0	0	2	2
18:45	0	0	31	0	0	0	0	31	31	0	0	2	0	0	0	0	2	2
H/TOT	0	1	178	0	0	0	0	179	178.4	0	0	11	0	0	0	0	11	11
12 TOT	0	6	7628	218	16	1	11	7880	7897	0	0	214	1	3	0	0	218	219.5

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	19	6	1	1	0	27	28.8	0	0	0	0	0	0	0	0	0
0	0	20	2	0	0	1	23	24	0	0	0	0	0	0	0	0	0
0	0	29	4	2	0	0	35	36	0	0	0	0	0	0	0	0	0
0	0	12	11	0	1	0	24	25.3	0	0	2	0	0	0	0	2	2
0	0	80	23	3	2	1	109	114.1	0	0	2	0	0	0	0	2	2
0	0	11	6	1	0	1	19	20.5	0	0	0	1	0	0	0	1	1
0	0	29	3	0	0	0	32	32	0	0	2	0	0	0	0	2	2
0	0	38	0	0	2	0	40	42.6	0	0	3	0	0	0	0	3	3
7	0	32	8	2	0	0	49	44.4	0	0	7	0	0	0	0	7	7
7	0	110	17	3	2	1	140	139.5	0	0	12	1	0	0	0	13	13
1	1	52	8	0	0	1	63	62.6	0	0	3	0	0	0	0	3	3
1	0	59	6	0	0	0	66	65.2	0	0	4	0	0	0	0	4	4
0	1	104	1	1	0	1	108	108.9	0	0	4	0	0	0	0	4	4
0	1	91	0	3	0	1	96	97.9	0	0	5	0	0	0	0	5	5
2	3	306	15	4	0	3	333	334.6	0	0	16	0	0	0	0	16	16
0	0	78	7	1	0	0	86	86.5	0	0	2	0	0	0	0	2	2
0	0	56	0	2	0	0	58	59	0	0	7	1	0	0	0	8	8
2	0	78	4	1	0	1	86	85.9	0	0	2	0	0	0	0	2	2
0	0	66	2	0	0	0	68	68	0	0	4	0	0	0	0	4	4
2	0	278	13	4	0	1	298	299.4	0	0	15	1	0	0	0	16	16
0	0	81	1	2	1	0	85	87.3	0	0	4	0	0	0	0	4	4
0	0	69	4	2	0	0	75	76	0	0	7	0	0	0	0	7	7
0	0	81	2	0	1	1	85	87.3	0	0	7	0	0	0	0	7	7
0	0	53	1	1	0	0	55	55.5	0	0	11	0	0	0	0	11	11
0	0	284	8	5	2	1	300	306.1	0	0	29	0	0	0	0	29	29
0	0	117	6	0	0	0	123	123	0	0	5	0	0	0	0	5	5
1	1	122	6	1	0	2	133	134.1	0	0	4	0	0	0	0	4	4
1	0	80	9	2	0	0	92	92.2	0	0	6	0	0	0	0	6	6
0	0	79	6	1	0	1	87	88.5	0	0	7	0	0	0	0	7	7
2	1	398	27	4	0	3	435	437.8	0	0	22	0	0	0	0	22	22
0	0	90	4	0	0	1	95	96	0	0	10	0	0	0	0	10	10
0	0	108	1	0	0	1	110	111	0	0	9	0	0	0	0	9	9
0	0	94	2	0	0	0	96	96	0	0	12	0	0	0	0	12	12
1	0	115	6	0	0	1	123	123.2	0	0	1	1	0	0	0	2	2
1	0	407	13	0	0	3	424	426.2	0	0	32	1	0	0	0	33	33
0	0	109	11	0	0	1	121	122	0	0	6	1	0	0	0	7	7
1	0	85	3	0	0	1	90	90.2	0	0	6	0	0	0	0	6	6
0	0	74	6	1	0	0	81	81.5	0	0	2	0	0	0	0	2	2
0	0	24	10	2	0	0	36	37	0	0	4	1	0	0	0	5	5
1	0	292	30	3	0	2	328	330.7	0	0	18	2	0	0	0	20	20
0	0	59	4	1	0	1	65	66.5	0	0	0	0	0	0	0	0	0
0	0	102	7	0	0	2	111	113	0	0	7	0	0	0	0	7	7
1	0	96	3	1	0	1	102	102.7	0	0	8	0	0	0	0	8	8
0	1	80	5	0	0	0	86	85.4	0	0	7	0	0	0	0	7	7
1	1	337	19	2	0	4	364	367.6	0	0	22	0	0	0	0	22	22
0	0	72	5	2	0	1	80	82	0	0	5	1	0	0	0	6	6
0	0	105	3	0	0	0	108	108	0	0	6	0	0	0	0	6	6
0	0	76	5	0	0	1	82	83	0	0	4	1	0	0	0	5	5
0	0	95	3	0	0	1	99	100	0	0	5	0	0	0	0	5	5
0	0	348	16	2	0	3	369	373	0	0	20	2	0	0	0	22	22
0	0	68	3	1	0	0	72	72.5	0	0	8	0	0	0	0	8	8
0	0	69	4	0	0	0	73	73	0	0	3	0	0	0	0	3	3
0	0	89	1	0	1	1	92	94.3	0	0	0	0	0	0	0	0	0
0	0	69	3	0	0	0	72	72	0	0	2	0	0	0	0	2	2
0	0	295	11	1	1	1	309	311.8	0	0	13	0	0	0	0	13	13
0	1	61	1	0	0	0	63	62.4	0	0	3	0	0	0	0	3	3
0	0	63	1	0	0	1	65	66	0	0	4	0	0	0	0	4	4
0	0	77	0	0	0	0	77	77	0	0	0	0	0	0	0	0	0
0	1	63	2	0	0	0	66	65.4	0	0	2	0	0	0	0	2	2
0	2	264	4	0	0	1	271	270.8	0	0	9	0	0	0	0	9	9
16	7	3399	196	31	7	24	3680	3712	0	0	210	7	0	0	0	217	217

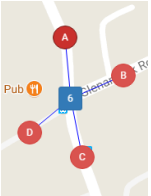
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	4	4.5
0	0	0	0	0	0	0	0	0	1	0	3	0	1	0	0	5	4.7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	2	0	35	1	2	0	0	40	39.4

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	9	1	0	1	0	11	12.3	0	0	0	0	0	0	0	0	0
0	0	19	2	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
0	0	8	2	1	0	0	11	11.5	0	0	0	0	0	0	0	0	0
1	0	4	11	0	0	1	17	17.2	0	0	1	0	0	0	0	1	1
1	0	40	16	2	1	1	61	63.5	0	0	1	0	0	0	0	1	1
0	0	21	0	0	0	0	21	21	0	0	1	1	0	0	0	2	2
1	0	37	7	0	0	0	45	44.2	0	0	1	0	0	0	0	1	1
1	0	28	4	1	0	2	36	37.7	0	0	0	0	0	0	0	0	0
0	1	49	4	0	0	0	54	53.4	0	0	1	0	0	0	0	1	1
2	1	135	15	1	0	2	156	156.3	0	0	3	1	0	0	0	4	4
0	0	47	2	1	0	0	50	50.5	0	0	0	0	0	0	0	0	0
1	0	69	5	1	0	1	77	77.7	0	0	0	0	0	0	0	0	0
0	0	82	1	0	2	0	85	87.6	0	0	0	0	0	0	0	0	0
1	0	81	6	0	0	1	89	89.2	0	0	1	0	0	0	0	1	1
2	0	279	14	2	2	2	301	305	0	0	1	0	0	0	0	1	1
0	0	73	3	1	1	1	79	81.8	0	0	0	0	0	0	0	0	0
0	0	117	5	0	2	1	125	128.6	0	0	1	0	0	0	0	1	1
2	1	96	4	3	1	0	107	107.6	0	0	2	0	0	0	0	2	2
0	0	94	4	0	0	1	99	100	0	0	0	0	0	0	0	0	0
2	1	380	16	4	4	3	410	418	0	0	3	0	0	0	0	3	3
0	2	91	7	1	0	0	101	100.3	0	0	1	0	0	0	0	1	1
2	0	69	14	1	2	0	88	89.5	0	0	0	0	0	0	0	0	0
7	0	106	5	0	0	1	119	114.4	0	0	0	0	0	0	0	0	0
2	1	34	6	1	0	0	44	42.3	0	0	0	0	0	0	0	0	0
11	3	300	32	3	2	1	352	346.5	0	0	1	0	0	0	0	1	1
0	0	95	10	2	1	0	108	110.3	0	0	1	0	0	0	0	1	1
0	0	70	7	0	0	0	77	77	0	0	1	0	0	0	0	1	1
1	0	117	7	1	0	1	127	127.7	0	0	1	0	0	0	0	1	1
2	1	101	3	0	0	0	107	104.8	0	0	0	1	0	0	0	1	1
3	1	383	27	3	1	1	419	419.8	0	0	3	1	0	0	0	4	4
0	0	85	0	0	0	0	85	85	0	0	1	0	0	0	0	1	1
0	1	105	3	1	0	1	111	111.9	0	0	1	0	0	0	0	1	1
2	0	97	10	0	0	0	109	107.4	0	0	1	0	0	0	0	1	1
1	0	105	5	0	0	1	112	112.2	0	0	0	0	0	0	0	0	0
3	1	392	18	1	0	2	417	416.5	0	0	3	0	0	0	0	3	3
0	0	92	2	1	0	0	95	95.5	0	0	3	0	0	0	0	3	3
0	1	63	10	0	1	0	75	75.7	0	0	0	0	0	0	0	0	0
0	0	82	7	2	1	1	93	96.3	0	0	1	0	0	0	0	1	1
1	0	104	6	3	0	0	114	114.7	0	0	0	0	0	0	0	0	0
1	1	341	25	6	2	1	377	382.2	0	0	4	0	0	0	0	4	4
0	0	121	11	3	0	0	135	136.5	0	0	2	0	0	0	0	2	2
0	0	140	1	0	0	1	142	143	0	0	1	0	0	0	0	1	1
0	0	129	4	1	1	1	136	138.8	0	0	1	0	0	0	0	1	1
0	0	92	8	3	0	0	103	104.5	0	0	1	0	0	0	0	1	1
0	0	482	24	7	1	2	516	522.8	0	0	5	0	0	0	0	5	5
0	0	84	10	1	0	0	95	95.5	0	0	1	0	0	0	0	1	1
1	1	113	7	1	0	1	124	124.1	0	0	1	0	0	0	0	1	1
0	0	105	5	1	0	0	111	111.5	0	0	0	1	0	0	0	1	1
1	0	92	0	1	0	0	94	93.7	0	0	1	0	0	0	0	1	1
2	1	394	22	4	0	1	424	424.8	0	0	3	1	0	0	0	4	4
0	0	75	2	3	0	1	81	83.5	0	0	0	0	0	0	0	0	0
0	0	75	0	0	0	0	75	75	0	0	0	0	0	0	0	0	0
0	0	64	1	0	0	0	65	65	0	0	0	0	0	0	0	0	0
0	0	43	0	0	2	1	46	49.6	0	0	1	0	0	0	0	1	1
0	0	257	3	3	2	2	267	273.1	0	0	1	0	0	0	0	1	1
0	1	46	3	0	0	0	50	49.4	0	0	0	0	0	0	0	0	0
0	0	58	0	0	1	1	60	62.3	0	0	0	0	0	0	0	0	0
0	0	52	6	0	0	1	59	60	0	0	0	0	0	0	0	0	0
0	0	34	1	0	0	0	35	35	0	0	1	0	0	0	0	1	1
0	1	190	10	0	1	2	204	206.7	0	0	1	0	0	0	0	1	1
27	10	3573	222	36	16	20	3904	3935	0	0	29	3	0	0	0	32	32

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2
0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	23	0	0	0	0	23	23

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 6
Date : 07/11/17
Location : Glenamuck Road/Enniskerry Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
07:15	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
07:30	0	0	0	0	0	0	0	0	0	1	0	17	1	0	0	0	19	18.2
07:45	0	0	0	0	0	0	0	0	0	0	0	38	3	0	0	0	41	41
H/TOT	0	0	0	0	0	0	0	0	0	1	0	70	7	0	0	0	78	77.2
08:00	0	0	0	0	0	0	0	0	0	0	0	38	6	0	0	0	44	44
08:15	0	0	0	0	0	0	0	0	0	0	0	49	3	1	0	0	53	53.5
08:30	0	0	0	0	0	0	0	0	0	0	0	34	4	0	0	0	38	38
08:45	0	0	0	0	0	0	0	0	0	1	0	35	6	0	0	0	42	41.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	156	19	1	0	0	177	176.7
09:00	0	0	0	0	0	0	0	0	0	0	0	34	1	0	0	0	35	35
09:15	0	0	0	0	0	0	0	0	0	1	0	21	3	0	0	0	25	24.2
09:30	0	0	0	0	0	0	0	0	0	0	0	10	3	2	0	0	15	16
09:45	0	0	0	0	0	0	0	0	0	0	0	14	1	0	1	0	16	17.3
H/TOT	0	0	0	0	0	0	0	0	0	1	0	79	8	2	1	0	91	92.5
10:00	0	0	0	0	0	0	0	0	0	1	0	11	0	0	1	0	13	13.5
10:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
10:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
10:45	0	0	0	0	0	0	0	0	0	1	0	13	2	0	0	0	16	15.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	41	3	0	1	0	47	46.7
11:00	0	0	0	0	0	0	0	0	0	0	0	16	0	1	0	0	17	17.5
11:15	0	0	0	0	0	0	0	0	0	0	0	13	2	0	1	0	16	17.3
11:30	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
11:45	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	0	0	47	5	1	1	0	54	55.8
12:00	0	0	0	0	0	0	0	0	0	0	0	11	3	1	0	0	15	15.5
12:15	0	0	0	0	0	0	0	0	0	0	0	16	0	3	0	0	19	20.5
12:30	0	0	0	0	0	0	0	0	0	0	0	13	1	1	0	0	15	15.5
12:45	0	0	0	0	0	0	0	0	0	0	1	14	0	0	0	0	15	14.4
H/TOT	0	0	0	0	0	0	0	0	0	0	1	54	4	5	0	0	64	65.9
13:00	0	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	19	19
13:15	0	0	0	0	0	0	0	0	0	0	0	16	4	0	0	0	20	20
13:30	0	0	0	0	0	0	0	0	0	0	0	12	2	1	0	0	15	15.5
13:45	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	0	55	9	1	0	0	65	65.5
14:00	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
14:15	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
14:30	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
14:45	0	0	0	0	0	0	0	0	0	0	0	16	1	1	0	0	18	18.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	56	3	1	0	0	60	60.5
15:00	0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	15	15
15:15	0	0	0	0	0	0	0	0	0	0	0	17	4	2	1	0	24	26.3
15:30	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
15:45	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
H/TOT	0	0	0	0	0	0	0	0	0	0	0	57	7	2	1	0	67	69.3
16:00	0	0	0	0	0	0	0	0	0	0	0	26	10	0	0	0	36	36
16:15	0	0	0	0	0	0	0	0	0	0	0	17	5	0	1	0	23	24.3
16:30	0	0	0	0	0	0	0	0	0	0	0	11	3	2	0	0	16	17
16:45	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	12
H/TOT	0	0	0	0	0	0	0	0	0	0	0	65	19	2	1	0	87	89.3
17:00	0	0	0	0	0	0	0	0	0	1	0	12	3	0	0	0	16	15.2
17:15	0	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	16
17:30	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	12
17:45	0	0	0	0	0	0	0	0	0	0	0	20	1	0	0	0	21	21
H/TOT	0	0	0	0	0	0	0	0	0	1	0	57	7	0	0	0	65	64.2
18:00	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
18:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
18:30	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
18:45	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
H/TOT	0	0	0	0	0	0	0	0	0	0	0	43	1	0	0	0	44	44
12 TOT	0	0	0	0	0	0	0	0	0	6	1	780	92	15	5	0	899	907.6

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
2	0	11	1	0	0	3	17	18.4	0	0	1	0	0	0	0	1	1
0	0	12	2	0	0	1	15	16	0	0	0	0	0	0	0	0	0
1	0	21	1	0	0	0	23	22.2	0	0	0	0	0	0	0	0	0
0	0	25	3	0	0	1	29	30	0	0	0	0	1	0	0	1	1.5
3	0	69	7	0	0	5	84	86.6	0	0	1	0	1	0	0	2	2.5
0	0	33	6	3	0	3	45	49.5	0	0	0	1	0	0	0	1	1
0	1	42	7	0	0	1	51	51.4	0	0	7	0	0	0	0	7	7
1	0	96	2	0	0	0	99	98.2	0	0	1	0	0	0	0	1	1
0	1	87	2	0	0	1	91	91.4	0	0	0	0	0	0	0	0	0
1	2	258	17	3	0	5	286	290.5	0	0	8	1	0	0	0	9	9
0	0	47	1	0	0	0	48	48	0	0	1	0	0	0	0	1	1
8	0	37	1	0	1	0	47	41.9	0	0	0	0	0	0	0	0	0
0	0	30	3	0	0	0	33	33	0	0	0	0	0	0	0	0	0
1	0	26	2	0	0	0	29	28.2	0	0	1	0	0	0	0	1	1
9	0	140	7	0	1	0	157	151.1	0	0	2	0	0	0	0	2	2
3	0	20	3	1	0	1	28	27.1	0	0	0	0	0	0	0	0	0
2	0	31	1	1	0	0	35	33.9	0	0	0	0	0	0	0	0	0
2	0	20	2	3	0	0	27	26.9	0	0	0	0	0	0	0	0	0
1	0	28	4	1	0	1	35	35.7	0	0	0	0	0	0	0	0	0
8	0	99	10	6	0	2	125	123.6	0	0	0	0	0	0	0	0	0
0	0	17	5	3	1	0	26	28.8	0	0	0	0	0	0	0	0	0
1	0	14	3	1	0	0	19	18.7	0	0	1	0	0	0	0	1	1
2	0	23	1	2	1	0	29	29.7	0	0	0	0	0	0	0	0	0
1	1	21	0	2	0	0	25	24.6	0	0	1	0	0	0	0	1	1
4	1	75	9	8	2	0	99	101.8	0	0	2	0	0	0	0	2	2
4	0	24	5	0	0	1	34	31.8	0	0	0	1	0	0	0	1	1
0	0	29	3	2	0	0	34	35	0	0	1	1	0	0	0	2	2
0	0	27	3	1	0	0	31	31.5	0	0	3	0	0	0	0	3	3
2	0	23	0	1	1	1	28	29.2	0	0	1	0	1	0	0	2	2.5
6	0	103	11	4	1	2	127	127.5	0	0	5	2	1	0	0	8	8.5
0	0	45	2	2	0	0	49	50	0	0	2	0	0	0	0	2	2
1	0	37	11	1	0	0	50	49.7	0	0	2	0	0	0	0	2	2
0	1	30	4	2	0	0	37	37.4	0	0	1	0	0	0	0	1	1
0	1	44	4	1	0	1	51	51.9	0	0	6	0	0	0	0	6	6
1	2	156	21	6	0	1	187	189	0	0	11	0	0	0	0	11	11
0	0	55	3	1	0	0	59	59.5	0	0	4	0	0	0	0	4	4
0	1	51	3	1	0	0	56	55.9	0	0	4	0	0	0	0	4	4
0	0	36	2	0	0	0	38	38	0	0	2	0	0	0	0	2	2
1	0	36	7	0	0	1	45	45.2	0	0	2	0	0	0	0	2	2
1	1	178	15	2	0	1	198	198.6	0	0	12	0	0	0	0	12	12
1	0	31	2	0	0	0	34	33.2	0	0	1	1	0	0	0	2	2
0	2	31	2	2	0	1	38	38.8	0	0	0	0	0	0	0	0	0
1	0	36	2	3	0	0	42	42.7	0	0	1	0	0	0	0	1	1
0	0	26	3	2	0	1	32	34	0	0	0	0	0	0	0	0	0
2	2	124	9	7	0	2	146	148.7	0	0	2	1	0	0	0	3	3
2	0	51	10	0	0	0	63	61.4	0	0	0	0	0	0	0	0	0
1	0	53	14	2	0	0	70	70.2	0	0	1	0	0	0	0	1	1
1	0	77	9	2	0	0	89	89.2	0	0	1	0	0	0	0	1	1
1	0	118	12	0	0	1	132	132.2	0	0	0	0	0	0	0	0	0
5	0	299	45	4	0	1	354	353	0	0	2	0	0	0	0	2	2
0	0	101	14	0	0	1	116	117	0	0	3	0	0	0	0	3	3
0	0	124	10	0	0	0	134	134	0	0	1	0	0	0	0	1	1
0	0	117	6	1	0	0	124	124.5	0	0	2	0	0	0	0	2	2
0	1	103	5	2	0	0	111	111.4	0	0	0	0	0	0	0	0	0
0	1	445	35	3	0	1	485	486.9	0	0	6	0	0	0	0	6	6
1	1	114	4	2	0	0	122	121.6	0	0	1	0	0	0	0	1	1
0	0	107	12	0	0	0	119	119	0	0	1	0	0	0	0	1	1
1	3	89	4	0	0	1	98	96.4	0	0	2	0	0	0	0	2	2
0	0	83	4	0	0	0	87	87	0	0	1	0	0	0	0	1	1
2	4	393	24	2	0	1	426	424	0	0	5	0	0	0	0	5	5
42	13	2339	210	45	4	21	2674	2681	0	0	56	4	2	0	0	62	63

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	6	4	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	11	4	0	0	0	15	15	0	0	0	0	0	0	0	0	0
1	0	12	3	1	1	0	18	19	0	0	0	0	0	0	0	0	0
1	0	31	11	1	1	0	45	46	0	0	0	0	0	0	0	0	0
0	0	17	2	1	0	0	20	20.5	0	0	0	0	0	0	0	0	0
0	0	15	2	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	23	2	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	18	2	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	73	8	1	0	0	82	82.5	0	0	0	0	0	0	0	0	0
0	0	14	2	1	0	0	17	17.5	0	0	0	0	0	0	0	0	0
0	0	8	1	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
0	0	15	0	0	1	0	16	17.3	0	0	0	0	0	0	0	0	0
0	0	12	1	0	1	0	14	15.3	0	0	0	0	0	0	0	0	0
0	0	49	4	2	2	0	57	60.6	0	0	0	0	0	0	0	0	0
0	0	13	1	1	0	0	15	15.5	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	11	1	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	35	4	2	0	0	41	42	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	7	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	35	4	0	0	0	39	39	0	0	0	0	0	0	0	0	0
0	0	10	2	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
0	0	9	1	1	1	0	12	13.8	0	0	0	0	0	0	0	0	0
0	1	13	2	0	1	0	17	17.7	0	0	0	0	0	0	0	0	0
0	0	17	4	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
0	1	49	9	3	2	0	64	67.5	0	0	0	0	0	0	0	0	0
0	0	21	5	0	0	0	26	26	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	1	7	1	0	0	0	9	8.4	0	0	0	0	0	0	0	0	0
0	0	12	2	1	0	0	15	15.5	0	0	0	0	0	0	0	0	0
0	1	56	8	1	0	0	66	65.9	0	0	0	0	0	0	0	0	0
0	0	15	3	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	13	2	1	1	1	18	20.8	0	0	0	0	0	0	0	0	0
0	0	12	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	44	7	1	1	1	54	56.8	0	0	0	0	0	0	0	0	0
0	0	22	1	0	0	0	23	23	0	0	0	0	0	0	0	0	0
0	0	16	2	2	0	0	20	21	0	0	0	0	0	0	0	0	0
0	0	20	3	0	0	0	23	23	0	0	0	0	0	0	0	0	0
0	0	18	2	1	0	0	21	21.5	0	0	0	0	0	0	0	0	0
0	0	76	8	3	0	0	87	88.5	0	0	0	0	0	0	0	0	0
0	0	10	3	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	18	2	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	22	2	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	14	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	64	8	0	0	0	72	72	0	0	0	0	0	0	0	0	0
0	0	22	2	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	29	0	0	0	0	29	29	0	0	0	0	0	0	0	0	0
0	0	81	2	0	0	0	83	83	0	0	0	0	0	0	0	0	0
0	0	25	2	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	25	0	1	0	0	26	26.5	0	0	0	0	0	0	0	0	0
0	0	20	5	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	25	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0
0	0	95	8	1	0	0	104	104.5	0	0	0	0	0	0	0	0	0
1	2	688	81	15	6	1	794	808.3	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	9	9	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
0	0	14	8	1	1	1	25	27.8	0	0	0	0	0	0	0	0	0
0	0	19	9	0	0	1	29	30	0	0	1	0	0	0	0	1	1
0	0	22	5	0	0	1	28	29	0	0	0	0	0	0	0	0	0
0	0	64	31	2	1	3	101	106.3	0	0	1	0	0	0	0	1	1
0	0	27	6	0	0	0	33	33	0	0	0	0	0	0	0	0	0
0	1	27	4	0	0	0	32	31.4	0	0	2	0	0	0	0	2	2
0	0	29	1	0	0	1	31	32	0	0	6	0	0	0	0	6	6
0	0	39	4	2	1	0	46	48.3	0	0	0	0	0	0	0	0	0
0	1	122	15	2	1	1	142	144.7	0	0	8	0	0	0	0	8	8
0	0	34	5	0	0	1	40	41	0	0	1	0	1	0	0	2	2.5
0	1	26	2	2	1	0	32	33.7	0	0	0	0	0	0	0	0	0
0	0	18	1	1	0	0	20	20.5	0	0	2	0	0	0	0	2	2
0	0	25	4	2	0	2	33	36	0	0	0	0	0	0	0	0	0
0	1	103	12	5	1	3	125	131.2	0	0	3	0	1	0	0	4	4.5
0	0	24	5	1	0	0	30	30.5	0	0	0	0	0	0	0	0	0
0	0	18	1	1	0	1	21	22.5	0	0	0	0	0	0	0	0	0
0	1	16	5	1	0	0	23	22.9	0	0	0	0	0	0	0	0	0
0	0	24	3	4	1	1	33	37.3	0	0	1	0	0	0	0	1	1
0	1	82	14	7	1	2	107	113.2	0	0	1	0	0	0	0	1	1
0	0	18	1	1	1	0	21	22.8	0	0	0	0	0	0	0	0	0
0	0	28	3	1	0	0	32	32.5	1	0	0	0	0	0	0	1	0.2
0	0	27	4	0	0	1	32	33	0	0	0	1	0	0	0	1	1
0	2	24	6	0	0	0	32	30.8	0	0	0	0	0	0	0	0	0
0	2	97	14	2	1	1	117	119.1	1	0	0	1	0	0	0	2	1.2
0	0	17	5	0	0	1	23	24	0	0	5	0	0	0	0	5	5
0	0	24	0	1	0	0	25	25.5	0	0	2	0	0	0	0	2	2
0	0	18	2	4	1	1	26	30.3	0	0	3	0	0	0	0	3	3
0	0	33	6	4	0	1	44	47	0	0	2	0	0	0	0	2	2
0	0	92	13	9	1	3	118	126.8	0	0	12	0	0	0	0	12	12
1	0	44	1	0	1	1	48	49.5	0	0	2	0	0	0	0	2	2
0	0	46	1	1	0	0	48	48.5	0	0	2	1	0	0	0	3	3
0	0	47	7	0	0	1	55	56	0	0	2	1	0	0	0	3	3
0	0	39	5	2	0	0	46	47	0	0	5	1	0	0	0	6	6
1	0	176	14	3	1	2	197	201	0	0	11	3	0	0	0	14	14
0	1	41	6	1	0	1	50	50.9	0	0	4	1	0	0	0	5	5
0	0	47	6	1	0	2	56	58.5	0	0	2	0	0	0	0	2	2
0	0	33	4	1	0	0	38	38.5	0	0	2	0	0	0	0	2	2
0	0	42	5	0	0	2	49	51	0	0	1	1	0	0	0	2	2
0	1	163	21	3	0	5	193	198.9	0	0	9	2	0	0	0	11	11
0	0	25	1	1	0	0	27	27.5	0	0	3	0	0	0	0	3	3
0	0	37	6	0	0	0	43	43	0	0	0	1	0	0	0	1	1
0	0	42	7	0	0	2	51	53	0	0	0	0	0	0	0	0	0
0	1	29	5	3	0	0	38	38.9	0	0	0	0	0	0	0	0	0
0	1	133	19	4	0	2	159	162.4	0	0	3	1	0	0	0	4	4
0	0	49	10	0	0	3	62	65	0	1	2	0	0	0	0	3	2.4
0	0	65	5	1	1	0	72	73.8	0	0	3	1	0	0	0	4	4
0	0	72	9	0	0	1	82	83	0	0	0	0	0	0	0	0	0
0	0	104	9	1	1	0	115	116.8	0	0	0	0	0	0	0	0	0
0	0	290	33	2	2	4	331	338.6	0	1	5	1	0	0	0	7	6.4
0	0	81	20	1	1	1	104	106.8	0	0	4	0	0	0	0	4	4
0	0	83	8	0	0	0	91	91	0	0	0	0	0	0	0	0	0
0	0	117	4	2	0	1	124	126	0	0	0	0	0	0	0	0	0
0	2	114	14	0	0	1	131	130.8	0	0	2	0	0	0	0	2	2
0	2	395	46	3	1	3	450	454.6	0	0	6	0	0	0	0	6	6
0	0	111	5	0	0	0	116	116	0	0	3	0	0	0	0	3	3
0	1	119	3	0	0	2	125	126.4	0	0	3	0	0	0	0	3	3
0	0	94	5	0	0	1	100	101	0	0	2	0	0	0	0	2	2
0	0	69	7	0	0	0	76	76	0	0	1	0	0	0	0	1	1
0	1	393	20	0	0	3	417	419.4	0	0	9	0	0	0	0	9	9
1	10	2110	252	42	10	32	2457	2516	1	1	68	8	1	0	0	79	78.1

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	3	28	5	3	0	0	39	38.7	0	0	28	5	0	1	0	34	35.3
0	1	33	10	1	0	2	47	48.9	0	0	62	10	1	0	1	74	75.5
1	1	61	9	1	2	1	76	78.7	0	0	58	10	1	0	0	69	69.5
4	0	61	7	0	0	3	75	74.8	0	0	71	6	0	1	4	82	87.3
5	5	183	31	5	2	6	237	241.1	0	0	219	31	2	2	5	259	267.6
1	1	53	6	1	0	0	62	61.1	0	1	64	6	0	0	0	71	70.4
0	1	46	8	1	0	1	57	57.9	0	0	85	5	2	1	1	94	97.3
1	2	50	5	0	0	0	58	56	0	0	78	4	1	0	0	83	83.5
0	0	79	5	0	0	1	85	86	1	0	67	3	1	0	0	72	71.7
2	4	228	24	2	0	2	262	261	1	1	294	18	4	1	1	320	322.9
0	0	65	1	0	0	0	66	66	2	0	81	2	2	0	0	87	86.4
0	0	38	6	1	0	1	46	47.5	1	1	47	4	2	0	0	55	54.6
0	2	45	3	1	0	1	52	52.3	0	0	47	2	1	0	0	50	50.5
0	0	35	4	0	1	0	40	41.3	0	0	26	6	1	0	1	34	35.5
0	2	183	14	2	1	2	204	207.1	3	1	201	14	6	0	1	226	227
0	0	16	4	1	0	0	21	21.5	0	0	26	3	2	0	0	31	32
1	2	18	2	0	0	0	23	21	0	1	16	2	3	1	1	24	27.2
1	0	35	5	4	0	1	46	48.2	0	0	10	1	2	0	0	13	14
2	0	19	3	1	1	0	26	26.2	0	0	14	2	1	0	1	18	19.5
4	2	88	14	6	1	1	116	116.9	0	1	66	8	8	1	2	86	92.7
0	0	26	2	2	0	0	30	31	0	0	19	4	1	0	0	24	24.5
4	0	18	2	0	0	0	24	20.8	0	0	22	0	0	0	1	23	24
1	1	30	1	0	0	1	34	33.6	0	0	24	1	3	0	0	28	29.5
0	0	29	7	0	0	0	36	36	0	0	24	6	0	0	1	31	32
5	1	103	12	2	0	1	124	121.4	0	0	89	11	4	0	2	106	110
0	1	17	1	2	0	0	21	21.4	1	0	19	3	2	1	0	26	27.5
0	0	19	4	0	0	1	24	25	0	0	24	2	1	0	0	27	27.5
7	1	16	4	1	0	1	30	25.3	1	0	23	3	2	0	0	29	29.2
0	0	29	8	0	0	0	37	37	0	0	31	4	2	1	1	39	42.3
7	2	81	17	3	0	2	112	108.7	2	0	97	12	7	2	1	121	126.5
1	0	22	1	0	0	0	24	23.2	0	0	23	5	3	0	0	31	32.5
0	1	18	1	2	0	0	22	22.4	0	1	31	3	4	0	1	40	42.4
1	0	42	1	1	1	0	46	47	2	0	29	3	3	0	2	39	40.9
0	0	35	6	2	0	0	43	44	0	0	28	7	2	1	0	38	40.3
2	1	117	9	5	1	0	135	136.6	2	1	111	18	12	1	3	148	156.1
1	0	48	4	0	0	0	53	52.2	0	0	36	0	2	2	0	40	43.6
0	1	56	5	0	0	0	62	61.4	0	0	31	5	0	0	3	39	42
0	0	56	0	1	0	1	58	59.5	0	0	35	4	1	0	1	41	42.5
0	1	88	1	0	0	2	92	93.4	0	0	36	1	0	1	1	39	41.3
1	2	248	10	1	0	3	265	266.5	0	0	138	10	3	3	5	159	169.4
2	0	46	4	0	0	0	52	50.4	0	0	35	3	1	0	1	40	41.5
4	0	32	1	0	0	0	37	33.8	0	0	27	7	0	0	0	34	34
0	0	47	3	1	0	1	52	53.5	1	0	23	3	3	0	0	30	30.7
0	0	33	4	1	0	0	38	38.5	0	0	26	7	2	0	1	36	38
6	0	158	12	2	0	1	179	176.2	1	0	111	20	6	0	2	140	144.2
1	0	30	2	0	0	0	33	32.2	0	0	22	5	2	1	1	31	34.3
0	0	33	3	1	0	0	37	37.5	1	0	36	4	1	0	1	43	43.7
1	0	40	3	0	0	1	45	45.2	0	0	35	1	1	1	0	38	39.8
0	0	40	6	1	1	0	48	49.8	0	0	27	4	1	0	1	33	34.5
2	0	143	14	2	1	1	163	164.7	1	0	120	14	5	2	3	145	152.3
0	1	40	2	0	0	0	43	42.4	0	0	18	4	1	0	1	24	25.5
0	2	49	1	0	0	0	52	50.8	0	0	19	2	1	0	0	22	22.5
1	0	34	4	1	0	1	41	41.7	0	0	19	1	2	0	1	23	25
0	0	38	1	0	0	0	39	39	0	0	13	3	1	0	0	17	17.5
1	3	161	8	1	0	1	175	173.9	0	0	69	10	5	0	2	86	90.5
4	0	27	1	0	1	0	33	31.1	0	0	24	0	0	1	0	25	26.3
0	0	39	0	0	0	0	39	39	0	0	26	1	2	0	1	30	32
2	0	34	2	0	0	0	38	36.4	0	0	28	3	0	0	0	31	31
0	0	32	1	0	0	0	33	33	0	0	32	2	0	0	1	35	36
6	0	132	4	0	1	0	143	139.5	0	0	110	6	2	1	2	121	125.3
41	22	1825	169	31	7	20	2115	2114	10	4	1625	172	64	13	29	1917	1985

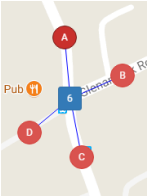
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	5	1	0	0	0	7	6.2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	4	3.2
0	0	0	0	0	0	0	0	0	1	0	8	2	0	0	0	11	10.2
0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	10	3	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	2	0	50	8	0	0	0	60	58.4

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	4	4.5
0	0	1	0	0	0	0	1	1	0	0	3	1	1	0	0	5	5.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
0	0	3	0	0	0	0	3	3	0	0	5	0	0	0	0	5	5
0	0	5	0	0	0	0	5	5	0	0	10	0	0	0	0	10	10
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	1	1.5
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	2	1	0	0	0	3	3	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	1	1	0	0	0	2	2	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	2	1	0	0	0	3	3
0	0	3	0	0	0	0	3	3	0	0	5	0	0	0	0	5	5
0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	6	0	0	0	0	6	6	0	0	10	1	0	0	0	11	11
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	9	1	0	0	0	10	10	0	0	11	2	0	0	0	13	13
0	0	3	0	0	0	0	3	3	0	0	0	1	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	14	1	0	0	0	15	15	0	0	16	3	0	0	0	19	19
0	0	6	0	0	0	0	6	6	0	0	1	1	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	1	0	0	1	0	0	0	2	1.2
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	11	0	0	0	0	11	11	1	0	4	2	0	0	0	7	6.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	1	2	0	0	0	0	3	2.4
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	1	4	1	0	0	0	6	5.4
0	0	51	5	0	0	0	56	56	1	1	59	10	2	0	0	73	72.6

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	6	1	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	38	5	2	0	0	45	46	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 6
Date : 09/11/17
Location : Glenamuck Road/Enniskerry Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
07:15	0	0	0	0	0	0	0	0	0	0	0	15	0	1	1	0	17	18.8
07:30	0	0	0	0	0	0	0	0	0	0	0	18	2	0	0	0	20	20
07:45	0	0	0	0	0	0	0	0	0	0	1	44	4	0	0	0	49	48.4
H/TOT	0	0	0	0	0	0	0	0	0	0	1	86	6	1	1	0	95	96.2
08:00	0	0	0	0	0	0	0	0	0	0	0	45	2	0	0	0	47	47
08:15	0	0	0	0	0	0	0	0	0	0	0	66	1	0	1	0	68	69.3
08:30	0	0	0	0	0	0	0	0	0	1	0	41	2	1	0	1	46	46.7
08:45	0	0	0	0	0	0	0	0	0	0	0	44	2	0	1	0	47	48.3
H/TOT	0	0	0	0	0	0	0	0	0	1	0	196	7	1	2	1	208	211.3
09:00	0	0	0	0	0	0	0	0	0	0	0	52	3	0	0	0	55	55
09:15	0	0	0	0	0	0	0	0	0	0	0	24	1	1	0	0	26	26.5
09:30	0	0	0	0	0	0	0	0	0	0	0	12	1	1	0	0	14	14.5
09:45	0	0	0	0	0	0	0	0	0	0	0	18	3	0	0	0	21	21
H/TOT	0	0	0	0	0	0	0	0	0	0	0	106	8	2	0	0	116	117
10:00	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
10:15	0	0	0	0	0	0	0	0	0	1	0	12	0	1	1	0	15	16
10:30	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
10:45	0	0	0	0	0	0	0	0	0	0	0	14	3	0	0	0	17	17
H/TOT	0	0	0	0	0	0	0	0	0	1	0	51	5	1	1	0	59	60
11:00	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
11:15	0	0	0	0	0	0	0	0	0	0	0	18	1	2	0	0	21	22
11:30	0	0	0	0	0	0	0	0	0	0	0	13	0	2	0	0	15	16
11:45	0	0	0	0	0	0	0	0	0	0	0	16	2	1	0	0	19	19.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	56	3	5	0	0	64	66.5
12:00	0	0	0	0	0	0	0	0	0	0	0	23	2	1	0	0	26	26.5
12:15	0	0	0	0	0	0	0	0	0	0	0	22	3	0	1	0	26	27.3
12:30	0	0	0	0	0	0	0	0	0	0	0	12	1	1	0	0	14	14.5
12:45	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
H/TOT	0	0	0	0	0	0	0	0	0	0	0	79	6	2	1	0	88	90.3
13:00	0	0	0	0	0	0	0	0	0	0	1	15	2	1	1	0	20	21.2
13:15	0	0	0	0	0	0	0	0	0	1	0	23	2	1	0	0	27	26.7
13:30	0	0	0	0	0	0	0	0	0	0	0	22	4	0	1	0	27	28.3
13:45	0	0	0	0	0	0	0	0	0	0	0	26	1	1	0	0	28	28.5
H/TOT	0	0	0	0	0	0	0	0	0	1	1	86	9	3	2	0	102	104.7
14:00	0	0	0	0	0	0	0	0	0	1	0	27	4	2	0	0	34	34.2
14:15	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16
14:30	0	0	0	0	0	0	0	0	0	0	0	9	1	1	0	0	11	11.5
14:45	0	0	0	0	0	0	0	0	0	0	0	22	6	0	0	0	28	28
H/TOT	0	0	0	0	0	0	0	0	0	1	0	73	12	3	0	0	89	89.7
15:00	0	0	0	0	0	0	0	0	0	0	0	22	1	0	0	0	23	23
15:15	0	0	0	0	0	0	0	0	0	0	0	22	1	1	0	0	24	24.5
15:30	0	0	0	0	0	0	0	0	0	0	0	15	3	1	2	0	21	24.1
15:45	0	0	0	0	0	0	0	0	0	0	0	25	2	0	1	0	28	29.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	84	7	2	3	0	96	100.9
16:00	0	0	0	0	0	0	0	0	0	0	0	17	6	0	0	0	23	23
16:15	0	0	0	0	0	0	0	0	0	0	0	22	3	1	0	0	26	26.5
16:30	0	0	0	0	0	0	0	0	0	0	0	17	5	0	0	0	22	22
16:45	0	0	0	0	0	0	0	0	0	0	0	18	2	1	0	0	21	21.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	74	16	2	0	0	92	93
17:00	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	17
17:15	0	0	0	0	0	0	0	0	0	1	0	17	5	1	0	0	24	23.7
17:30	0	0	0	0	0	0	0	0	0	1	0	19	2	0	0	0	22	21.2
17:45	0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	0	28	28
H/TOT	0	0	0	0	0	0	0	0	0	2	0	78	10	1	0	0	91	89.9
18:00	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
18:15	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	10	10.5
18:30	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
18:45	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	28	28
H/TOT	0	0	0	0	0	0	0	0	0	0	0	62	0	1	0	0	63	63.5
12 TOT	0	0	0	0	0	0	0	0	0	6	2	1031	89	24	10	1	1163	1183

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	12	1	0	0	1	15	15.2	0	0	0	0	0	0	0	0	0
2	0	15	1	0	0	0	18	16.4	0	0	0	0	0	0	0	0	0
0	0	18	2	1	0	2	23	25.5	0	0	0	0	0	0	0	0	0
0	0	32	2	0	0	1	35	36	0	0	0	1	0	0	0	1	1
3	0	77	6	1	0	4	91	93.1	0	0	0	1	0	0	0	1	1
1	0	33	4	0	1	0	39	39.5	0	0	0	0	0	0	0	0	0
0	0	37	2	1	0	0	40	40.5	0	0	3	0	0	0	0	3	3
0	0	95	4	1	2	0	102	105.1	0	0	7	0	0	0	0	7	7
0	0	85	0	0	0	2	87	89	0	0	0	1	0	0	0	1	1
1	0	250	10	2	3	2	268	274.1	0	0	10	1	0	0	0	11	11
1	0	56	3	0	0	0	60	59.2	0	0	0	0	0	0	0	0	0
0	0	40	3	0	0	1	44	45	0	0	1	0	0	0	0	1	1
2	0	21	3	2	0	0	28	27.4	0	0	3	0	0	0	0	3	3
2	0	39	5	0	1	1	48	48.7	0	0	0	1	0	0	0	1	1
5	0	156	14	2	1	2	180	180.3	0	0	4	1	0	0	0	5	5
1	0	23	3	1	1	1	30	32	0	0	1	0	3	0	0	4	5.5
5	0	16	1	0	1	0	23	20.3	0	0	1	1	0	0	0	2	2
3	1	21	1	0	0	0	26	23	0	0	2	0	0	0	0	2	2
2	1	25	1	0	1	0	30	29.1	0	0	0	0	0	0	0	0	0
11	2	85	6	1	3	1	109	104.4	0	0	4	1	3	0	0	8	9.5
1	0	27	5	0	0	1	34	34.2	0	0	0	1	0	0	0	1	1
0	0	40	3	2	0	0	45	46	0	0	0	0	0	0	0	0	0
5	0	18	6	1	0	0	30	26.5	0	0	1	1	0	0	0	2	2
2	0	35	4	0	0	1	42	41.4	0	0	0	0	0	0	0	0	0
8	0	120	18	3	0	2	151	148.1	0	0	1	2	0	0	0	3	3
2	0	21	2	0	0	0	25	23.4	0	0	0	0	0	0	0	0	0
0	0	26	1	1	0	0	28	28.5	0	0	2	0	0	0	0	2	2
0	1	20	1	2	0	0	24	24.4	0	0	1	0	0	0	0	1	1
0	1	29	2	1	0	0	33	32.9	0	0	2	0	1	0	0	3	3.5
2	2	96	6	4	0	0	110	109.2	0	0	5	0	1	0	0	6	6.5
1	0	41	3	2	0	1	48	49.2	0	0	0	0	0	0	0	0	0
0	1	54	5	0	0	0	60	59.4	0	0	1	0	0	0	0	1	1
0	0	31	4	0	1	0	36	37.3	0	0	0	0	0	0	0	0	0
0	1	42	7	1	0	1	52	52.9	0	0	0	1	0	0	0	1	1
1	2	168	19	3	1	2	196	198.8	0	0	1	1	0	0	0	2	2
0	0	47	2	0	0	0	49	49	0	0	8	0	0	0	0	8	8
0	0	59	3	2	1	1	66	69.3	0	0	2	0	0	0	0	2	2
0	1	41	4	2	0	0	48	48.4	0	0	0	0	0	0	0	0	0
1	0	46	2	4	0	1	54	56.2	0	0	0	0	0	0	0	0	0
1	1	193	11	8	1	2	217	222.9	0	0	10	0	0	0	0	10	10
1	0	36	3	1	0	0	41	40.7	0	0	1	0	0	0	0	1	1
0	0	44	3	1	0	0	48	48.5	0	0	0	0	0	0	0	0	0
1	1	45	6	2	0	0	55	54.6	0	0	1	0	0	0	0	1	1
0	0	41	4	2	0	0	47	48	0	0	1	0	0	0	0	1	1
2	1	166	16	6	0	0	191	191.8	0	0	3	0	0	0	0	3	3
1	0	37	9	1	0	1	49	49.7	0	0	1	0	0	0	0	1	1
0	0	73	5	2	2	0	82	85.6	0	0	3	0	0	0	0	3	3
0	1	77	8	5	2	0	93	97.5	0	0	0	0	0	0	0	0	0
0	0	105	26	0	0	0	131	131	0	0	0	0	0	0	0	0	0
1	1	292	48	8	4	1	355	363.8	0	0	4	0	0	0	0	4	4
1	0	89	10	0	0	0	100	99.2	0	0	0	0	0	0	0	0	0
0	0	121	14	2	0	0	137	138	0	0	0	0	0	0	0	0	0
2	0	109	13	2	0	1	127	127.4	0	0	2	0	0	0	0	2	2
0	1	112	10	1	1	1	126	128.2	0	0	2	0	0	0	0	2	2
3	1	431	47	5	1	2	490	492.8	0	0	4	0	0	0	0	4	4
1	0	118	8	0	1	0	128	128.5	0	0	0	0	0	0	0	0	0
3	1	102	8	1	0	0	115	112.5	0	0	1	0	0	0	0	1	1
23	0	66	5	1	0	1	96	79.1	0	0	3	0	0	0	0	3	3
4	0	53	0	0	0	0	57	53.8	0	0	0	1	0	0	0	1	1
31	1	339	21	2	1	1	396	373.9	0	0	4	1	0	0	0	5	5
69	11	2373	222	45	15	19	2754	2753	0	0	50	8	4	0	0	62	64

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	5	2	0	2	0	9	11.6	0	0	0	0	0	0	0	0	0
0	0	13	3	1	0	0	17	17.5	0	0	0	0	0	0	0	0	0
0	0	9	2	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	32	9	1	2	0	44	47.1	0	0	0	0	0	0	0	0	0
0	0	18	1	0	2	1	22	25.6	0	0	0	0	0	0	0	0	0
0	1	14	1	0	0	0	16	15.4	0	0	0	0	0	0	0	0	0
0	0	26	0	2	0	0	28	29	0	0	0	0	0	0	0	0	0
0	0	23	2	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	1	81	4	2	2	1	91	95	0	0	0	0	0	0	0	0	0
0	0	12	4	1	0	0	17	17.5	0	0	0	0	0	0	0	0	0
0	0	14	2	1	0	0	17	17.5	0	0	0	0	0	0	0	0	0
0	0	15	4	2	1	0	22	24.3	0	0	0	0	0	0	0	0	0
0	0	8	1	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
0	0	49	11	5	1	0	66	69.8	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	6	0	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0
0	0	5	3	1	1	0	10	11.8	0	0	0	0	0	0	0	0	0
0	0	12	3	1	1	0	17	18.8	0	0	0	0	0	0	0	0	0
0	0	36	7	3	2	0	48	52.1	0	0	0	0	0	0	0	0	0
0	0	12	0	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
0	1	11	2	1	0	0	15	14.9	0	0	0	0	0	0	0	0	0
1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
1	1	34	3	2	0	0	41	40.6	0	0	0	0	0	0	0	0	0
0	0	14	2	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	11	2	0	1	0	14	15.3	0	0	0	0	0	0	0	0	0
0	0	12	3	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	26	2	1	1	0	30	31.8	0	0	0	0	0	0	0	0	0
0	0	63	9	1	2	0	75	78.1	0	0	0	0	0	0	0	0	0
0	0	24	3	1	0	0	28	28.5	0	0	0	0	0	0	0	0	0
0	0	18	3	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	1	15	1	0	0	0	17	16.4	0	0	0	0	0	0	0	0	0
0	1	13	4	1	0	0	19	18.9	0	0	0	0	0	0	0	0	0
0	2	70	11	2	0	0	85	84.8	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	20	3	2	0	0	25	26	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	55	4	2	0	0	61	62	0	0	0	0	0	0	0	0	0
0	0	14	2	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	21	1	1	2	0	25	28.1	0	0	0	0	0	0	0	0	0
0	0	12	0	0	1	0	13	14.3	0	0	0	0	0	0	0	0	0
0	0	18	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	65	3	1	3	0	72	76.4	0	0	0	0	0	0	0	0	0
0	0	16	3	0	3	0	22	25.9	0	0	0	0	0	0	0	0	0
0	0	26	2	0	0	0	28	28	0	0	0	0	0	0	0	0	0
0	0	28	1	0	1	0	30	31.3	0	0	0	0	0	0	0	0	0
0	0	7	0	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0
0	0	77	6	1	4	0	88	93.7	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	17	2	0	0	0	19	19	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	62	4	0	0	0	66	66	0	0	0	0	0	0	0	0	0
0	0	27	1	0	0	0	28	28	0	0	0	0	0	0	0	0	0
0	0	33	0	0	0	0	33	33	0	0	0	0	0	0	0	0	0
0	0	23	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0
0	0	21	4	1	0	0	26	26.5	0	0	0	0	0	0	0	0	0
0	0	104	5	1	0	0	110	110.5	0	0	0	0	0	0	0	0	0
1	4	728	76	21	16	1	847	876.1	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	10	4	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	23	8	2	0	1	34	36	0	0	1	0	1	0	0	2	2.5
0	0	17	7	1	0	0	25	25.5	0	0	0	0	0	0	0	0	0
0	0	33	5	0	0	1	39	40	0	0	0	0	0	0	0	0	0
0	0	83	24	3	0	2	112	115.5	0	0	1	0	1	0	0	2	2.5
0	0	28	3	0	1	0	32	33.3	0	0	2	0	0	0	0	2	2
0	0	23	2	2	1	0	28	30.3	0	0	3	0	0	0	0	3	3
0	1	37	3	1	0	1	43	43.9	0	0	4	1	0	0	0	5	5
0	0	37	5	2	0	0	44	45	0	0	0	1	0	0	0	1	1
0	1	125	13	5	2	1	147	152.5	0	0	9	2	0	0	0	11	11
0	0	33	7	2	0	1	43	45	0	0	0	0	0	0	0	0	0
0	0	25	2	2	0	0	29	30	0	0	0	0	0	0	0	0	0
0	0	17	4	3	0	1	25	27.5	0	0	0	0	0	0	0	0	0
0	0	22	3	1	2	0	28	31.1	0	0	1	0	0	0	0	1	1
0	0	97	16	8	2	2	125	133.6	0	0	1	0	0	0	0	1	1
0	0	22	2	0	0	1	25	26	0	0	2	1	0	0	0	3	3
0	1	25	2	0	0	1	29	29.4	1	0	2	0	0	0	0	3	2.2
1	1	19	6	1	0	1	29	29.1	0	0	1	0	0	0	0	1	1
0	1	21	8	4	1	1	36	39.7	0	0	0	0	0	0	0	0	0
1	3	87	18	5	1	4	119	124.2	1	0	5	1	0	0	0	7	6.2
0	0	17	4	2	0	0	23	24	0	0	1	0	0	0	0	1	1
0	0	26	3	0	1	0	30	31.3	0	0	1	0	0	0	0	1	1
0	0	23	2	2	0	1	28	30	0	0	0	0	0	0	0	0	0
0	0	29	2	2	1	0	34	36.3	0	0	4	0	0	0	0	4	4
0	0	95	11	6	2	1	115	121.6	0	0	6	0	0	0	0	6	6
0	0	23	6	1	0	2	32	34.5	0	0	0	0	1	0	0	1	1.5
0	0	37	2	3	0	2	44	47.5	0	0	2	0	1	0	0	3	3.5
0	0	20	4	1	0	0	25	25.5	0	0	0	0	0	0	0	0	0
0	1	36	1	2	0	1	41	42.4	0	0	4	2	1	0	0	7	7.5
0	1	116	13	7	0	5	142	149.9	0	0	6	2	3	0	0	11	12.5
0	1	31	4	0	3	0	39	42.3	0	0	3	1	0	0	0	4	4
0	0	37	3	2	0	0	42	43	0	0	3	1	0	0	0	4	4
0	0	38	5	0	0	2	45	47	0	0	2	0	0	0	0	2	2
0	0	49	4	2	0	0	55	56	0	0	3	0	0	0	0	3	3
0	1	155	16	4	3	2	181	188.3	0	0	11	2	0	0	0	13	13
0	0	40	3	3	0	1	47	49.5	0	0	7	0	0	0	0	7	7
0	0	47	3	1	0	1	52	53.5	0	0	1	1	0	0	0	2	2
0	0	24	2	3	1	0	30	32.8	0	0	1	0	0	0	0	1	1
0	0	25	8	0	1	1	35	37.3	0	0	0	0	0	0	0	0	0
0	0	136	16	7	2	3	164	173.1	0	0	9	1	0	0	0	10	10
0	0	26	4	0	1	0	31	32.3	0	0	1	0	0	0	0	1	1
0	0	41	2	0	0	0	43	43	0	0	2	0	0	0	0	2	2
0	0	40	7	2	0	2	51	54	0	0	1	0	0	0	0	1	1
2	0	36	4	1	1	1	45	46.2	0	0	0	0	0	0	0	0	0
2	0	143	17	3	2	3	170	175.5	0	0	4	0	0	0	0	4	4
0	0	43	8	0	0	1	52	53	0	0	1	0	0	0	0	1	1
0	0	55	9	0	0	0	64	64	0	0	2	0	0	0	0	2	2
0	0	86	14	0	1	0	101	102.3	0	0	0	0	0	0	0	0	0
0	1	95	14	0	0	1	111	111.4	0	0	0	1	0	0	0	1	1
0	1	279	45	0	1	2	328	330.7	0	0	3	1	0	0	0	4	4
0	0	118	8	1	0	0	127	127.5	0	0	1	0	0	0	0	1	1
0	0	92	9	1	0	1	103	104.5	0	0	0	0	0	0	0	0	0
0	0	91	10	0	0	1	102	103	0	0	0	0	0	0	0	0	0
0	0	87	12	2	0	0	101	102	0	0	1	0	0	0	0	1	1
0	0	388	39	4	0	2	433	437	0	0	2	0	0	0	0	2	2
0	0	115	5	1	0	0	121	121.5	0	0	4	0	0	0	0	4	4
0	1	94	7	0	0	2	104	105.4	0	0	1	0	0	0	0	1	1
0	0	86	5	0	0	0	91	91	0	0	2	0	0	0	0	2	2
0	0	65	4	0	0	0	69	69	0	0	2	0	0	0	0	2	2
0	1	360	21	1	0	2	385	386.9	0	0	9	0	0	0	0	9	9
3	8	2064	249	53	15	29	2421	2489	1	0	66	9	4	0	0	80	81.2

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
2	0	28	9	0	0	0	39	37.4	0	0	20	5	0	0	1	26	27
1	0	34	7	1	0	2	45	46.7	0	1	43	5	0	0	0	49	48.4
1	0	49	7	0	0	1	58	58.2	0	1	73	13	0	0	0	87	86.4
2	0	52	6	1	0	1	62	61.9	0	0	61	5	1	0	4	71	75.5
6	0	163	29	2	0	4	204	204.2	0	2	197	28	1	0	5	233	237.3
2	0	52	6	1	0	1	62	61.9	0	0	80	4	0	0	1	85	86
1	0	51	6	1	2	1	62	65.3	1	1	71	3	1	0	1	78	78.1
1	1	52	2	2	0	0	58	57.6	0	0	64	5	1	1	1	72	74.8
0	0	58	1	3	0	0	62	63.5	0	1	65	4	3	0	1	74	75.9
4	1	213	15	7	2	2	244	248.3	1	2	280	16	5	1	4	309	314.8
2	0	91	5	2	0	0	100	99.4	0	0	71	3	1	0	0	75	75.5
0	0	41	1	3	1	0	46	48.8	0	0	57	2	1	0	1	61	62.5
1	0	39	1	1	0	1	43	43.7	0	0	52	6	0	0	0	58	58
0	2	25	5	0	0	0	32	30.8	0	1	31	1	2	0	1	36	37.4
3	2	196	12	6	1	1	221	222.7	0	1	211	12	4	0	2	230	233.4
0	0	19	2	1	0	0	22	22.5	0	1	21	4	0	2	0	28	30
2	0	18	2	1	0	0	23	21.9	0	0	25	1	1	1	1	29	31.8
2	0	20	4	0	0	1	27	26.4	0	0	24	2	2	1	0	29	31.3
0	0	18	3	0	0	0	21	21	0	0	19	5	2	0	1	27	29
4	0	75	11	2	0	1	93	91.8	0	1	89	12	5	4	2	113	122.1
1	0	22	3	1	0	0	27	26.7	0	0	26	4	2	1	1	34	37.3
5	0	12	2	0	0	1	20	17	0	0	18	0	0	1	0	19	20.3
1	0	28	3	0	2	1	35	37.8	0	0	30	2	1	0	0	33	33.5
1	0	52	6	1	0	0	60	59.7	0	0	26	1	2	0	1	30	32
8	0	114	14	2	2	2	142	141.2	0	0	100	7	5	2	2	116	123.1
2	0	53	5	1	0	0	61	59.9	0	0	27	4	0	1	0	32	33.3
4	0	64	3	1	0	0	72	69.3	1	0	29	5	2	0	1	38	39.2
0	0	22	4	0	0	1	27	28	0	0	16	3	2	0	0	21	22
4	0	25	0	0	0	0	29	25.8	0	0	27	4	0	1	1	33	35.3
10	0	164	12	2	0	1	189	183	1	0	99	16	4	2	2	124	129.8
1	1	24	3	0	0	0	29	27.6	0	0	29	7	0	0	0	36	36
1	0	19	4	0	0	0	24	23.2	0	0	27	3	1	2	1	34	38.1
0	0	53	2	0	0	2	57	59	0	1	38	5	2	0	0	46	46.4
1	0	35	3	1	0	0	40	39.7	0	0	26	3	3	1	1	34	37.8
3	1	131	12	1	0	2	150	149.5	0	1	120	18	6	3	2	150	158.3
1	2	53	4	3	0	0	63	62.5	0	0	34	1	0	0	0	35	35
1	0	31	0	0	0	0	32	31.2	0	0	24	1	0	0	2	27	29
0	0	65	3	0	0	2	70	72	0	0	29	2	1	0	1	33	34.5
0	0	62	1	3	0	0	66	67.5	0	0	46	2	1	1	0	50	51.8
2	2	211	8	6	0	2	231	233.2	0	0	133	6	2	1	3	145	150.3
5	1	33	3	2	0	0	44	40.4	0	0	47	3	0	1	0	51	52.3
0	0	39	5	3	0	0	47	48.5	0	0	26	3	2	1	1	33	36.3
1	0	48	4	0	0	2	55	56.2	0	0	39	5	1	1	0	46	47.8
0	0	40	1	0	0	0	41	41	0	0	36	6	0	0	2	44	46
6	1	160	13	5	0	2	187	186.1	0	0	148	17	3	3	3	174	182.4
0	1	37	5	0	0	0	43	42.4	2	0	21	3	0	0	2	28	28.4
0	0	44	1	0	0	0	45	45	0	0	29	2	0	0	1	32	33
1	1	40	3	1	0	1	47	47.1	0	1	18	5	0	0	0	24	23.4
0	0	43	2	1	0	1	47	48.5	0	0	24	2	0	0	1	27	28
1	2	164	11	2	0	2	182	183	2	1	92	12	0	0	4	111	112.8
0	4	36	3	0	0	0	43	40.6	0	0	34	5	0	0	0	39	39
0	0	51	2	0	1	0	54	55.3	1	0	18	3	1	0	0	23	22.7
1	0	43	1	1	0	0	46	45.7	0	0	17	0	0	0	1	18	19
1	0	33	1	1	0	1	37	37.7	0	0	20	2	0	0	1	23	24
2	4	163	7	2	1	1	180	179.3	1	0	89	10	1	0	2	103	104.7
0	0	23	1	0	0	0	24	24	0	0	24	0	0	0	0	24	24
2	1	40	1	0	0	0	44	41.8	0	0	24	1	0	0	1	26	27
1	0	40	1	0	0	0	42	41.2	0	0	37	1	2	0	0	40	41
0	0	36	2	0	0	1	39	40	0	0	31	0	1	0	1	33	34.5
3	1	139	5	0	0	1	149	147	0	0	116	2	3	0	2	123	126.5
52	14	1893	149	37	6	21	2172	2169	5	8	1674	156	39	16	33	1931	1996

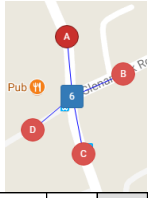
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	0	7	7.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	57	7	1	0	0	65	65.5

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	1	0	0	0	0	1	1
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	2	2.5	0	0	1	0	0	0	0	1	1
0	0	2	1	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	6	1	0	0	0	7	7	0	0	3	0	0	0	0	3	3
0	0	10	3	1	0	0	14	14.5	0	0	6	0	0	0	0	6	6
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	2	1	0	0	4	4.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	8	0	0	0	0	8	8	0	0	4	0	1	0	0	5	5.5
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	6	1	0	0	0	7	7
0	0	1	0	1	0	0	2	2.5	0	0	7	1	0	0	0	8	8
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	9	1	0	0	0	10	10	0	0	7	1	0	0	0	8	8
0	0	5	0	0	0	0	5	5	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	13	1	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	2	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	6	0	0	0	0	6	6	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	58	8	3	0	0	69	70.5	0	0	45	6	2	0	0	53	54

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	1	3	0	0	8	9.5	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	2	3	0	0	11	12.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	5	0	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0
0	0	9	2	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	41	10	5	0	0	56	58.5	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 6
Date : 11/11/17
Location : Glenamuck Road/Enniskerry Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
07:30	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
07:45	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	14	3	0	0	0	17	17
08:00	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
08:15	0	0	0	0	0	0	0	0	0	1	0	8	1	0	0	0	10	9.2
08:30	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
08:45	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	17
H/TOT	0	0	0	0	0	0	0	0	0	1	0	40	2	0	0	0	43	42.2
09:00	0	0	0	0	0	0	0	0	0	0	0	27	2	1	0	0	30	30.5
09:15	0	0	0	0	0	0	0	0	0	0	0	34	0	0	1	0	35	36.3
09:30	0	0	0	0	0	0	0	0	0	0	0	33	1	0	0	0	34	34
09:45	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	35	35
H/TOT	0	0	0	0	0	0	0	0	0	0	0	129	3	1	1	0	134	135.8
10:00	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	40	40
10:15	0	0	0	0	0	0	0	0	0	0	0	27	0	0	1	0	28	29.3
10:30	0	0	0	0	0	0	0	0	0	0	0	36	2	0	0	0	38	38
10:45	0	0	0	0	0	0	0	0	0	0	0	42	1	0	0	0	43	43
H/TOT	0	0	0	0	0	0	0	0	0	0	0	145	3	0	1	0	149	150.3
11:00	0	0	0	0	0	0	0	0	0	0	0	22	2	0	0	0	24	24
11:15	0	0	0	0	0	0	0	0	0	6	0	31	0	0	0	0	37	32.2
11:30	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	24	24
11:45	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
H/TOT	0	0	0	0	0	0	0	0	0	6	0	99	2	0	0	0	107	102.2
12:00	0	0	0	0	0	0	0	0	0	0	0	31	2	1	0	0	34	34.5
12:15	0	0	0	0	0	0	0	0	0	0	0	23	2	0	0	0	25	25
12:30	0	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	34	34
12:45	0	0	0	0	0	0	0	0	0	0	0	30	1	0	0	0	31	31
H/TOT	0	0	0	0	0	0	0	0	0	0	0	115	8	1	0	0	124	124.5
13:00	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
13:15	0	0	0	0	0	0	0	0	0	0	0	28	3	1	0	0	32	32.5
13:30	0	0	0	0	0	0	0	0	0	0	0	25	2	0	0	0	27	27
13:45	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	29	29
H/TOT	0	0	0	0	0	0	0	0	0	0	0	108	6	1	0	0	115	115.5
14:00	0	0	0	0	0	0	0	0	0	0	0	21	1	0	0	0	22	22
14:15	0	0	0	0	0	0	0	0	0	0	0	31	3	0	0	0	34	34
14:30	0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	29	29
14:45	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26	26
H/TOT	0	0	0	0	0	0	0	0	0	0	0	106	5	0	0	0	111	111
15:00	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
15:15	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31	31
15:30	0	0	0	0	0	0	0	0	0	0	0	21	2	0	0	0	23	23
15:45	0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	29	29
H/TOT	0	0	0	0	0	0	0	0	0	0	0	106	4	0	0	0	110	110
16:00	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
16:15	0	0	0	0	0	0	0	0	0	0	0	23	1	0	0	0	24	24
16:30	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	19	19
16:45	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	27	27
H/TOT	0	0	0	0	0	0	0	0	0	0	0	82	3	0	0	0	85	85
17:00	0	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0	18	18
17:15	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31	31
17:30	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16
17:45	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
H/TOT	0	0	0	0	0	0	0	0	0	0	0	77	5	0	0	0	82	82
18:00	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
18:15	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
18:30	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	20	20
18:45	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	12	12.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	56	1	1	0	0	58	58.5
12 TOT	0	0	0	0	0	0	0	0	0	7	0	1077	45	4	2	0	1135	1134

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
4	0	1	1	0	1	0	7	5.1	0	0	0	0	0	0	0	0	0
0	0	2	2	0	0	0	4	4	0	0	0	0	0	0	0	0	0
1	0	12	1	1	0	1	16	16.7	0	0	0	0	0	0	0	0	0
5	0	17	5	1	1	1	30	28.8	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	1	10	11	0	0	0	0	0	0	0	0	0
0	0	12	2	1	0	0	15	15.5	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	40	3	1	0	1	45	46.5	0	0	0	0	0	0	0	0	0
2	0	24	3	1	0	0	30	28.9	0	0	0	0	0	0	0	0	0
17	0	31	2	0	0	0	50	36.4	0	0	0	0	0	0	0	0	0
7	0	47	3	0	0	1	58	53.4	0	0	1	1	0	0	0	2	2
22	0	38	0	1	0	1	62	45.9	0	0	0	0	0	0	0	0	0
48	0	140	8	2	0	2	200	164.6	0	0	1	1	0	0	0	2	2
2	0	34	1	1	0	0	38	36.9	0	0	1	0	0	0	0	1	1
11	0	38	0	0	0	0	49	40.2	0	0	0	0	0	0	0	0	0
5	0	47	2	0	0	1	55	52	0	0	0	0	0	0	0	0	0
2	0	29	3	1	1	0	36	36.2	0	0	1	0	0	0	0	1	1
20	0	148	6	2	1	1	178	165.3	0	0	2	0	0	0	0	2	2
7	0	29	2	1	0	0	39	33.9	0	0	0	0	0	0	0	0	0
3	0	44	2	1	0	0	50	48.1	0	0	0	0	0	0	0	0	0
5	0	50	3	0	0	1	59	56	0	0	1	0	0	0	0	1	1
1	1	35	5	1	1	0	44	44.4	0	0	1	0	0	0	0	1	1
16	1	158	12	3	1	1	192	182.4	0	0	2	0	0	0	0	2	2
2	0	56	2	0	0	0	60	58.4	0	0	3	0	0	0	0	3	3
2	0	43	1	0	0	0	46	44.4	0	0	1	0	0	0	0	1	1
2	0	41	3	0	1	0	47	46.7	0	0	1	0	0	0	0	1	1
1	0	55	0	0	0	1	57	57.2	0	0	3	0	0	0	0	3	3
7	0	195	6	0	1	1	210	206.7	0	0	8	0	0	0	0	8	8
0	0	50	0	1	0	0	51	51.5	0	0	1	0	0	0	0	1	1
0	0	42	1	1	0	0	44	44.5	0	0	0	0	0	0	0	0	0
4	1	37	2	1	0	0	45	41.7	0	0	1	0	0	0	0	1	1
3	0	51	3	0	1	1	59	58.9	0	0	1	0	0	0	0	1	1
7	1	180	6	3	1	1	199	196.6	0	0	3	0	0	0	0	3	3
3	0	32	3	0	0	0	38	35.6	0	0	5	0	0	0	0	5	5
6	0	30	4	0	0	0	40	35.2	0	0	2	0	0	0	0	2	2
4	0	40	3	1	0	0	48	45.3	0	0	1	0	0	0	0	1	1
0	0	43	2	0	0	1	46	47	0	0	4	0	0	0	0	4	4
13	0	145	12	1	0	1	172	163.1	0	0	12	0	0	0	0	12	12
0	0	36	0	1	0	0	37	37.5	0	0	1	0	0	0	1	2	3
0	0	31	0	0	0	0	31	31	0	0	0	0	0	0	0	0	0
1	0	33	1	0	0	0	35	34.2	0	0	2	0	0	0	0	2	2
1	0	40	1	0	0	0	42	41.2	0	0	1	0	0	0	0	1	1
2	0	140	2	1	0	0	145	143.9	0	0	4	0	0	0	1	5	6
0	0	32	3	0	0	1	36	37	0	0	0	0	0	0	0	0	0
0	0	37	0	1	0	1	39	40.5	0	0	0	0	0	0	0	0	0
0	0	34	3	0	0	0	37	37	0	0	1	0	0	0	0	1	1
0	1	29	1	1	0	0	32	31.9	0	0	2	0	0	0	0	2	2
0	1	132	7	2	0	2	144	146.4	0	0	3	0	0	0	0	3	3
0	1	37	0	1	0	1	40	40.9	0	0	4	0	0	0	0	4	4
0	0	23	1	0	0	0	24	24	0	0	1	0	0	0	0	1	1
0	0	27	0	0	0	0	27	27	0	0	1	0	0	0	0	1	1
0	0	24	1	1	0	0	26	26.5	0	0	2	0	0	0	0	2	2
0	1	111	2	2	0	1	117	118.4	0	0	8	0	0	0	0	8	8
0	0	18	0	1	0	1	20	21.5	0	0	2	1	0	0	0	3	3
0	0	20	1	0	0	0	21	21	0	0	2	1	0	0	0	3	3
0	0	31	1	1	0	0	33	33.5	0	0	2	0	0	0	0	2	2
0	0	15	1	0	0	0	16	16	0	0	1	0	0	0	0	1	1
0	0	84	3	2	0	1	90	92	0	0	7	2	0	0	0	9	9
118	4	1490	72	20	5	13	1722	1655	0	0	50	3	0	0	1	54	55

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	7	1	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0
0	0	6	2	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0
0	0	16	6	2	0	0	24	25	0	0	0	0	0	0	0	0	0
0	0	2	3	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	10	1	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
0	0	29	4	1	0	0	34	34.5	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	19	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	50	3	0	0	0	53	53	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	20	3	0	0	0	23	23	0	0	0	0	0	0	0	0	0
0	0	16	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	27	1	0	0	0	28	28	0	0	0	0	0	0	0	0	0
0	0	80	6	0	0	0	86	86	0	0	0	0	0	0	0	0	0
0	0	15	2	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	24	0	1	0	0	25	25.5	0	0	0	0	0	0	0	0	0
0	0	22	3	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	21	0	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
0	0	82	5	2	0	0	89	90	0	0	0	0	0	0	0	0	0
0	0	18	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	25	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0
0	0	25	2	0	0	0	27	27	0	0	0	0	0	0	0	0	0
0	0	24	1	0	0	0	25	25	0	0	0	0	0	0	0	0	0
0	0	92	4	0	0	0	96	96	0	0	0	0	0	0	0	0	0
0	0	20	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	25	3	0	0	0	28	28	0	0	0	0	0	0	0	0	0
0	0	17	3	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	14	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	76	8	0	0	0	84	84	0	0	0	0	0	0	0	0	0
0	0	19	2	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	20	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	22	0	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	23	2	1	0	0	26	26.5	0	0	0	0	0	0	0	0	0
0	0	84	5	1	0	0	90	90.5	0	0	0	0	0	0	0	0	0
1	0	19	1	0	0	0	21	20.2	0	0	0	0	0	0	0	0	0
0	0	17	2	0	0	0	19	19	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	24	2	0	0	0	26	26	0	0	0	0	0	0	0	0	0
1	0	77	6	0	0	0	84	83.2	0	0	0	0	0	0	0	0	0
0	0	21	1	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	19	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	18	2	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	25	2	1	0	0	28	28.5	0	0	0	0	0	0	0	0	0
0	0	83	6	1	0	0	90	90.5	0	0	0	0	0	0	0	0	0
0	0	21	1	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	18	0	0	0	0	18	18	0	0	0	0	0	0	0	0	0
0	0	69	3	0	0	0	72	72	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	46	1	0	0	0	47	47	0	0	0	0	0	0	0	0	0
1	0	784	57	7	0	0	849	851.7	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	4	0	1	0	2	7	9.5	0	0	0	0	0	0	0	0	0
0	0	9	3	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	5	3	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	5	1	0	1	1	8	10.3	0	0	0	0	0	0	0	0	0
0	0	23	7	1	1	3	35	39.8	0	0	0	0	0	0	0	0	0
0	0	2	2	1	0	2	7	9.5	0	0	1	0	0	0	0	1	1
0	0	9	0	0	0	1	10	11	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0
0	0	11	4	0	0	1	16	17	0	0	0	0	0	0	0	0	0
0	0	29	6	1	0	5	41	46.5	0	0	1	0	0	0	0	1	1
5	0	21	3	1	0	1	31	28.5	0	0	0	0	0	0	0	0	0
0	1	23	5	0	0	1	30	30.4	0	0	0	0	0	0	0	0	0
0	0	30	1	0	0	0	31	31	0	0	0	0	0	0	0	0	0
0	0	41	3	0	0	1	45	46	0	0	0	0	0	0	0	0	0
5	1	115	12	1	0	3	137	135.9	0	0	0	0	0	0	0	0	0
0	0	40	3	1	0	1	45	46.5	0	0	0	0	0	0	0	0	0
2	0	31	3	1	0	1	38	37.9	1	0	0	0	0	0	0	1	0.2
0	0	47	2	0	0	0	49	49	0	0	1	0	0	0	0	1	1
2	0	48	4	1	0	1	56	55.9	0	0	0	0	0	0	0	0	0
4	0	166	12	3	0	3	188	189.3	1	0	1	0	0	0	0	2	1.2
1	0	33	1	0	0	2	37	38.2	0	0	1	0	0	0	0	1	1
0	0	46	3	0	0	0	49	49	0	0	3	0	0	0	0	3	3
0	0	34	0	2	1	0	37	39.3	0	0	0	0	0	0	0	0	0
0	0	34	2	0	0	1	37	38	0	0	1	0	1	0	0	2	2.5
1	0	147	6	2	1	3	160	164.5	0	0	5	0	1	0	0	6	6.5
0	0	66	3	0	0	1	70	71	0	0	5	0	0	0	0	5	5
0	0	60	2	0	0	0	62	62	0	0	0	0	0	0	0	0	0
1	0	73	8	1	0	0	83	82.7	0	0	3	1	0	0	0	4	4
0	0	60	3	0	0	1	64	65	0	0	4	1	0	0	0	5	5
1	0	259	16	1	0	2	279	280.7	0	0	12	2	0	0	0	14	14
0	0	48	7	0	0	0	55	55	0	0	2	0	0	0	0	2	2
0	0	50	3	0	0	1	54	55	0	0	0	0	0	0	0	0	0
0	0	49	3	0	0	0	52	52	0	0	3	0	0	0	0	3	3
0	0	44	2	0	0	1	47	48	0	0	6	0	0	0	0	6	6
0	0	191	15	0	0	2	208	210	0	0	11	0	0	0	0	11	11
0	0	54	2	0	0	0	56	56	0	0	6	0	0	0	0	6	6
0	0	38	2	0	0	2	42	44	0	0	3	0	0	0	0	3	3
0	0	30	2	0	0	2	34	36	0	0	3	0	0	0	0	3	3
0	1	21	2	0	0	0	24	23.4	0	0	1	0	0	0	0	1	1
0	1	143	8	0	0	4	156	159.4	0	0	13	0	0	0	0	13	13
0	0	33	1	1	0	0	35	35.5	0	0	6	1	0	0	0	7	7
0	0	41	5	0	0	2	48	50	0	0	0	0	0	0	0	0	0
0	0	39	2	0	0	0	41	41	0	0	3	0	0	0	0	3	3
0	0	32	5	0	0	2	39	41	0	0	2	0	0	0	0	2	2
0	0	145	13	1	0	4	163	167.5	0	0	11	1	0	0	0	12	12
0	0	33	3	1	0	2	39	41.5	0	0	0	0	0	0	0	0	0
0	0	36	2	0	0	0	38	38	0	0	2	0	0	0	0	2	2
0	0	42	2	0	0	0	44	44	0	0	3	0	0	0	0	3	3
0	0	38	1	0	0	2	41	43	0	0	0	0	0	0	0	0	0
0	0	149	8	1	0	4	162	166.5	0	0	5	0	0	0	0	5	5
0	0	37	5	0	0	0	42	42	0	0	0	0	0	0	0	0	0
0	0	22	2	2	0	1	27	29	0	0	2	0	0	0	0	2	2
0	0	36	0	0	0	1	37	38	0	0	3	0	0	0	0	3	3
0	0	36	2	0	0	1	39	40	0	0	2	1	0	0	0	3	3
0	0	131	9	2	0	3	145	149	0	0	7	1	0	0	0	8	8
0	0	30	1	0	0	0	31	31	0	0	0	0	0	0	0	0	0
0	0	15	1	0	0	1	17	18	0	0	0	0	0	0	0	0	0
0	0	24	0	0	0	0	24	24	0	0	3	0	0	0	0	3	3
0	0	19	0	0	0	1	20	21	0	0	1	0	0	0	0	1	1
0	0	88	2	0	0	2	92	94	0	0	4	0	0	0	0	4	4
11	2	1586	114	13	2	38	1766	1803	1	0	70	4	1	0	0	76	75.7

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	2	0	0	1	3	4	0	0	17	5	0	0	1	23	24
0	0	4	0	0	0	0	4	4	0	1	40	5	0	0	0	46	45.4
0	0	5	3	0	0	0	8	8	0	1	70	6	0	0	0	77	76.4
0	0	3	1	1	0	0	5	5.5	0	0	58	5	1	0	4	68	72.5
0	0	12	6	1	0	1	20	21.5	0	2	185	21	1	0	5	214	218.3
0	0	10	1	1	0	1	13	14.5	0	0	77	2	0	0	1	80	81
1	0	12	3	1	0	0	17	16.7	1	1	68	1	0	0	1	72	71.6
0	0	19	0	0	0	0	19	19	0	0	61	3	1	1	1	67	69.8
2	0	17	3	0	0	0	22	20.4	0	1	62	2	1	0	1	67	67.9
3	0	58	7	2	0	1	71	70.6	1	2	268	8	2	1	4	286	290.3
1	0	22	0	3	0	1	27	28.7	0	0	68	2	1	0	0	71	71.5
3	0	23	3	0	0	0	29	26.6	0	0	54	1	1	0	1	57	58.5
1	0	22	0	0	0	0	23	22.2	0	0	49	2	0	0	0	51	51
4	0	22	0	1	0	0	27	24.3	0	1	28	3	0	0	1	33	33.4
9	0	89	3	4	0	1	106	101.8	0	1	199	8	2	0	2	212	214.4
4	0	35	1	0	0	1	41	38.8	0	1	18	1	0	2	0	22	24
4	0	31	0	0	0	0	35	31.8	0	0	22	1	1	1	1	26	28.8
2	0	30	3	0	0	0	35	33.4	0	0	21	2	1	1	0	25	26.8
0	0	34	3	0	0	0	37	37	0	0	16	3	1	0	1	21	22.5
10	0	130	7	0	0	1	148	141	0	1	77	7	3	4	2	94	102.1
9	0	28	3	0	1	1	42	37.1	0	0	23	2	0	1	1	27	29.3
11	0	30	1	0	1	0	43	35.5	0	0	15	1	0	1	0	17	18.3
6	0	36	1	1	0	0	44	39.7	0	0	27	2	1	0	0	30	30.5
9	0	32	2	0	0	0	43	35.8	0	0	23	1	1	0	1	26	27.5
35	0	126	7	1	2	1	172	148.1	0	0	88	6	2	2	2	100	105.6
8	0	36	3	0	0	1	48	42.6	0	0	24	4	0	1	0	29	30.3
16	0	38	0	0	0	0	54	41.2	1	0	26	5	1	0	1	34	34.7
3	0	46	1	1	1	0	52	51.4	0	0	13	3	1	0	0	17	17.5
6	0	55	6	0	0	0	67	62.2	0	0	24	4	0	1	1	30	32.3
33	0	175	10	1	1	1	221	197.4	1	0	87	16	2	2	2	110	114.8
14	0	38	2	0	0	0	54	42.8	0	0	26	3	0	0	0	29	29
3	0	56	0	0	0	2	61	60.6	0	0	24	1	0	2	1	28	31.6
15	0	36	2	1	0	0	54	42.5	0	1	35	5	2	0	0	43	43.4
8	1	50	1	0	0	0	60	53	0	0	23	3	1	1	1	29	31.8
40	1	180	5	1	0	2	229	198.9	0	1	108	12	3	3	2	129	135.8
2	0	46	1	0	0	0	49	47.4	0	0	31	1	0	0	0	32	32
3	0	36	2	0	0	1	42	40.6	0	0	21	1	0	0	2	24	26
4	1	51	1	0	0	1	58	55.2	0	0	26	2	1	0	1	30	31.5
2	0	34	1	0	1	0	38	37.7	0	0	43	2	1	1	0	47	48.8
11	1	167	5	0	1	2	187	180.9	0	0	121	6	2	1	3	133	138.3
5	0	43	1	0	0	0	49	45	0	0	44	3	0	0	0	47	47
4	0	47	1	0	0	1	53	50.8	0	0	23	1	1	0	1	26	27.5
1	0	39	2	1	0	0	43	42.7	0	0	36	3	1	1	0	41	42.8
2	0	41	1	1	0	0	45	43.9	0	0	33	4	0	0	2	39	41
12	0	170	5	2	0	1	190	182.4	0	0	136	11	2	1	3	153	158.3
3	0	49	2	0	0	0	54	51.6	2	0	18	3	0	0	2	25	25.4
1	0	40	2	0	0	2	45	46.2	0	0	26	2	0	0	1	29	30
3	0	37	0	0	0	0	40	37.6	0	1	15	5	0	0	0	21	20.4
0	0	35	0	0	0	1	36	37	0	0	21	2	0	0	1	24	25
7	0	161	4	0	0	3	175	172.4	2	1	80	12	0	0	4	99	100.8
0	0	39	2	1	0	0	42	42.5	0	0	31	5	0	0	0	36	36
0	0	29	0	0	0	1	30	31	1	0	15	3	1	0	0	20	19.7
0	0	23	0	0	0	0	23	23	0	0	14	0	0	0	1	15	16
0	0	25	0	1	0	0	26	26.5	0	0	17	2	0	0	1	20	21
0	0	116	2	2	0	1	121	123	1	0	77	10	1	0	2	91	92.7
0	0	19	1	0	0	0	20	20	0	0	21	0	0	0	0	21	21
0	1	22	0	0	0	0	23	22.4	0	0	21	1	0	0	1	23	24
0	0	21	0	0	0	0	21	21	0	0	34	1	0	0	0	35	35
0	0	18	0	0	0	0	18	18	0	0	28	0	1	0	1	30	31.5
0	1	80	1	0	0	0	82	81.4	0	0	104	2	1	0	2	109	111.5
160	3	1464	62	14	4	15	1722	1619	5	8	1530	119	21	14	33	1730	1783

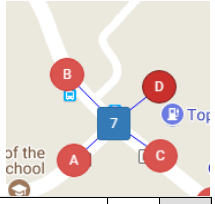
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	0	7	7.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	57	7	1	0	0	65	65.5

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	1	0	0	0	0	1	1
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	2	2.5	0	0	1	0	0	0	0	1	1
0	0	2	1	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	6	1	0	0	0	7	7	0	0	3	0	0	0	0	3	3
0	0	10	3	1	0	0	14	14.5	0	0	6	0	0	0	0	6	6
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	2	1	0	0	4	4.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	8	0	0	0	0	8	8	0	0	4	0	1	0	0	5	5.5
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	6	1	0	0	0	7	7
0	0	1	0	1	0	0	2	2.5	0	0	7	1	0	0	0	8	8
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	9	1	0	0	0	10	10	0	0	7	1	0	0	0	8	8
0	0	5	0	0	0	0	5	5	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	17	1	0	0	0	18	18	0	0	13	1	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	2	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	6	0	0	0	0	6	6	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	58	8	3	0	0	69	70.5	0	0	45	6	2	0	0	53	54

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	1	3	0	0	8	9.5	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	2	3	0	0	11	12.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	5	0	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0
0	0	9	2	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	41	10	5	0	0	56	58.5	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 7
Date : 07/11/17
Location : Enniskerry Road/R116



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	14	14
07:15	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	1	15	16
07:30	0	0	1	0	0	0	0	1	1	0	0	23	2	1	0	0	26	26.5
07:45	0	0	1	0	0	0	0	1	1	0	0	13	0	0	0	3	16	19
H/TOT	0	0	2	0	0	0	0	2	2	0	0	58	8	1	0	4	71	75.5
08:00	0	0	0	0	0	0	0	0	0	1	0	16	0	0	0	0	17	16.2
08:15	0	0	0	0	0	0	0	0	0	1	0	23	1	0	0	0	25	24.2
08:30	0	0	0	0	0	0	0	0	0	0	0	33	0	1	0	0	34	34.5
08:45	0	0	0	0	0	0	0	0	0	0	0	63	0	0	0	0	63	63
H/TOT	0	0	0	0	0	0	0	0	0	2	0	135	1	1	0	0	139	137.9
09:00	0	0	0	0	0	0	0	0	0	0	0	31	0	1	0	0	32	32.5
09:15	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
09:30	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	28	28
09:45	0	0	0	0	0	0	0	0	0	0	0	8	3	1	1	0	13	14.8
H/TOT	0	0	0	0	0	0	0	0	0	0	0	77	4	2	1	0	84	86.3
10:00	0	0	0	0	0	0	0	0	0	0	0	9	1	1	0	0	11	11.5
10:15	0	0	0	0	0	0	0	0	0	0	0	8	1	0	1	0	10	11.3
10:30	0	0	0	0	0	0	0	0	0	0	0	10	1	2	0	0	13	14
10:45	0	0	0	0	0	0	0	0	0	0	0	9	1	0	1	0	11	12.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	36	4	3	2	0	45	49.1
11:00	0	0	0	0	0	0	0	0	0	0	0	12	1	1	0	0	14	14.5
11:15	0	0	0	0	0	0	0	0	0	1	0	13	0	0	0	0	14	13.2
11:30	0	0	0	0	0	0	0	0	0	0	0	16	1	1	0	0	18	18.5
11:45	0	0	0	0	0	0	0	0	0	1	0	7	1	0	0	0	9	8.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	48	3	2	0	0	55	54.4
12:00	0	0	0	0	0	0	0	0	0	0	0	8	1	1	1	0	11	12.8
12:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
12:30	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
12:45	0	0	0	0	0	0	0	0	0	0	0	14	1	0	1	0	16	17.3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	41	3	1	2	0	47	50.1
13:00	0	0	0	0	0	0	0	0	0	0	0	6	0	2	0	0	8	9
13:15	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	8	8.5
13:30	0	0	0	0	0	0	0	0	0	1	0	29	1	2	1	0	34	35.5
13:45	0	0	0	0	0	0	0	0	0	0	0	18	0	2	0	0	20	21
H/TOT	0	0	0	0	0	0	0	0	0	1	0	57	4	7	1	0	70	74
14:00	0	0	0	0	0	0	0	0	0	0	0	25	1	2	1	0	29	31.3
14:15	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
14:30	0	0	0	0	0	0	0	0	0	1	0	67	1	0	0	0	69	68.2
14:45	0	0	0	0	0	0	0	0	0	1	0	18	1	0	0	0	20	19.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	122	4	2	1	0	131	131.7
15:00	0	0	0	0	0	0	0	0	0	1	0	27	0	0	0	0	28	27.2
15:15	0	0	0	0	0	0	0	0	0	0	0	9	3	0	0	0	12	12
15:30	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	14	14
15:45	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	1	0	55	5	0	0	0	61	60.2
16:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
16:15	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
16:30	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	11	11.5
16:45	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
H/TOT	0	0	0	0	0	0	0	0	0	0	0	43	2	1	0	0	46	46.5
17:00	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
17:15	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
17:30	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2
17:45	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	1	0	20	3	0	0	0	24	23.2
18:00	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
18:15	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
18:30	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
18:45	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
H/TOT	0	0	0	0	0	0	0	0	0	0	0	34	1	0	0	0	35	35
12 TOT	0	0	2	0	0	0	0	2	2	9	0	726	42	20	7	4	808	823.9

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	4	1	0	0	0	5	5	0	0	1	1	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	12	1	0	0	0	13	13	0	0	4	1	0	0	0	5	5
0	0	10	1	0	0	0	11	11	0	0	1	0	0	0	0	1	1
0	0	5	0	0	0	0	5	5	0	0	2	1	0	0	0	3	3
0	0	9	0	0	0	0	9	9	0	0	2	0	0	0	0	2	2
0	0	11	2	0	0	0	13	13	0	0	5	0	0	0	0	5	5
0	0	35	3	0	0	0	38	38	0	0	10	1	0	0	0	11	11
0	0	11	0	2	0	0	13	14	0	0	3	0	0	0	0	3	3
0	0	9	1	0	0	0	10	10	0	0	3	0	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	7	1	0	0	0	8	8
0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	25	2	2	0	0	29	30	0	0	14	1	0	0	0	15	15
0	0	4	0	0	0	0	4	4	0	0	2	0	0	0	0	2	2
0	0	2	2	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	1	0	2	3.3	0	0	2	0	0	0	0	2	2
1	0	2	0	0	0	0	3	2.2	0	0	0	0	1	0	0	1	1.5
1	0	9	2	0	1	0	13	13.5	0	0	4	0	1	0	0	5	5.5
0	0	2	1	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	10	4	0	0	0	14	14	0	0	4	0	0	0	0	4	4
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	15	2	0	0	0	17	17	0	0	3	0	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	1	0	0	1	1.5
0	0	7	0	0	0	0	7	7	0	0	3	0	0	0	0	3	3
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	17	0	0	0	0	17	17	0	0	4	0	1	0	0	5	5.5
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	3	0	0	0	0	3	3
0	0	5	0	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	2	0	1	0	0	3	3.5	0	0	2	1	0	0	0	3	3
0	0	13	0	1	0	0	14	14.5	0	0	9	1	0	0	0	10	10
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	14	1	0	0	0	15	15	0	0	2	0	0	0	0	2	2
0	0	7	1	0	0	0	8	8	0	0	1	0	0	0	0	1	1
0	0	6	0	0	0	0	6	6	0	0	2	0	0	0	0	2	2
0	0	5	2	0	0	0	7	7	0	0	2	1	0	0	0	3	3
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	21	3	0	0	0	24	24	0	0	6	1	0	0	0	7	7
0	0	9	0	0	0	0	9	9	0	0	3	0	0	0	0	3	3
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	8	2	0	0	0	10	10	0	0	1	0	0	0	0	1	1
0	0	4	0	0	1	0	5	6.3	0	0	2	0	0	0	0	2	2
0	0	26	3	0	1	0	30	31.3	0	0	6	0	0	0	0	6	6
0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
0	0	5	2	0	0	0	7	7	0	0	2	0	0	0	0	2	2
0	0	4	1	0	0	0	5	5	0	0	3	0	0	0	0	3	3
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	12	4	0	0	0	16	16	0	0	9	0	0	0	0	9	9
1	0	209	25	3	2	0	240	243.3	0	0	75	5	2	0	0	82	83

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	5	2	1	0	1	9	10.5	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	11	3	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	27	7	1	0	2	37	39.5	0	0	0	0	0	0	0	0	0
0	0	20	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	65	1	0	0	0	66	66	0	0	0	0	0	0	0	0	0
0	0	48	0	0	1	0	49	50.3	0	0	0	0	0	0	0	0	0
0	0	148	2	0	1	0	151	152.3	0	0	0	0	0	0	0	0	0
0	0	20	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0
0	0	38	1	1	2	0	42	45.1	0	0	0	0	0	0	0	0	0
0	0	6	0	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	72	2	2	2	0	78	81.6	0	0	0	0	0	0	0	0	0
0	0	10	3	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	7	2	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
0	0	8	0	3	1	0	12	14.8	0	0	0	0	0	0	0	0	0
0	0	32	5	4	1	0	42	45.3	0	0	0	0	0	0	0	0	0
0	0	11	1	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	13	0	0	1	0	14	15.3	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	41	2	1	1	0	45	46.8	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	0	2	1	0	5	7.3	0	0	0	0	0	0	0	0	0
0	0	10	1	2	0	0	13	14	0	0	0	0	0	0	0	0	0
0	0	23	3	4	1	0	31	34.3	0	0	0	0	0	0	0	0	0
0	0	18	0	2	1	0	21	23.3	0	0	0	0	0	0	0	0	0
0	0	20	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0
0	0	12	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	25	1	1	0	0	27	27.5	0	0	0	0	0	0	0	0	0
0	0	75	5	3	1	0	84	86.8	0	0	0	0	0	0	0	0	0
0	0	29	0	1	0	0	30	30.5	0	0	0	0	0	0	0	0	0
0	1	34	2	0	0	1	38	38.4	0	0	0	0	0	0	0	0	0
0	0	17	1	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
0	0	15	2	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	1	95	5	2	0	1	104	105.4	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	9	1	1	0	1	12	13.5	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	32	3	1	0	1	37	38.5	0	0	0	0	0	0	0	0	0
0	0	12	3	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	17	2	0	0	0	19	19	0	0	0	0	0	0	0	0	0
1	0	13	0	1	0	0	15	14.7	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
1	0	52	6	1	0	0	60	59.7	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	11	1	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	10	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	39	5	0	0	0	44	44	0	0	0	0	0	0	0	0	0
0	0	19	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	12	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	1	16	1	0	0	0	18	17.4	0	0	0	0	0	0	0	0	0
0	1	57	4	0	0	0	62	61.4	0	0	0	0	0	0	0	0	0
1	2	693	49	19	7	4	775	795.6	0	0	0	0	0	0	0	0	0

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
2	0	14	3	0	0	2	21	21.4	0	0	2	2	0	0	0	4	4
0	0	15	6	0	1	1	23	25.3	0	0	6	3	1	0	0	10	10.5
1	0	33	7	0	0	1	42	42.2	0	0	7	3	0	0	0	10	10
0	0	35	2	0	0	2	39	41	0	0	5	2	0	0	0	7	7
3	0	97	18	0	1	6	125	129.9	0	0	20	10	1	0	0	31	31.5
0	0	35	4	3	0	3	45	49.5	0	0	6	4	0	0	0	10	10
0	0	55	5	0	0	1	61	62	0	2	5	2	0	0	0	9	7.8
1	0	34	2	0	0	1	38	38.2	0	0	15	3	0	0	0	18	18
0	1	53	4	1	0	1	60	60.9	0	0	23	0	1	0	0	24	24.5
1	1	177	15	4	0	6	204	210.6	0	2	49	9	1	0	0	61	60.3
0	0	49	3	0	0	1	53	54	0	0	10	1	0	0	0	11	11
8	1	36	0	1	0	0	46	39.5	0	0	6	0	0	0	0	6	6
0	0	37	2	0	0	0	39	39	0	0	7	3	0	0	0	10	10
1	0	34	2	1	0	2	40	41.7	0	0	1	3	1	0	0	5	5.5
9	1	156	7	2	0	3	178	174.2	0	0	24	7	1	0	0	32	32.5
3	0	28	3	2	0	1	37	36.6	0	0	9	2	0	0	0	11	11
2	0	34	2	0	0	1	39	38.4	0	0	4	1	2	0	0	7	8
2	0	26	4	2	0	0	34	33.4	0	0	6	0	1	0	0	7	7.5
1	1	35	8	2	0	2	49	50.6	0	0	7	0	0	0	0	7	7
8	1	123	17	6	0	4	159	159	0	0	26	3	3	0	0	32	33.5
0	0	14	3	3	2	0	22	26.1	0	0	6	1	0	0	0	7	7
1	0	35	4	2	0	0	42	42.2	0	0	3	1	0	0	0	4	4
1	0	28	6	2	0	1	38	39.2	1	0	5	2	0	0	0	8	7.2
1	0	24	3	2	0	0	30	30.2	0	0	8	1	0	0	0	9	9
3	0	101	16	9	2	1	132	137.7	1	0	22	5	0	0	0	28	27.2
4	0	33	6	0	0	2	45	43.8	0	0	1	0	0	0	0	1	1
0	0	41	2	3	0	0	46	47.5	0	0	9	1	0	0	0	10	10
0	0	37	5	3	0	1	46	48.5	0	0	3	1	0	0	0	4	4
1	0	41	2	3	0	2	49	51.7	1	0	6	0	0	1	0	8	8.5
5	0	152	15	9	0	5	186	191.5	1	0	19	2	0	1	0	23	23.5
1	0	55	2	1	0	1	60	60.7	0	0	9	0	0	0	0	9	9
1	0	36	7	2	0	0	46	46.2	0	0	17	1	0	0	0	18	18
0	0	58	6	2	0	1	67	69	0	1	7	2	0	0	0	10	9.4
0	1	45	5	2	0	1	54	55.4	0	0	10	2	0	0	0	12	12
2	1	194	20	7	0	3	227	231.3	0	1	43	5	0	0	0	49	48.4
0	1	44	9	1	0	1	56	56.9	0	0	12	1	0	0	0	13	13
0	0	45	5	2	0	0	52	53	0	0	13	2	0	0	1	16	17
0	0	47	3	0	0	0	50	50	0	0	11	0	0	0	0	11	11
1	0	58	7	0	0	3	69	71.2	0	0	8	1	0	0	0	9	9
1	1	194	24	3	0	4	227	231.1	0	0	44	4	0	0	1	49	50
1	0	40	4	0	0	0	45	44.2	0	0	7	0	1	0	0	8	8.5
0	2	43	3	2	0	1	51	51.8	0	0	11	3	0	0	0	14	14
1	0	64	6	2	0	1	74	75.2	0	0	5	2	0	0	0	7	7
0	0	33	5	5	0	1	44	47.5	0	0	5	1	0	0	0	6	6
2	2	180	18	9	0	3	214	218.7	0	0	28	6	1	0	0	35	35.5
2	1	81	7	0	0	3	94	94.8	0	0	9	4	0	0	0	13	13
1	0	79	15	3	1	0	99	101	0	0	14	2	0	0	0	16	16
0	0	118	12	0	0	1	131	132	0	0	12	3	1	0	0	16	16.5
1	0	184	14	1	1	0	201	202	0	0	16	5	0	0	1	22	23
4	1	462	48	4	2	4	525	529.8	0	0	51	14	1	0	1	67	68.5
0	0	142	26	1	1	2	172	175.8	0	0	11	2	0	0	0	13	13
0	0	196	20	0	0	0	216	216	0	0	7	0	0	0	0	7	7
0	0	213	14	3	0	1	231	233.5	0	0	16	0	0	0	0	16	16
0	2	187	12	3	0	1	205	206.3	0	0	11	3	0	0	0	14	14
0	2	738	72	7	1	4	824	831.6	0	0	45	5	0	0	0	50	50
1	0	202	9	2	0	0	214	214.2	0	0	11	0	0	0	0	11	11
0	1	196	11	0	0	2	210	211.4	0	0	15	3	0	0	0	18	18
1	0	165	7	0	0	2	175	176.2	0	0	15	0	0	0	0	15	15
0	3	123	8	0	0	0	134	132.2	0	0	13	1	0	0	0	14	14
2	4	686	35	2	0	4	733	734	0	0	54	4	0	0	0	58	58
40	14	3260	305	62	6	47	3734	3779	2	3	425	74	8	1	2	515	518.9

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	44	5	3	1	0	53	55.8
0	0	5	1	0	0	0	6	6	1	0	82	17	2	0	2	104	106.2
0	0	4	1	0	0	0	5	5	1	1	97	16	1	2	1	119	121.7
1	0	3	0	0	0	0	4	3.2	4	1	121	11	0	1	4	142	143.5
1	0	12	2	0	0	0	15	14.2	6	2	344	49	6	4	7	418	427.2
0	0	2	0	0	0	0	2	2	1	0	110	8	1	0	0	120	119.7
0	1	6	0	1	0	0	8	7.9	0	0	98	9	3	1	2	113	117.8
0	0	10	0	0	0	0	10	10	3	2	99	8	0	0	0	112	108.4
0	0	5	0	0	0	0	5	5	1	0	91	4	1	0	1	98	98.7
0	1	23	0	1	0	0	25	24.9	5	2	398	29	5	1	3	443	444.6
0	0	12	0	0	0	0	12	12	2	0	79	2	0	0	0	83	81.4
0	0	13	0	0	0	0	13	13	2	0	70	8	3	0	1	84	84.9
0	0	2	0	0	0	0	2	2	1	2	56	5	2	0	1	67	67
0	0	4	3	1	0	0	8	8.5	0	0	48	6	0	0	1	55	56
0	0	31	3	1	0	0	35	35.5	5	2	253	21	5	0	3	289	289.3
1	0	0	0	0	0	0	1	0.2	0	0	34	5	2	0	0	41	42
0	0	5	0	0	0	0	5	5	1	3	24	3	3	0	1	35	34.9
0	0	5	0	1	0	0	6	6.5	1	0	30	5	4	0	1	41	43.2
0	0	3	0	0	0	0	3	3	2	0	24	3	2	0	1	32	32.4
1	0	13	0	1	0	0	15	14.7	4	3	112	16	11	0	3	149	152.5
0	0	1	0	2	0	0	3	4	0	0	33	5	2	0	0	40	41
0	0	2	0	0	0	0	2	2	3	0	22	5	0	0	1	31	29.6
0	0	2	2	1	1	0	6	7.8	1	1	26	4	2	0	1	35	35.6
0	0	4	2	0	0	0	6	6	0	0	46	9	0	0	1	56	57
0	0	9	4	3	1	0	17	19.8	4	1	127	23	4	0	3	162	163.2
0	0	3	2	0	0	0	5	5	2	0	30	3	3	0	0	38	37.9
0	0	5	0	0	0	0	5	5	0	0	28	6	0	0	1	35	36
0	0	5	1	0	0	0	6	6	10	0	30	6	3	0	1	50	44.5
0	0	7	0	0	0	0	7	7	1	0	45	7	2	0	1	56	57.2
0	0	20	3	0	0	0	23	23	13	0	133	22	8	0	3	179	175.6
0	0	5	0	0	0	0	5	5	1	0	44	6	1	0	0	52	51.7
0	0	4	0	0	0	0	4	4	2	2	41	3	4	0	1	53	53.2
0	0	6	2	0	0	0	8	8	0	0	38	3	2	0	2	45	48
0	0	5	0	0	0	0	5	5	0	0	50	6	2	1	0	59	61.3
0	0	20	2	0	0	0	22	22	3	2	173	18	9	1	3	209	214.2
0	0	2	0	0	0	0	2	2	1	0	70	2	0	1	0	74	74.5
1	0	6	0	0	0	0	7	6.2	0	1	67	4	0	0	3	75	77.4
1	0	4	0	0	0	0	5	4.2	0	0	41	1	2	0	2	46	49
0	0	7	3	0	0	0	10	10	0	0	59	2	0	1	3	65	69.3
2	0	19	3	0	0	0	24	22.4	1	1	237	9	2	2	8	260	270.2
0	0	5	0	0	0	0	5	5	2	0	40	5	1	0	1	49	48.9
0	0	5	0	0	0	0	5	5	4	0	49	6	0	0	0	59	55.8
0	0	4	1	0	0	0	5	5	0	0	47	4	4	0	1	56	59
0	0	3	1	0	0	0	4	4	0	0	46	9	3	0	1	59	61.5
0	0	17	2	0	0	0	19	19	6	0	182	24	8	0	3	223	225.2
1	0	6	2	0	1	0	10	10.5	1	1	44	7	2	1	1	57	58.9
1	0	6	0	0	0	0	7	6.2	0	0	56	1	2	0	1	60	62
0	0	5	0	0	0	0	5	5	1	0	58	2	0	1	1	63	64.5
0	0	10	1	0	0	0	11	11	0	0	49	2	2	1	1	55	58.3
2	0	27	3	0	1	0	33	32.7	2	1	207	12	6	3	4	235	243.7
0	0	6	2	0	1	0	9	10.3	1	2	51	3	1	0	1	59	58.5
2	0	3	0	0	0	0	5	3.4	0	3	55	4	1	0	0	63	61.7
0	0	11	1	0	0	0	12	12	0	0	43	1	3	0	2	49	52.5
0	0	8	2	0	0	0	10	10	0	0	44	2	1	0	0	47	47.5
2	0	28	5	0	1	0	36	35.7	1	5	193	10	6	0	3	218	220.2
0	0	8	0	0	0	0	8	8	1	0	38	3	0	2	0	44	45.8
0	0	10	0	1	0	0	11	11.5	0	0	51	2	2	0	1	56	58
0	0	5	0	0	0	1	6	7	0	0	48	4	0	0	0	52	52
0	0	4	1	0	0	0	5	5	0	0	46	2	0	0	1	49	50
0	0	27	1	1	0	1	30	31.5	1	0	183	11	2	2	2	201	205.8
8	1	246	28	7	3	1	294	295.4	51	19	2542	244	72	13	45	2986	3032

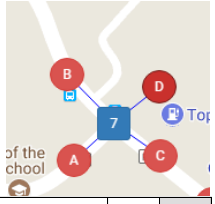
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	3	4.3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	2	0	1	0	6	7.3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5	5.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	3.3
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	6.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	3	2	0	0	11	12
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
0	0	0	0	0	0	0	0	0	0	0	5	0	2	0	0	7	8
0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3	4.3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	9	0	0	1	0	10	11.3
0	0	1	0	0	0	0	1	1	0	0	59	10	5	3	0	77	83.4

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	8	2	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	2	3	0	0	0	5	5
0	0	0	1	0	0	0	1	1	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	1	1	0	0	0	2	2	0	0	9	5	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	9	9.5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	16	1	1	0	0	18	18.5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	5	2	0	0	0	7	7
1	0	1	0	0	0	0	2	1.2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	4	4.5
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	0	0	1	0	0	1	1.5	0	0	2	0	0	0	0	2	2
1	0	2	0	1	0	0	4	3.7	0	0	7	1	1	0	0	9	9.5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	3	0	1	0	0	4	4.5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	7	0	1	0	0	8	8.5
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	1	1	0	0	0	2	2	0	0	12	1	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	6	2	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	1	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	1	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	1	1	0	0	0	2	2	0	0	14	0	0	0	0	14	14
1	0	20	4	1	0	0	26	25.7	0	0	103	14	3	0	0	120	121.5

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	1	0	5	6.3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	1	0	6	7.3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	37	8	0	1	0	46	47.3	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 7
Date : 09/11/17
Location : Enniskerry Road/R116



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	2	0	6	4	0	0	0	12	10.4
07:15	0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	2	18	20
07:30	0	0	0	0	0	0	0	0	0	0	0	25	2	0	0	1	28	29
07:45	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	2	12	14
H/TOT	0	0	0	0	0	0	0	0	0	2	0	53	10	0	0	5	70	73.4
08:00	0	0	0	0	0	0	0	0	0	0	0	20	2	0	0	1	23	24
08:15	0	0	0	0	0	0	0	0	0	0	0	19	0	1	2	0	22	25.1
08:30	0	0	0	0	0	0	0	0	0	0	0	35	2	1	1	1	40	42.8
08:45	0	0	0	0	0	0	0	0	0	0	0	71	1	2	0	0	74	75
H/TOT	0	0	0	0	0	0	0	0	0	0	0	145	5	4	3	2	159	166.9
09:00	0	0	0	0	0	0	0	0	0	0	0	45	1	2	0	0	48	49
09:15	0	0	0	0	0	0	0	0	0	0	0	25	1	0	1	0	27	28.3
09:30	0	0	0	0	0	0	0	0	0	0	0	23	1	0	0	1	25	26
09:45	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	9	9.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	101	3	3	1	1	109	112.8
10:00	0	0	0	0	0	0	0	0	0	0	0	9	4	0	1	0	14	15.3
10:15	0	0	0	0	0	0	0	0	0	0	0	6	1	0	1	0	8	9.3
10:30	0	0	0	0	0	0	0	0	0	0	1	13	0	0	0	1	15	15.4
10:45	0	0	0	0	0	0	0	0	0	0	0	8	2	0	0	1	11	12
H/TOT	0	0	0	0	0	0	0	0	0	0	1	36	7	0	2	2	48	52
11:00	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	8	8.5
11:15	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2
11:30	0	0	0	0	0	0	0	0	0	0	0	21	0	0	2	1	24	27.6
11:45	0	0	0	0	0	0	0	0	0	0	0	47	1	1	0	0	49	49.5
H/TOT	0	0	0	0	0	0	0	0	0	1	0	79	2	2	2	1	87	90.8
12:00	0	0	0	0	0	0	0	0	0	0	0	16	0	0	1	0	17	18.3
12:15	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	8	7.2
12:30	0	0	0	0	0	0	0	0	0	0	0	7	1	1	0	1	10	11.5
12:45	0	0	0	0	0	0	0	0	0	0	0	13	1	0	1	0	15	16.3
H/TOT	0	0	0	0	0	0	0	0	0	1	0	42	3	1	2	1	50	53.3
13:00	0	0	0	0	0	0	0	0	0	0	1	6	1	0	0	0	8	7.4
13:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	2	0	13	15.6
13:30	0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	2	44	46
13:45	0	0	0	0	0	0	0	0	0	0	0	16	0	1	1	0	18	19.8
H/TOT	0	0	0	0	0	0	0	0	0	0	1	74	2	1	3	2	83	88.8
14:00	0	0	0	0	0	0	0	0	0	1	0	39	1	0	0	0	41	40.2
14:15	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	10	12
14:30	0	0	0	0	0	0	0	0	0	0	0	58	1	1	0	0	60	60.5
14:45	0	0	0	0	0	0	0	0	0	0	0	20	0	0	1	0	21	22.3
H/TOT	0	0	0	0	0	0	0	0	0	1	0	125	2	1	1	2	132	135
15:00	0	0	0	0	0	0	0	0	0	2	0	17	1	0	1	0	21	20.7
15:15	0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	16	16
15:30	0	0	0	0	0	0	0	0	0	0	0	28	1	1	1	2	33	36.8
15:45	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	1	14	15
H/TOT	0	0	0	0	0	0	0	0	0	2	0	70	6	1	2	3	84	88.5
16:00	0	0	0	0	0	0	0	0	0	2	1	9	1	0	0	1	14	12.8
16:15	0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	15	15
16:30	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	6
16:45	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	1	13	14
H/TOT	0	0	0	0	0	0	0	0	0	2	1	38	5	0	0	2	48	47.8
17:00	0	0	0	0	0	0	0	0	0	0	1	8	2	0	0	0	11	10.4
17:15	0	0	1	0	0	0	0	1	1	1	0	8	1	0	1	0	11	11.5
17:30	0	0	0	0	0	0	0	0	0	1	0	7	1	0	0	1	10	10.2
17:45	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	1	7	8
H/TOT	0	0	1	0	0	0	0	1	1	2	1	28	5	0	1	2	39	40.1
18:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
18:15	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	1	12	13
18:30	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
18:45	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16
H/TOT	0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	1	43	44
12 TOT	0	0	1	0	0	0	0	1	1	11	4	832	51	13	17	24	952	993.4

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	1	1	0	0	3	3.5	1	0	1	0	0	0	0	2	1.2
0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	12	2	1	0	0	15	15.5	1	0	1	1	0	0	0	3	2.2
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	7	1	0	0	0	8	8	0	0	5	0	0	0	0	5	5
0	0	12	1	0	0	0	13	13	0	0	4	1	0	0	0	5	5
0	0	11	2	0	0	0	13	13	0	0	8	0	0	0	0	8	8
0	0	34	4	0	0	0	38	38	0	0	18	1	0	0	0	19	19
0	0	11	2	0	0	0	13	13	0	0	2	1	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	2	0	0	0	0	2	2
0	0	6	0	0	0	0	6	6	0	0	4	0	0	0	0	4	4
0	0	2	0	0	0	0	2	2	0	0	0	1	0	0	0	1	1
0	0	23	2	0	0	0	25	25	0	0	8	2	0	0	0	10	10
0	0	4	1	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	4	0	1	0	0	5	5.5	0	0	4	0	1	0	0	5	5.5
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	10	1	1	0	0	12	12.5	0	0	6	0	1	0	0	7	7.5
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	7	2	2	0	0	11	12	0	0	3	2	0	0	0	5	5
0	0	19	3	2	0	0	24	25	0	0	7	2	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	3	0	0	0	0	3	3
0	0	3	0	1	0	0	4	4.5	0	0	3	0	0	0	0	3	3
0	0	8	0	1	0	0	9	9.5	0	0	9	0	0	0	0	9	9
1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
0	0	4	2	0	0	0	6	6	0	0	1	0	1	0	0	2	2.5
0	0	3	0	0	0	0	3	3	0	0	2	1	0	0	0	3	3
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
1	0	16	2	0	0	0	19	18.2	0	0	3	1	1	0	0	5	5.5
0	0	10	0	0	0	0	10	10	0	0	3	0	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	6	1	0	0	0	7	7
0	0	7	1	1	0	0	9	9.5	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	2	1	0	0	0	3	3
0	0	24	1	1	0	0	26	26.5	0	0	13	2	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	7	2	0	0	0	9	9	0	0	1	1	0	0	0	2	2
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	15	4	0	0	0	19	19	0	0	6	1	0	0	0	7	7
0	0	6	0	0	0	0	6	6	0	0	4	0	0	0	1	5	6
0	0	9	0	0	0	0	9	9	0	0	1	0	0	0	0	1	1
0	0	6	2	0	1	0	9	10.3	0	0	1	0	0	0	0	1	1
0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	26	3	0	1	0	30	31.3	0	0	7	0	0	0	1	8	9
0	0	7	1	0	0	0	8	8	0	0	3	0	0	0	0	3	3
0	0	9	1	0	0	0	10	10	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	5	0	0	0	0	5	5
0	0	10	1	0	0	0	11	11	0	0	1	0	0	0	0	1	1
0	0	29	3	0	0	0	32	32	0	0	11	0	0	0	0	11	11
0	0	2	0	2	0	0	4	5	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	1	0	0	0	0	1	1
0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	10	0	0	0	0	10	10	0	0	0	1	0	0	0	1	1
0	0	20	1	2	0	0	23	24	0	0	2	1	0	0	0	3	3
1	0	236	26	8	1	0	272	276.5	1	0	91	11	2	0	1	106	107.2

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	4	0	0	0	1	5	6	0	0	0	0	0	0	0	0	0
0	0	3	1	1	0	1	6	7.5	0	0	0	0	0	0	0	0	0
0	0	6	1	0	0	1	8	9	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	1	9	10	0	0	0	0	0	0	0	0	0
0	0	20	3	1	0	4	28	32.5	0	0	0	0	0	0	0	0	0
0	0	17	0	0	2	0	19	21.6	0	0	0	0	0	0	0	0	0
0	0	15	0	1	1	0	17	18.8	0	0	0	0	0	0	0	0	0
0	1	54	1	0	0	1	57	57.4	0	0	0	0	0	0	0	0	0
0	0	63	0	2	0	0	65	66	0	0	0	0	0	0	0	0	0
0	1	149	1	3	3	1	158	163.8	0	0	0	0	0	0	0	0	0
1	0	31	1	0	0	1	34	34.2	0	0	0	0	0	0	0	0	0
0	0	18	0	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	1	10	11	0	0	0	0	0	0	0	0	0
0	0	7	0	1	2	0	10	13.1	0	0	0	0	0	0	0	0	0
1	0	65	1	2	2	2	73	77.8	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	1	7	8	0	0	0	0	0	0	0	0	0
0	0	3	1	0	1	0	5	6.3	0	0	0	0	0	0	0	0	0
1	1	3	2	0	0	1	8	7.6	0	0	0	0	0	0	0	0	0
0	0	6	3	0	0	1	10	11	0	0	0	0	0	0	0	0	0
1	1	17	7	0	1	3	30	32.9	0	0	0	0	0	0	0	0	0
0	0	15	0	1	0	0	16	16.5	0	0	0	0	0	0	0	0	0
0	0	19	2	0	1	0	22	23.3	0	0	0	0	0	0	0	0	0
2	0	9	1	0	0	1	13	12.4	0	0	0	0	0	0	0	0	0
0	0	14	1	1	1	0	17	18.8	0	0	0	0	0	0	0	0	0
2	0	57	4	2	2	1	68	71	0	0	0	0	0	0	0	0	0
0	0	6	1	0	0	1	8	9	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	9	1	1	0	0	11	11.5	0	0	0	0	0	0	0	0	0
0	0	17	0	1	0	0	18	18.5	0	0	0	0	0	0	0	0	0
0	0	44	2	2	0	1	49	51	0	0	0	0	0	0	0	0	0
0	0	16	0	0	3	1	20	24.9	0	0	0	0	0	0	0	0	0
0	0	29	0	1	0	0	30	30.5	0	0	0	0	0	0	0	0	0
0	0	23	0	0	0	1	24	25	0	0	0	0	0	0	0	0	0
0	1	30	1	0	0	0	32	31.4	0	0	0	0	0	0	0	0	0
0	1	98	1	1	3	2	106	111.8	0	0	0	0	0	0	0	0	0
0	0	30	2	1	0	1	34	35.5	0	0	0	0	0	0	0	0	0
0	0	34	1	1	0	2	38	40.5	0	0	1	0	0	0	0	1	1
0	0	15	1	0	1	0	17	18.3	0	0	0	0	0	0	0	0	0
0	0	19	5	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	98	9	2	1	3	113	118.3	0	0	1	0	0	0	0	1	1
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	23	2	0	0	0	25	25	0	0	0	0	0	0	0	0	0
2	0	15	1	0	0	1	19	18.4	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	1	12	13	0	0	0	0	0	0	0	0	0
2	0	63	3	0	0	2	70	70.4	0	0	0	0	0	0	0	0	0
0	0	7	3	0	0	1	11	12	0	0	0	0	0	0	0	0	0
0	0	11	1	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	11	4	0	0	1	16	17	0	0	1	0	0	0	0	1	1
0	0	36	9	0	0	2	47	49	0	0	1	0	0	0	0	1	1
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	11	2	0	0	2	15	17	0	0	0	0	0	0	0	0	0
0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	38	4	0	0	2	44	46	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	11	1	0	0	2	14	16	0	0	0	0	0	0	0	0	0
0	0	12	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	47	4	0	0	2	53	55	0	0	0	0	0	0	0	0	0
6	3	732	48	13	12	25	839	879.5	0	0	2	0	0	0	0	2	2

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	14	3	0	0	0	18	17.2	0	0	2	3	0	0	0	5	5
1	0	20	3	0	0	0	24	23.2	0	0	9	5	1	0	0	15	15.5
0	0	24	4	1	0	1	30	31.5	0	0	10	4	1	0	0	15	15.5
0	0	49	2	0	0	1	52	53	0	0	6	1	0	0	0	7	7
2	0	107	12	1	0	2	124	124.9	0	0	27	13	2	0	0	42	43
1	0	35	3	0	0	0	39	38.2	0	0	8	1	0	0	0	9	9
0	0	41	1	2	0	0	44	45	0	0	7	1	0	0	0	8	8
0	0	57	2	1	2	0	62	65.1	0	0	20	1	1	0	0	22	22.5
0	0	42	3	0	0	2	47	49	0	0	17	3	0	0	0	20	20
1	0	175	9	3	2	2	192	197.3	0	0	52	6	1	0	0	59	59.5
0	0	45	3	1	0	0	49	49.5	0	0	17	0	1	0	0	18	18.5
0	0	40	3	0	0	1	44	45	0	0	6	0	1	0	0	7	7.5
2	0	32	4	3	0	0	41	40.9	0	0	4	1	2	0	0	7	8
2	0	44	5	0	1	1	53	53.7	1	0	6	2	0	0	0	9	8.2
4	0	161	15	4	1	2	187	189.1	1	0	33	3	4	0	0	41	42.2
1	0	37	4	4	1	1	48	51.5	0	0	8	0	0	0	0	8	8
4	0	35	2	0	0	1	42	39.8	0	0	2	0	0	0	0	2	2
2	1	31	1	0	0	0	35	32.8	0	1	8	2	1	0	0	12	11.9
3	1	35	5	0	1	0	45	43.3	0	0	6	1	4	1	0	12	15.3
10	2	138	12	4	2	2	170	167.4	0	1	24	3	5	1	0	34	37.2
1	1	26	6	1	0	1	36	36.1	0	0	7	0	0	0	0	7	7
0	0	36	4	1	0	0	41	41.5	0	0	4	2	1	0	0	7	7.5
3	0	30	5	2	0	0	40	38.6	0	0	5	1	1	0	0	7	7.5
2	0	45	3	1	0	1	52	51.9	0	0	4	4	0	0	0	8	8
6	1	137	18	5	0	2	169	168.1	0	0	20	7	2	0	0	29	30
2	0	38	3	1	0	1	45	44.9	0	0	7	0	0	0	0	7	7
0	0	38	2	3	0	2	45	48.5	0	0	8	2	1	0	0	11	11.5
0	1	33	4	2	0	0	40	40.4	0	0	6	0	0	0	0	6	6
0	2	34	4	2	0	1	43	43.8	0	0	8	0	0	0	0	8	8
2	3	143	13	8	0	4	173	177.6	0	0	29	2	1	0	0	32	32.5
1	1	46	6	2	0	0	56	55.6	0	0	10	2	0	0	0	12	12
1	1	51	4	1	0	0	58	57.1	0	0	9	0	0	0	0	9	9
0	0	48	5	0	1	1	55	57.3	0	0	9	4	0	0	0	13	13
0	0	56	7	1	0	1	65	66.5	0	0	9	4	3	0	0	16	17.5
2	2	201	22	4	1	2	234	236.5	0	0	37	10	3	0	0	50	51.5
0	0	42	0	2	0	0	44	45	0	0	11	3	0	0	0	14	14
0	0	56	2	2	1	0	61	63.3	0	0	14	2	0	0	0	16	16
0	1	31	6	4	0	0	42	43.4	0	0	16	0	1	0	0	17	17.5
0	0	48	5	4	1	2	60	65.3	0	0	15	0	0	0	0	15	15
0	1	177	13	12	2	2	207	217	0	0	56	5	1	0	0	62	62.5
0	0	43	5	1	1	0	50	51.8	0	0	2	2	0	0	0	4	4
0	0	53	4	0	0	0	57	57	0	0	6	0	1	0	0	7	7.5
0	0	59	10	4	0	0	73	75	0	1	13	3	0	0	1	18	18.4
0	0	52	6	3	1	0	62	64.8	0	0	9	0	0	0	0	9	9
0	0	207	25	8	2	0	242	248.6	0	1	30	5	1	0	1	38	38.9
1	0	59	11	1	0	1	73	73.7	0	0	8	4	0	0	0	12	12
0	0	96	10	2	2	0	110	113.6	0	0	11	2	0	0	0	13	13
0	0	134	19	5	3	0	161	167.4	0	1	17	2	0	0	0	20	19.4
0	0	173	24	0	0	0	197	197	1	0	13	6	0	0	0	20	19.2
1	0	462	64	8	5	1	541	551.7	1	1	49	14	0	0	0	65	63.6
0	0	172	20	0	0	0	192	192	0	0	18	0	1	0	0	19	19.5
0	0	185	26	3	0	1	215	217.5	0	0	8	2	0	0	0	10	10
0	0	185	22	3	0	0	210	211.5	0	0	15	1	0	0	0	16	16
0	0	155	17	3	1	1	177	180.8	0	0	13	2	0	0	0	15	15
0	0	697	85	9	1	2	794	801.8	0	0	54	5	1	0	0	60	60.5
1	0	175	13	1	1	0	191	192	0	0	25	3	0	0	0	28	28
2	2	159	16	1	0	0	180	177.7	0	0	15	0	0	0	0	15	15
15	0	135	8	1	0	1	160	149.5	0	0	12	1	0	0	0	13	13
3	0	90	3	0	0	0	96	93.6	0	0	11	1	0	0	0	12	12
21	2	559	40	3	1	1	627	612.8	0	0	63	5	0	0	0	68	68
49	11	3164	328	69	17	22	3660	3693	2	3	474	78	21	1	1	580	589.4

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	1	0	39	3	0	0	1	44	44.2
0	0	2	0	0	0	0	2	2	0	1	67	7	1	0	0	76	75.9
0	0	3	2	0	0	0	5	5	1	1	97	9	0	0	0	108	106.6
1	0	6	0	0	0	0	7	6.2	2	0	111	9	2	0	3	127	129.4
1	0	11	2	0	0	0	14	13.2	4	2	314	28	3	0	4	355	356.1
0	0	2	1	0	0	0	3	3	3	0	98	4	1	0	1	107	106.1
0	0	6	0	0	0	0	6	6	2	0	96	4	2	0	2	106	107.4
0	0	6	1	0	0	0	7	7	1	1	96	6	2	0	0	106	105.6
0	0	15	0	0	0	0	15	15	0	1	73	3	4	0	1	82	84.4
0	0	29	2	0	0	0	31	31	6	2	363	17	9	0	4	401	403.5
0	0	10	1	1	0	0	12	12.5	2	0	76	4	1	0	0	83	81.9
0	0	8	0	1	1	0	10	11.8	0	0	62	3	4	0	1	70	73
0	0	7	2	0	0	0	9	9	1	0	59	3	1	0	0	64	63.7
0	0	5	0	1	0	0	6	6.5	0	3	38	2	1	0	1	45	44.7
0	0	30	3	3	1	0	37	39.8	3	3	235	12	7	0	2	262	263.3
1	0	5	0	0	0	0	6	5.2	0	1	31	1	1	1	0	35	36.2
1	0	2	0	1	0	0	4	3.7	2	0	36	2	2	0	1	43	43.4
0	0	7	0	0	0	0	7	7	2	0	33	4	2	1	0	42	42.7
0	0	1	0	0	0	0	1	1	1	0	27	3	1	0	0	32	31.7
2	0	15	0	1	0	0	18	16.9	5	1	127	10	6	2	1	152	154
0	0	6	0	0	0	0	6	6	2	0	38	0	1	1	1	43	44.2
0	0	6	0	0	0	0	6	6	3	0	28	2	0	1	1	35	34.9
0	0	6	1	1	0	0	8	8.5	0	0	43	3	1	0	0	47	47.5
1	0	7	0	0	0	0	8	7.2	0	0	38	4	1	0	1	44	45.5
1	0	25	1	1	0	0	28	27.7	5	0	147	9	3	2	3	169	172.1
0	0	6	0	0	0	0	6	6	2	0	58	4	1	0	0	65	63.9
0	0	5	0	0	0	0	5	5	4	0	72	5	3	0	1	85	84.3
0	0	2	2	0	0	0	4	4	0	0	34	5	1	0	0	40	40.5
0	0	5	0	0	0	0	5	5	6	0	41	4	0	0	1	52	48.2
0	0	18	2	0	0	0	20	20	12	0	205	18	5	0	2	242	236.9
0	0	8	0	0	0	0	8	8	1	0	46	9	0	0	0	56	55.2
0	0	3	0	0	0	0	3	3	1	0	45	5	1	0	1	53	53.7
0	0	7	1	1	0	0	9	9.5	0	1	45	3	2	0	0	51	51.4
0	0	8	0	1	1	0	10	11.8	1	0	44	4	3	0	1	53	54.7
0	0	26	1	2	1	0	30	32.3	3	1	180	21	6	0	2	213	215
0	0	5	0	0	0	0	5	5	0	2	53	4	3	0	0	62	62.3
0	0	6	0	0	0	0	6	6	1	0	41	2	0	0	0	44	43.2
1	0	12	0	0	1	0	14	14.5	0	0	41	5	0	0	3	49	52
1	0	5	0	0	0	0	6	5.2	0	0	52	3	4	0	0	59	61
2	0	28	0	0	1	0	31	30.7	1	2	187	14	7	0	3	214	218.5
0	0	4	0	0	0	0	4	4	3	1	51	7	2	0	0	64	62
0	0	0	0	0	1	0	1	2.3	0	0	55	8	5	1	1	70	74.8
0	0	6	0	0	0	0	6	6	1	0	55	7	0	0	0	63	62.2
0	0	3	1	0	0	0	4	4	0	0	58	4	0	0	1	63	64
0	0	13	1	0	1	0	15	16.3	4	1	219	26	7	1	2	260	263
0	0	6	0	0	1	0	7	8.3	0	0	59	9	0	0	1	69	70
0	0	4	3	0	0	0	7	7	1	0	49	3	0	0	1	54	54.2
0	0	10	2	0	1	0	13	14.3	0	2	51	5	1	0	1	60	60.3
0	0	9	0	1	1	0	11	12.8	0	0	52	5	1	0	1	59	60.5
0	0	29	5	1	3	0	38	42.4	1	2	211	22	2	0	4	242	245
0	0	11	1	0	0	0	12	12	0	3	53	6	0	0	0	62	60.2
1	0	10	1	0	0	0	12	11.2	0	0	63	7	1	0	0	71	71.5
0	0	2	0	1	0	0	3	3.5	0	0	51	2	1	0	0	54	54.5
0	0	5	2	2	0	0	9	10	1	0	42	1	1	0	1	46	46.7
1	0	28	4	3	0	0	36	36.7	1	3	209	16	3	0	1	233	232.9
0	0	4	1	0	0	0	5	5	1	0	36	4	0	0	0	41	40.2
0	0	3	1	0	0	0	4	4	4	0	53	4	0	0	0	61	57.8
0	0	2	0	0	0	0	2	2	0	0	54	3	2	0	0	59	60
0	0	3	1	0	0	0	4	4	0	0	47	5	1	0	2	55	57.5
0	0	12	3	0	0	0	15	15	5	0	190	16	3	0	2	216	215.5
7	0	264	24	11	7	0	313	322	50	17	2587	209	61	5	30	2959	2976

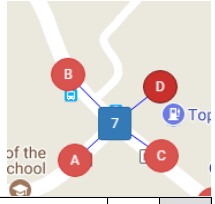
C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
0	0	0	0	0	0	0	0	0	0	0	11	2	1	0	0	14	14.5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	78	15	1	0	0	94	94.5

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	4	3	0	0	0	7	7
0	0	0	1	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	1	1	0	0	0	2	2	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	1	1	0	0	0	2	2
0	0	3	2	0	0	0	5	5	0	0	14	1	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	1	0	0	0	1	1	0	0	4	1	0	0	0	5	5
0	0	1	1	0	0	0	2	2	0	0	10	1	0	0	0	11	11
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	1	1	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
0	0	3	1	0	0	0	4	4	0	0	4	0	1	0	0	5	5.5
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	5	5.5
0	0	2	0	0	0	0	2	2	0	0	5	1	2	0	0	8	9
0	0	2	0	0	0	0	2	2	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	6	4	0	0	0	10	10
0	0	2	0	0	0	0	2	2	0	0	5	1	0	0	0	6	6
0	0	1	1	0	0	0	2	2	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	4	1	0	0	0	5	5	0	0	16	2	0	0	0	18	18
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	2	1	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	3	2	0	0	0	5	5	0	0	6	1	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	2	0	0	0	0	2	2	0	0	9	2	0	0	0	11	11
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	2	0	0	0	0	2	2	0	0	16	0	0	0	0	16	16
0	0	23	7	0	0	0	30	30	0	0	101	17	3	0	0	121	122.5

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	30	4	1	0	0	35	35.5	0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 7
Date : 11/11/17
Location : Enniskerry Road/R116



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0	9	9
08:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
08:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	5	6
08:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	1	13	14
09:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	7	8
09:15	0	0	0	0	0	0	0	0	0	3	0	11	0	0	0	0	14	11.6
09:30	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
09:45	0	0	0	0	0	0	0	0	0	1	0	10	2	0	0	1	14	14.2
H/TOT	0	0	0	0	0	0	0	0	0	4	0	35	2	0	0	2	43	41.8
10:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
10:15	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	9
10:30	0	0	0	0	0	0	0	0	0	1	0	11	0	0	0	0	12	11.2
10:45	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
H/TOT	0	0	0	0	0	0	0	0	0	1	0	40	3	0	0	0	44	43.2
11:00	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
11:15	0	0	0	0	0	0	0	0	0	3	0	9	0	0	0	0	12	9.6
11:30	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
11:45	0	0	0	0	0	0	0	0	0	1	0	13	0	0	0	0	14	13.2
H/TOT	0	0	0	0	0	0	0	0	0	4	0	51	0	0	0	0	55	51.8
12:00	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
12:15	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
12:30	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7
12:45	0	0	0	0	0	0	0	0	0	2	0	11	1	0	0	1	15	14.4
H/TOT	0	0	0	0	0	0	0	0	0	2	0	35	3	0	0	1	41	40.4
13:00	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	12
13:15	0	0	0	0	0	0	0	0	0	2	0	14	0	0	0	1	17	16.4
13:30	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
13:45	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
H/TOT	0	0	0	0	0	0	0	0	0	2	0	56	1	0	0	1	60	59.4
14:00	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	17
14:15	0	0	0	0	0	0	0	0	0	1	0	17	2	0	0	1	21	21.2
14:30	0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	1	19	20
14:45	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	1	0	61	4	0	0	2	68	69.2
15:00	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
15:15	0	0	0	0	0	0	0	0	0	0	0	20	1	0	0	0	21	21
15:30	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	16
15:45	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	20
H/TOT	0	0	0	0	0	0	0	0	0	0	0	69	1	0	0	0	70	70
16:00	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	1	14	15
16:15	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
16:30	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
16:45	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	1	9	10
H/TOT	0	0	0	0	0	0	0	0	0	0	0	47	2	0	0	2	51	53
17:00	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
17:15	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
17:30	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
17:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	7	8
H/TOT	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0	1	42	43
18:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
18:15	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	1	16	17
18:30	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
18:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0	1	43	44
12 TOT	0	0	0	0	0	0	0	0	0	14	0	493	21	0	0	11	539	538.8

A=>C									A=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	2	1	0	0	0	3	3	0	0	4	0	0	0	0	4	4
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
3	0	3	0	1	0	0	7	5.1	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
3	0	7	0	1	0	0	11	9.1	0	0	5	0	0	0	0	5	5
2	0	3	0	1	0	0	6	4.9	0	0	3	0	0	0	0	3	3
0	0	2	0	1	0	0	3	3.5	0	0	2	0	0	0	0	2	2
3	0	8	0	1	1	0	13	12.4	0	0	2	0	0	0	0	2	2
0	0	6	0	2	0	0	8	9	0	0	2	0	0	0	0	2	2
5	0	19	0	5	1	0	30	29.8	0	0	9	0	0	0	0	9	9
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	1	1	1	0	0	3	3.5	0	0	3	2	0	0	0	5	5
1	0	3	0	0	0	0	4	3.2	0	0	2	0	0	0	0	2	2
0	0	3	2	0	0	0	5	5	0	0	1	0	0	0	0	1	1
1	0	9	3	1	0	0	14	13.7	0	0	8	2	0	0	0	10	10
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	3	1	0	0	0	4	4	0	0	5	0	0	0	0	5	5
0	0	9	2	0	0	0	11	11	0	0	0	1	0	0	0	1	1
0	0	15	3	0	0	0	18	18	0	0	8	1	0	0	0	9	9
1	0	6	1	0	0	0	8	7.2	0	0	4	0	0	0	0	4	4
0	0	4	1	0	0	0	5	5	0	0	3	0	0	0	0	3	3
0	0	3	0	0	0	0	3	3	0	0	2	0	1	0	0	3	3.5
1	0	5	0	0	0	0	6	5.2	0	0	1	0	0	0	0	1	1
2	0	18	2	0	0	0	22	20.4	0	0	10	0	1	0	0	11	11.5
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	5	1	0	0	0	6	6	0	0	2	0	0	0	0	2	2
0	0	4	0	0	0	0	4	4	0	0	0	1	0	0	0	1	1
2	0	4	1	0	0	0	7	5.4	0	0	2	0	0	0	0	2	2
2	0	15	2	0	0	0	19	17.4	0	0	7	1	0	0	0	8	8
0	0	6	1	0	0	0	7	7	0	0	3	0	0	0	0	3	3
0	0	5	0	0	0	0	5	5	0	0	4	0	0	0	0	4	4
0	1	6	0	0	0	0	7	6.4	0	0	1	0	1	0	0	2	2.5
0	0	6	0	0	0	0	6	6	0	0	2	0	0	0	0	2	2
0	1	23	1	0	0	0	25	24.4	0	0	10	0	1	0	0	11	11.5
0	0	3	1	0	0	0	4	4	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	7	0	0	0	0	7	7	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	10	1	0	0	0	11	11	0	0	6	2	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	6	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	0	1	0	0	0	1	1
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	11	1	0	0	0	12	12	0	0	2	2	0	0	0	4	4
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1
13	1	136	14	7	1	0	172	165.8	0	0	70	8	2	0	0	80	81

B=>A									B=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	1	0	0	1	1.5
0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
2	0	13	0	0	0	0	15	13.4	0	0	1	0	0	0	0	1	1
2	0	24	2	0	0	0	28	26.4	0	0	2	0	1	0	0	3	3.5
0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
1	0	9	1	0	0	0	11	10.2	0	0	0	0	0	0	0	0	0
0	0	15	0	0	0	0	15	15	0	0	1	0	0	0	0	1	1
1	0	7	3	0	0	0	11	10.2	0	0	0	0	0	0	1	1	2
2	0	43	4	0	0	0	49	47.4	0	0	1	0	0	0	1	2	3
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	11	2	1	0	0	14	14.5	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
1	0	11	3	0	0	0	15	14.2	0	0	0	0	0	0	0	0	0
1	0	36	6	1	0	0	44	43.7	0	0	0	0	0	0	0	0	0
0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	10	1	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
0	0	15	2	0	0	0	17	17	0	0	0	0	0	0	0	0	0
0	0	53	4	1	0	0	58	58.5	0	0	0	0	0	0	0	0	0
0	0	14	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0
0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	1	1	2
0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	53	2	0	0	0	55	55	0	0	0	0	0	0	1	1	2
0	0	22	1	0	0	0	23	23	0	0	0	0	0	0	0	0	0
1	0	12	0	0	0	0	13	12.2	0	0	0	0	0	0	1	1	2
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	1	1	2
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
1	0	49	2	0	0	0	52	51.2	0	0	0	0	0	0	2	2	4
0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
0	0	39	1	0	0	0	40	40	0	0	0	0	0	0	0	0	0
0	0	12	0	1	0	1	14	15.5	0	0	0	0	0	0	0	0	0
0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	11	1	0	0	0	12	12	0	0	0	0	0	0	1	1	2
0	0	42	2	1	0	1	46	47.5	0	0	0	0	0	0	1	1	2
0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	39	3	0	0	0	42	42	0	0	0	0	0	0	0	0	0
0	0	5	0	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	29	0	1	0	0	30	30.5	0	0	0	0	0	0	0	0	0
6	0	417	26	4	0	1	454	452.2	0	0	3	0	1	0	5	9	14.5

B=>C									B=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	2	1	0	0	5	5.5	0	0	2	0	0	0	0	2	2
2	0	8	1	0	1	2	14	15.7	1	0	2	3	0	0	0	6	5.2
0	0	8	1	0	0	0	9	9	0	0	1	0	0	0	0	1	1
1	0	14	1	1	1	4	22	27	0	0	2	0	0	0	0	2	2
3	0	32	5	2	2	6	50	57.2	1	0	7	3	0	0	0	11	10.2
0	0	5	2	1	0	1	9	10.5	0	0	3	0	0	0	0	3	3
0	0	10	1	0	0	2	13	15	0	0	3	1	0	0	0	4	4
0	0	19	0	2	2	0	23	26.6	0	0	3	0	0	0	0	3	3
0	0	23	1	0	1	0	25	26.3	0	0	3	0	0	0	0	3	3
0	0	57	4	3	3	3	70	78.4	0	0	12	1	0	0	0	13	13
7	0	23	2	1	0	2	35	31.9	0	0	7	1	0	0	0	8	8
17	1	25	2	0	0	0	45	30.8	0	0	12	0	0	0	0	12	12
4	0	45	3	0	0	1	53	50.8	0	0	12	1	0	0	0	13	13
20	0	37	2	1	0	2	62	48.5	0	0	8	0	0	0	0	8	8
48	1	130	9	2	0	5	195	162	0	0	39	2	0	0	0	41	41
2	0	42	4	5	0	0	53	53.9	0	0	7	0	0	0	0	7	7
16	0	37	2	1	0	0	56	43.7	0	0	11	1	0	0	0	12	12
6	0	49	3	0	0	1	59	55.2	0	0	11	1	0	0	0	12	12
4	0	52	4	1	0	0	61	58.3	0	0	14	0	1	1	0	16	17.8
28	0	180	13	7	0	1	229	211.1	0	0	43	2	1	1	0	47	48.8
5	0	47	5	1	0	0	58	54.5	0	0	14	2	0	0	0	16	16
4	0	54	3	0	0	0	61	57.8	0	0	16	0	0	0	0	16	16
5	0	49	1	2	1	2	60	60.3	0	0	14	2	0	0	0	16	16
1	0	42	2	1	0	1	47	47.7	0	0	10	1	0	1	0	12	13.3
15	0	192	11	4	1	3	226	220.3	0	0	54	5	0	1	0	60	61.3
0	0	86	3	0	0	0	89	89	0	0	14	1	0	0	0	15	15
1	0	80	4	0	0	1	86	86.2	0	0	10	1	0	0	0	11	11
3	0	84	3	0	2	1	93	94.2	0	0	19	1	0	0	0	20	20
2	0	86	3	0	0	3	94	95.4	0	0	18	0	0	0	0	18	18
6	0	336	13	0	2	5	362	364.8	0	0	61	3	0	0	0	64	64
0	0	72	6	1	0	1	80	81.5	0	0	7	1	0	0	0	8	8
1	0	62	1	1	0	0	65	64.7	0	0	18	0	0	0	0	18	18
5	1	50	4	1	0	0	61	56.9	0	0	17	1	0	0	0	18	18
3	0	65	3	1	1	2	75	76.4	0	0	11	1	0	0	0	12	12
9	1	249	14	4	1	3	281	279.5	0	0	53	3	0	0	0	56	56
2	0	56	5	0	0	0	63	61.4	0	0	13	0	0	0	0	13	13
3	0	52	3	0	0	1	59	57.6	0	0	7	1	0	0	0	8	8
6	0	53	2	1	0	0	62	57.7	0	0	9	2	0	0	0	11	11
1	0	45	3	0	0	2	51	52.2	0	0	14	3	0	0	0	17	17
12	0	206	13	1	0	3	235	228.9	0	0	43	6	0	0	0	49	49
0	0	47	3	2	0	0	52	53	0	0	8	0	0	0	0	8	8
0	0	52	2	0	0	1	55	56	0	0	11	2	0	0	0	13	13
2	0	57	1	0	0	2	62	62.4	0	0	11	0	0	0	0	11	11
0	0	52	4	0	0	2	58	60	0	0	9	0	0	0	0	9	9
2	0	208	10	2	0	5	227	231.4	0	0	39	2	0	0	0	41	41
1	0	51	5	0	0	2	59	60.2	0	0	6	0	0	0	0	6	6
0	0	35	3	1	0	2	41	43.5	0	0	16	0	0	0	0	16	16
0	0	54	2	0	0	1	57	58	0	0	13	1	0	0	0	14	14
0	1	48	1	1	0	0	51	50.9	0	0	11	0	0	0	0	11	11
1	1	188	11	2	0	5	208	212.6	0	0	46	1	0	0	0	47	47
0	1	46	3	1	0	1	52	52.9	0	0	10	0	0	0	0	10	10
0	0	34	1	2	0	0	37	38	0	0	6	1	0	0	0	7	7
1	0	45	2	1	0	0	49	48.7	0	0	6	0	0	0	0	6	6
0	0	40	1	1	0	1	43	44.5	0	0	5	0	0	0	0	5	5
1	1	165	7	5	0	2	181	184.1	0	0	27	1	0	0	0	28	28
0	0	39	1	0	0	1	41	42	0	0	4	1	0	0	0	5	5
0	0	32	2	0	0	1	35	36	0	0	0	0	0	0	0	0	0
0	0	34	2	0	0	0	36	36	0	0	5	1	1	0	0	7	7.5
0	0	24	0	0	0	0	24	24	0	0	4	0	0	0	0	4	4
0	0	129	5	0	0	2	136	138	0	0	13	2	1	0	0	16	16.5
125	4	2072	115	32	9	43	2400	2368	1	0	437	31	2	2	0	473	475.8

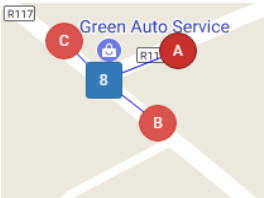
C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	4	6
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	9	2	2	0	4	17	22
0	0	0	0	0	0	0	0	0	0	0	21	6	2	0	6	35	42
0	0	0	0	0	0	0	0	0	0	0	19	1	1	0	2	23	25.5
0	0	0	0	0	0	0	0	0	1	0	22	4	2	0	1	30	31.2
0	0	0	1	0	0	0	1	1	0	0	27	0	1	1	0	29	30.8
0	0	1	0	0	0	0	1	1	3	1	33	3	1	0	1	42	40.5
0	0	1	1	0	0	0	2	2	4	1	101	8	5	1	4	124	128
0	0	0	0	1	1	0	2	3.8	1	0	34	3	3	0	0	41	41.7
0	0	3	0	0	0	0	3	3	1	0	39	3	1	0	1	45	45.7
0	0	3	0	1	0	0	4	4.5	3	0	34	1	0	0	0	38	35.6
1	0	2	0	0	0	0	3	2.2	1	0	37	1	0	0	0	39	38.2
1	0	8	0	2	1	0	12	13.5	6	0	144	8	4	0	1	163	161.2
0	0	5	0	0	1	0	6	7.3	5	0	40	2	0	2	1	50	49.6
0	0	5	0	2	0	0	7	8	3	0	50	0	1	1	1	56	56.4
0	0	4	0	0	0	0	4	4	1	0	50	3	1	1	0	56	57
0	0	6	1	0	0	0	7	7	2	0	40	4	1	0	0	47	45.9
0	0	20	1	2	1	0	24	26.3	11	0	180	9	3	4	2	209	208.9
0	0	8	0	0	0	0	8	8	9	1	42	5	0	2	2	61	57.8
1	0	3	1	0	0	0	5	4.2	10	0	44	5	0	2	0	61	55.6
4	0	6	0	0	0	0	10	6.8	8	0	41	2	2	0	0	53	47.6
0	0	3	0	0	0	0	3	3	8	0	51	1	1	0	1	62	57.1
5	0	20	1	0	0	0	26	22	35	1	178	13	3	4	3	237	218.1
2	0	8	0	0	0	0	10	8.4	7	0	49	3	0	1	1	61	57.7
0	0	6	0	0	0	0	6	6	16	0	64	1	1	0	1	83	71.7
0	0	2	1	0	0	0	3	3	5	0	74	3	2	1	0	85	83.3
4	0	12	0	0	0	0	16	12.8	6	0	81	3	0	1	0	91	87.5
6	0	28	1	0	0	0	35	30.2	34	0	268	10	3	3	2	320	300.2
0	0	6	0	0	0	0	6	6	13	0	65	3	0	0	0	81	70.6
0	0	10	2	0	0	0	12	12	2	0	94	4	0	2	1	103	105
0	1	9	0	0	0	0	10	9.4	16	1	60	7	3	0	0	87	75.1
1	0	9	1	0	0	0	11	10.2	7	0	74	3	1	1	1	87	84.2
1	1	34	3	0	0	0	39	37.6	38	1	293	17	4	3	2	358	334.9
0	0	8	2	1	0	0	11	11.5	2	0	59	2	0	0	0	63	61.4
2	0	8	2	0	0	0	12	10.4	2	0	53	5	0	0	1	61	60.4
0	0	6	0	0	0	0	6	6	5	1	63	4	1	0	0	74	69.9
1	0	11	1	0	0	0	13	12.2	2	0	68	7	1	2	0	80	81.5
3	0	33	5	1	0	0	42	40.1	11	1	243	18	2	2	1	278	273.2
0	1	10	1	0	0	1	13	13.4	5	0	72	2	0	0	0	79	75
1	0	5	0	0	0	0	6	5.2	4	0	69	6	1	0	2	82	81.3
0	0	9	0	0	0	0	9	9	1	0	68	4	2	0	0	75	75.2
0	0	3	0	0	0	0	3	3	2	0	59	5	0	0	2	68	68.4
1	1	27	1	0	0	1	31	30.6	12	0	268	17	3	0	4	304	299.9
0	0	3	0	0	0	0	3	3	4	0	81	4	0	0	1	90	87.8
0	0	4	0	0	0	0	4	4	2	0	60	6	0	0	3	71	72.4
0	0	3	0	0	0	0	3	3	3	0	49	2	0	0	0	54	51.6
0	0	6	2	0	0	0	8	8	0	0	52	0	0	0	0	52	52
0	0	16	2	0	0	0	18	18	9	0	242	12	0	0	4	267	263.8
0	0	3	1	1	0	0	5	5.5	0	0	54	3	1	0	0	58	58.5
0	0	4	1	0	0	0	5	5	0	0	44	1	1	0	1	47	48.5
0	0	3	1	0	0	0	4	4	0	0	29	1	0	0	1	31	32
0	0	2	0	0	0	0	2	2	0	0	31	2	1	0	0	34	34.5
0	0	12	3	1	0	0	16	16.5	0	0	158	7	3	0	2	170	173.5
0	0	2	0	0	0	0	2	2	0	0	27	2	0	0	0	29	29
0	0	1	0	0	0	0	1	1	0	0	28	0	0	0	0	28	28
0	0	1	1	0	0	0	2	2	0	0	26	1	0	0	0	27	27
0	0	4	0	0	0	0	4	4	0	0	23	0	1	0	1	25	26.5
0	0	8	1	0	0	0	9	9	0	0	104	3	1	0	1	109	110.5
17	2	207	19	6	2	1	254	245.8	160	4	2200	128	33	17	32	2574	2514

C=>C									C=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	8	2	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	70	6	0	0	0	76	76

D=>A									D=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
1	0	1	0	0	0	0	2	1.2	0	0	4	2	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	4	4.5
0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	9	9.5
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5
0	0	5	0	0	0	0	5	5	0	0	11	1	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	4	0	0	0	0	4	4	0	0	15	0	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	10	0	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	10	1	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
0	0	2	1	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	0	1	0	0	0	1	1	0	0	5	2	0	1	0	8	9.3
0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
0	0	2	2	0	0	0	4	4	0	0	12	2	1	1	0	16	17.8
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	5	0	0	0	0	5	5
1	0	23	2	0	0	0	26	25.2	0	0	112	6	2	1	0	121	123.3

D=>C									D=>D								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	39	3	0	0	0	42	42	0	0	0	0	0	0	0	0	0

IDASO



Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 8
Date : 07/11/17
Location : Enniskerry Road/Ballycorus Road

	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
07:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	5	5.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	3	1	0	0	12	12.5
08:00	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
09:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:30	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0	5	3.4
09:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	2	0	8	0	0	0	0	10	8.4
10:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:15	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2.5
11:30	0	0	0	0	0	0	0	0	0	1	0	3	1	0	0	0	5	4.2
11:45	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	1	0	6	4	1	0	0	12	11.7
12:00	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	4	5
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	1	0	3	1	0	0	0	5	4.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	5	3	2	0	0	11	11.2
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
13:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
13:45	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	12	0	0	0	0	13	12.2
14:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
14:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	14	14
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
15:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
15:45	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	11	10.2
16:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
16:45	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	19
17:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
17:15	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
17:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
17:45	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	22	3	0	0	0	25	25
18:00	0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	11	10.2
18:15	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
18:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
18:45	0	0	0	0	0	0	0	0	0	0	3	7	1	0	0	0	11	9.2
H/TOT	0	0	0	0	0	0	0	0	0	1	3	23	2	0	0	0	29	26.4
12 TOT	0	0	0	0	0	0	0	0	0	7	3	134	21	4	0	0	169	163.6

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	8	1	0	0	0	9	9	0	0	1	0	0	0	0	1	1
0	0	13	1	2	0	0	16	17	0	0	3	1	1	0	0	5	5.5
0	0	16	4	0	0	0	20	20	0	0	8	1	0	0	0	9	9
1	0	20	1	0	0	1	23	23.2	0	0	10	1	0	0	0	11	11
1	0	57	7	2	0	1	68	69.2	0	0	22	3	1	0	0	26	26.5
0	0	12	0	0	0	0	12	12	0	1	9	0	0	0	0	10	9.4
0	0	18	1	1	0	0	20	20.5	0	0	9	3	1	0	0	13	13.5
1	0	22	1	0	0	0	24	23.2	0	0	6	0	0	0	0	6	6
1	0	21	2	0	0	0	24	23.2	0	0	3	0	0	0	0	3	3
2	0	73	4	1	0	0	80	78.9	0	1	27	3	1	0	0	32	31.9
1	0	27	0	1	0	0	29	28.7	0	0	3	0	0	0	0	3	3
0	2	21	1	0	0	0	24	22.8	0	0	3	0	0	0	0	3	3
0	0	11	5	0	0	0	16	16	0	0	4	0	0	0	0	4	4
0	0	13	3	0	0	0	16	16	0	0	1	0	0	0	0	1	1
1	2	72	9	1	0	0	85	83.5	0	0	11	0	0	0	0	11	11
2	0	13	0	1	0	0	16	14.9	0	0	2	0	0	0	0	2	2
0	1	8	2	0	0	0	11	10.4	0	0	4	0	1	0	0	5	5.5
0	0	14	3	2	1	0	20	22.3	0	0	1	0	0	0	0	1	1
0	0	4	1	0	0	0	5	5	0	0	1	0	0	0	0	1	1
2	1	39	6	3	1	0	52	52.6	0	0	8	0	1	0	0	9	9.5
1	0	11	1	0	0	0	13	12.2	0	0	2	0	0	0	0	2	2
0	0	5	1	0	0	0	6	6	0	0	2	1	0	0	0	3	3
1	1	12	2	0	0	0	16	14.6	0	0	3	1	0	0	0	4	4
0	0	16	3	0	0	0	19	19	0	0	1	0	1	0	0	2	2.5
2	1	44	7	0	0	0	54	51.8	0	0	8	2	1	0	0	11	11.5
0	1	13	2	1	0	0	17	16.9	0	0	3	1	0	0	0	4	4
0	0	9	2	0	1	0	12	13.3	0	0	0	0	0	0	0	0	0
1	0	15	1	2	0	0	19	19.2	0	0	7	1	1	0	0	9	9.5
0	0	15	1	0	0	0	16	16	0	0	3	0	0	0	0	3	3
1	1	52	6	3	1	0	64	65.4	0	0	13	2	1	0	0	16	16.5
0	0	11	0	0	0	0	11	11	2	0	2	0	0	0	0	4	2.4
0	1	10	1	1	0	0	13	12.9	1	0	5	0	0	0	0	6	5.2
0	0	16	0	0	1	0	17	18.3	0	0	1	0	0	0	0	1	1
0	0	15	3	0	0	0	18	18	0	0	2	0	0	0	0	2	2
0	1	52	4	1	1	0	59	60.2	3	0	10	0	0	0	0	13	10.6
0	0	34	3	0	0	0	37	37	1	0	3	0	0	0	0	4	3.2
1	1	38	2	0	0	0	42	40.6	0	0	2	1	0	0	0	3	3
0	0	10	0	0	0	0	10	10	0	0	1	0	0	0	0	1	1
0	0	22	1	0	0	0	23	23	0	0	4	0	0	0	0	4	4
1	1	104	6	0	0	0	112	110.6	1	0	10	1	0	0	0	12	11.2
0	0	12	1	0	0	0	13	13	0	0	1	0	0	0	0	1	1
0	0	15	4	0	0	0	19	19	0	0	6	0	0	0	0	6	6
0	0	14	1	0	0	0	15	15	0	0	4	2	0	0	0	6	6
0	0	19	5	0	0	0	24	24	0	0	0	0	0	0	0	0	0
0	0	60	11	0	0	0	71	71	0	0	11	2	0	0	0	13	13
0	0	22	1	1	0	0	24	24.5	0	0	2	1	0	0	0	3	3
0	0	17	1	0	0	0	18	18	0	0	6	0	0	0	0	6	6
0	0	21	0	0	0	0	21	21	0	0	5	1	1	0	0	7	7.5
0	0	21	3	0	0	0	24	24	0	0	4	0	0	0	0	4	4
0	0	81	5	1	0	0	87	87.5	0	0	17	2	1	0	0	20	20.5
1	0	16	1	0	0	0	18	17.2	0	0	6	1	0	0	0	7	7
0	0	20	1	0	0	0	21	21	0	0	5	0	0	0	0	5	5
0	0	25	2	2	0	0	29	30	0	0	1	0	0	0	0	1	1
0	0	10	2	0	0	0	12	12	0	0	4	0	0	0	0	4	4
1	0	71	6	2	0	0	80	80.2	0	0	16	1	0	0	0	17	17
0	0	14	1	1	0	0	16	16.5	0	0	5	0	0	0	0	5	5
0	0	21	0	0	0	0	21	21	0	0	3	2	0	0	0	5	5
1	0	16	2	0	0	0	19	18.2	0	0	5	1	0	0	0	6	6
0	0	19	1	0	0	0	20	20	0	0	2	0	0	0	0	2	2
1	0	70	4	1	0	0	76	75.7	0	0	15	3	0	0	0	18	18
12	7	775	75	15	3	1	888	886.6	4	1	168	19	6	0	0	198	197.2

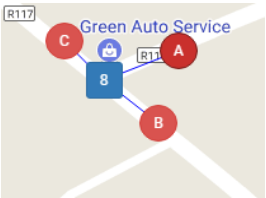
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	2	1	40	4	2	1	0	50	50.1
0	0	0	0	0	0	0	0	0	1	0	71	16	0	0	2	90	91.2
0	0	0	0	0	0	0	0	0	1	1	80	9	2	1	1	95	96.9
0	0	0	0	0	0	0	0	0	4	0	106	10	0	1	3	124	125.1
0	0	0	0	0	0	0	0	0	8	2	297	39	4	3	6	359	363.3
0	0	0	0	0	0	0	0	0	1	2	93	12	2	1	0	111	111.3
0	0	0	0	0	0	0	0	0	0	0	85	10	1	2	2	100	105.1
0	0	0	0	0	0	0	0	0	3	1	84	8	0	0	0	96	93
0	0	0	0	0	0	0	0	0	0	0	69	7	0	0	1	77	78
0	0	0	0	0	0	0	0	0	4	3	331	37	3	3	3	384	387.4
0	0	0	0	0	0	0	0	0	1	0	43	2	0	0	0	46	45.2
0	0	0	0	0	0	0	0	0	1	1	55	8	2	0	1	68	68.6
0	0	0	0	0	0	0	0	0	0	0	40	1	2	0	1	44	46
0	0	0	0	0	0	0	0	0	0	0	39	1	2	0	1	43	45
0	0	0	0	0	0	0	0	0	2	1	177	12	6	0	3	201	204.8
0	0	0	0	0	0	0	0	0	0	0	19	4	1	1	0	25	26.8
0	0	0	0	0	0	0	0	0	1	2	21	3	0	0	1	28	27
0	0	0	0	0	0	0	0	0	1	0	20	2	4	0	1	28	30.2
0	0	0	0	0	0	0	0	0	2	0	20	4	0	0	1	27	26.4
0	0	0	0	0	0	0	0	0	4	2	80	13	5	1	3	108	110.4
0	0	0	0	0	0	0	0	0	0	0	21	3	3	0	0	27	28.5
0	0	0	0	0	0	0	0	0	2	0	15	2	2	0	1	22	22.4
0	0	0	0	0	0	0	0	0	0	0	17	3	2	1	1	24	27.3
0	0	0	0	0	0	0	0	0	0	0	30	6	0	0	1	37	38
0	0	0	0	0	0	0	0	0	2	0	83	14	7	1	3	110	116.2
0	0	0	0	0	0	0	0	0	1	0	23	2	0	1	0	27	27.5
0	0	0	0	0	0	0	0	0	0	0	25	4	0	0	1	30	31
0	0	0	0	0	0	0	0	0	8	1	24	5	1	0	1	40	34.5
0	0	0	0	0	0	0	0	0	0	0	30	6	2	0	1	39	41
0	0	0	0	0	0	0	0	0	9	1	102	17	3	1	3	136	134
0	0	0	0	0	0	0	0	0	1	0	34	7	0	0	0	42	41.2
0	0	0	0	0	0	0	0	0	2	1	26	1	1	0	1	32	31.3
0	0	0	0	0	0	0	0	0	0	0	19	6	2	0	2	29	32
0	0	0	0	0	0	0	0	0	0	0	38	2	1	0	0	41	41.5
0	0	0	0	0	0	0	0	0	3	1	117	16	4	0	3	144	146
0	0	0	0	0	0	0	0	0	1	0	36	2	1	0	0	40	39.7
0	0	0	0	0	0	0	0	0	0	0	29	2	1	0	3	35	38.5
0	0	0	0	0	0	0	0	0	1	0	25	2	1	1	2	32	35
0	0	0	0	0	0	0	0	0	0	0	38	2	1	0	3	44	47.5
0	0	0	0	0	0	0	0	0	2	0	128	8	4	1	8	151	160.7
0	0	0	0	0	0	0	0	0	2	0	34	4	1	0	1	42	41.9
0	0	0	0	0	0	0	0	0	4	0	41	1	0	0	0	46	42.8
0	0	0	0	0	0	0	0	0	0	0	42	3	1	0	1	47	48.5
0	0	0	0	0	0	0	0	0	0	0	30	2	1	0	1	34	35.5
0	0	0	0	0	0	0	0	0	6	0	147	10	3	0	3	169	168.7
0	0	0	0	0	0	0	0	0	1	1	30	3	1	0	1	37	37.1
0	0	0	0	0	0	0	0	0	0	0	46	1	1	0	1	49	50.5
0	0	0	0	0	0	0	0	0	1	0	38	0	1	0	1	41	41.7
0	0	0	0	0	0	0	0	0	0	0	33	3	1	1	1	39	41.8
0	0	0	0	0	0	0	0	0	2	1	147	7	4	1	4	166	171.1
0	0	0	0	0	0	0	0	0	1	1	44	4	2	0	1	53	53.6
0	0	0	0	0	0	0	0	0	0	3	36	6	0	0	0	45	43.2
0	0	0	0	0	0	0	0	0	0	0	23	0	1	0	2	26	28.5
0	0	0	0	0	0	0	0	0	0	0	38	1	1	0	0	40	40.5
0	0	0	0	0	0	0	0	0	1	4	141	11	4	0	3	164	165.8
0	0	0	0	0	0	0	0	0	0	0	33	1	1	0	0	35	35.5
0	0	0	0	0	0	0	0	0	0	0	36	1	1	0	1	39	40.5
0	0	0	0	0	0	0	0	0	1	0	32	3	0	0	1	37	37.2
0	0	0	0	0	0	0	0	0	0	0	32	1	0	0	1	34	35
0	0	0	0	0	0	0	0	0	1	0	133	6	2	0	3	145	148.2
0	0	0	0	0	0	0	0	0	44	15	1883	190	49	11	45	2237	2277

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
1	0	5	2	0	0	0	8	7.2	1	0	11	2	0	0	2	16	17.2
0	0	4	3	0	0	1	8	9	0	0	17	4	0	1	0	22	23.3
1	0	7	2	0	0	0	10	9.2	0	0	29	6	1	0	1	37	38.5
0	0	19	0	0	0	0	19	19	0	0	26	2	0	0	2	30	32
2	0	35	7	0	0	1	45	44.4	1	0	83	14	1	1	5	105	111
0	0	21	2	0	0	0	23	23	0	0	26	5	2	0	3	36	40
0	0	24	8	0	1	1	34	36.3	0	0	36	2	0	0	0	38	38
0	0	22	2	0	0	0	24	24	0	0	23	3	0	0	1	27	28
0	1	17	3	1	0	1	23	23.9	1	0	49	4	0	0	0	54	53.2
0	1	84	15	1	1	2	104	107.2	1	0	134	14	2	0	4	155	159.2
0	0	22	1	2	0	0	25	26	0	0	47	4	0	0	1	52	53
0	1	12	0	0	0	0	13	12.4	1	0	30	0	0	0	0	31	30.2
0	0	16	2	0	0	0	18	18	7	0	25	2	0	0	0	34	28.4
0	0	5	4	1	0	0	10	10.5	1	0	32	1	0	0	2	36	37.2
0	1	55	7	3	0	0	66	66.9	9	0	134	7	0	0	3	153	148.8
0	0	9	1	0	0	0	10	10	3	0	27	1	2	0	1	34	33.6
0	0	19	1	0	0	0	20	20	2	0	23	4	0	0	1	30	29.4
1	0	11	2	0	1	0	15	15.5	1	0	21	0	4	0	0	26	27.2
1	1	7	2	0	0	0	11	9.6	2	1	29	5	1	0	2	40	40.3
2	1	46	6	0	1	0	56	55.1	8	1	100	10	7	0	4	130	130.5
0	0	7	1	1	0	0	9	9.5	0	0	14	4	2	1	0	21	23.3
0	0	11	3	1	0	0	15	15.5	1	0	26	5	3	0	0	35	35.7
0	0	11	2	0	0	0	13	13	1	0	21	5	1	0	1	29	29.7
0	2	8	2	0	0	0	12	10.8	0	1	23	3	0	0	0	27	26.4
0	2	37	8	2	0	0	49	48.8	2	1	84	17	6	1	1	112	115.1
0	0	13	3	0	0	0	16	16	4	0	23	4	0	0	2	33	31.8
0	0	21	1	1	0	0	23	23.5	0	0	33	2	1	0	0	36	36.5
0	0	9	2	0	0	0	11	11	0	0	37	6	2	0	1	46	48
0	0	19	1	0	0	0	20	20	0	0	21	2	3	0	2	28	31.5
0	0	62	7	1	0	0	70	70.5	4	0	114	14	6	0	5	143	147.8
1	0	31	0	0	0	0	32	31.2	0	0	29	2	0	0	1	32	33
0	0	15	3	0	0	0	18	18	1	0	28	5	0	0	0	34	33.2
0	0	21	3	0	1	0	25	26.3	1	0	47	3	1	0	1	53	53.7
0	0	12	1	0	0	0	13	13	0	1	43	6	2	1	1	54	56.7
1	0	79	7	0	1	0	88	88.5	2	1	147	16	3	1	3	173	176.6
0	0	19	3	2	0	0	24	25	0	1	41	6	0	0	1	49	49.4
0	0	11	1	1	0	0	13	13.5	0	0	42	3	0	0	0	45	45
0	0	14	1	1	0	0	16	16.5	0	1	44	1	0	0	0	46	45.4
0	0	20	3	0	0	0	23	23	1	0	44	7	1	0	3	56	58.7
0	0	64	8	4	0	0	76	78	1	2	171	17	1	0	4	196	198.5
0	0	11	1	0	0	0	12	12	1	0	41	4	1	0	0	47	46.7
0	0	19	0	1	0	0	20	20.5	0	1	37	3	0	0	1	42	42.4
1	0	18	4	0	0	0	23	22.2	0	0	50	7	0	0	1	58	59
0	0	9	3	0	0	0	12	12	0	0	35	4	2	0	1	42	44
1	0	57	8	1	0	0	67	66.7	1	1	163	18	3	0	3	189	192.1
0	0	26	0	0	0	0	26	26	0	1	65	8	1	0	3	78	80.9
0	0	23	2	0	0	0	25	25	0	0	73	16	3	0	0	92	93.5
0	0	23	4	0	0	0	27	27	0	0	111	12	1	0	1	125	126.5
0	0	38	3	0	0	0	41	41	1	0	151	17	1	1	0	171	172
0	0	110	9	0	0	0	119	119	1	1	400	53	6	1	4	466	472.9
0	0	36	5	0	0	0	41	41	0	1	124	26	1	0	2	154	155.9
0	0	45	1	0	0	0	46	46	0	0	169	17	0	0	0	186	186
0	0	52	3	0	0	0	55	55	0	1	182	15	3	0	1	202	203.9
0	0	38	0	0	0	0	38	38	0	1	166	13	4	0	1	185	187.4
0	0	171	9	0	0	0	180	180	0	3	641	71	8	0	4	727	733.2
0	0	38	1	0	0	0	39	39	0	0	177	7	1	0	0	185	185.5
0	1	68	6	0	0	0	75	74.4	0	1	143	8	0	0	2	154	155.4
3	0	49	3	0	0	0	55	52.6	1	0	132	9	0	0	2	144	145.2
0	1	36	3	0	0	0	40	39.4	0	2	97	5	0	0	0	104	102.8
3	2	191	13	0	0	0	209	205.4	1	3	549	29	1	0	4	587	588.9
9	7	991	104	12	3	3	1129	1131	31	13	2720	280	44	4	44	3136	3175

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 8
Date : 09/11/17
Location : Enniskerry Road/Ballycorus Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	4	4.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	3	1	0	0	9	9.5
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
08:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
08:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	1	1	0	0	6	6.5
09:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
09:15	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
09:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
09:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
10:00	0	0	0	0	0	0	0	0	0	1	0	7	0	0	0	0	8	7.2
10:15	0	0	0	0	0	0	0	0	0	1	0	3	0	0	1	0	5	5.5
10:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:45	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	2	0	17	1	0	1	0	21	20.7
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
11:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4
12:00	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2
12:15	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
12:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	2	0	8	1	0	0	0	11	9.4
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
13:30	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
13:45	0	0	0	0	0	0	0	0	0	1	0	3	1	0	0	0	5	4.2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	8	3	0	0	0	12	11.2
14:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
14:15	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	3	2.7
14:30	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
14:45	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	1	0	13	3	1	0	0	18	17.7
15:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
16:00	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	7	7
16:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	13	4	0	0	0	17	17
17:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
17:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
17:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	18	3	0	0	0	21	21
18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
18:15	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	8	8
18:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
12 TOT	0	0	0	0	0	0	0	0	0	6	0	124	24	3	1	0	158	156

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	1	8	0	0	0	0	9	8.4	0	0	0	0	1	0	0	1	1.5
0	0	7	2	0	0	0	9	9	1	0	2	2	0	0	0	5	4.2
0	0	13	0	0	0	0	13	13	0	0	7	1	0	0	0	8	8
0	0	16	2	0	0	0	18	18	0	0	4	2	0	0	0	6	6
0	1	44	4	0	0	0	49	48.4	1	0	13	5	1	0	0	20	19.7
0	0	15	2	0	0	0	17	17	0	0	12	0	0	0	0	12	12
1	0	17	4	1	0	0	23	22.7	0	0	4	1	0	0	0	5	5
0	0	24	2	0	0	0	26	26	0	0	5	0	0	0	0	5	5
0	1	19	1	1	0	0	22	21.9	0	0	7	0	0	0	0	7	7
1	1	75	9	2	0	0	88	87.6	0	0	28	1	0	0	0	29	29
0	0	30	2	1	0	0	33	33.5	0	0	4	0	0	0	0	4	4
0	0	26	0	0	0	0	26	26	0	0	5	0	0	0	0	5	5
0	0	19	2	0	0	0	21	21	0	0	10	0	0	0	0	10	10
0	0	15	2	1	0	0	18	18.5	0	0	2	0	0	1	0	3	4.3
0	0	90	6	2	0	0	98	99	0	0	21	0	0	1	0	22	23.3
0	0	7	4	0	0	0	11	11	0	0	4	0	0	0	0	4	4
3	0	12	1	0	0	0	16	13.6	0	0	3	0	0	0	0	3	3
0	0	15	2	0	0	0	17	17	0	0	2	0	0	0	0	2	2
0	0	9	3	0	0	0	12	12	0	0	2	0	0	0	0	2	2
3	0	43	10	0	0	0	56	53.6	0	0	11	0	0	0	0	11	11
0	0	7	0	0	0	0	7	7	0	0	4	1	0	0	0	5	5
0	0	16	1	0	1	0	18	19.3	1	0	2	0	0	0	0	3	2.2
0	0	14	2	0	0	0	16	16	0	0	2	1	0	0	0	3	3
0	0	8	3	0	0	0	11	11	0	0	5	1	0	0	0	6	6
0	0	45	6	0	1	0	52	53.3	1	0	13	3	0	0	0	17	16.2
0	0	16	2	1	0	0	19	19.5	0	0	3	0	0	0	0	3	3
1	0	15	3	0	0	0	19	18.2	0	0	3	2	0	0	0	5	5
0	0	10	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0
0	0	7	2	0	0	0	9	9	0	0	1	2	0	0	0	3	3
1	0	48	9	1	0	0	59	58.7	0	0	7	4	0	0	0	11	11
0	0	21	2	0	0	0	23	23	0	0	1	0	0	0	0	1	1
0	0	8	2	0	0	0	10	10	0	0	3	0	0	0	0	3	3
0	0	15	1	1	0	0	17	17.5	0	0	5	0	0	0	0	5	5
0	0	19	2	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
0	0	63	7	2	0	0	72	73	0	0	9	0	0	0	0	9	9
0	2	16	1	0	0	0	19	17.8	0	0	2	0	0	0	0	2	2
0	0	12	1	0	0	0	13	13	1	0	3	0	0	0	0	4	3.2
0	0	16	1	0	0	0	17	17	0	0	2	0	1	0	0	3	3.5
0	0	17	1	1	0	0	19	19.5	0	0	1	1	0	0	0	2	2
0	2	61	4	1	0	0	68	67.3	1	0	8	1	1	0	0	11	10.7
0	0	22	5	1	0	0	28	28.5	0	1	2	0	1	0	0	4	3.9
0	0	11	0	1	0	0	12	12.5	0	0	1	0	0	0	0	1	1
1	0	12	3	0	0	0	16	15.2	0	0	5	0	0	0	0	5	5
0	0	14	4	0	0	0	18	18	0	0	3	0	0	1	0	4	5.3
1	0	59	12	2	0	0	74	74.2	0	1	11	0	1	1	0	14	15.2
0	0	21	5	0	0	0	26	26	0	0	6	1	0	0	0	7	7
0	0	18	3	0	0	0	21	21	0	0	3	1	0	0	0	4	4
0	1	20	2	0	0	0	23	22.4	0	0	4	0	0	0	0	4	4
0	0	16	3	1	0	0	20	20.5	0	0	4	2	0	0	0	6	6
0	1	75	13	1	0	0	90	89.9	0	0	17	4	0	0	0	21	21
0	0	22	3	0	0	0	25	25	0	0	5	0	0	0	0	5	5
0	0	29	2	0	0	0	31	31	0	0	6	0	0	0	0	6	6
0	0	20	1	0	1	0	22	23.3	0	0	4	1	0	0	0	5	5
1	0	15	2	1	0	0	19	18.7	0	0	3	1	0	0	0	4	4
1	0	86	8	1	1	0	97	98	0	0	18	2	0	0	0	20	20
0	0	13	0	0	0	0	13	13	0	0	5	1	1	0	0	7	7.5
3	0	13	0	0	0	0	16	13.6	0	0	1	0	0	0	0	1	1
0	0	16	1	1	0	0	18	18.5	0	0	6	1	0	0	0	7	7
0	0	17	2	0	0	0	19	19	0	0	4	0	0	0	0	4	4
3	0	59	3	1	0	0	66	64.1	0	0	16	2	1	0	0	19	19.5
10	5	748	91	13	2	0	869	867.1	3	1	172	22	4	2	0	204	205.6

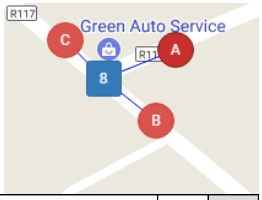
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	1	0	33	4	0	0	1	39	39.2
0	0	0	0	0	0	0	0	0	1	0	64	5	0	0	0	70	69.2
0	0	0	0	0	0	0	0	0	2	0	81	10	0	0	0	93	91.4
0	0	0	0	0	0	0	0	0	4	0	98	9	2	0	3	116	116.8
0	0	0	0	0	0	0	0	0	8	0	276	28	2	0	4	318	316.6
0	0	0	0	0	0	0	0	0	3	0	81	5	1	0	1	91	90.1
0	0	0	0	0	0	0	0	0	0	1	79	8	1	0	2	91	92.9
0	0	0	0	0	0	0	0	0	1	1	69	3	1	0	0	75	74.1
0	0	0	0	0	0	0	0	0	0	0	45	2	4	0	1	52	55
0	0	0	0	0	0	0	0	0	4	2	274	18	7	0	4	309	312.1
0	0	0	0	0	0	0	0	0	2	0	51	5	2	1	0	61	61.7
0	0	0	0	0	0	0	0	0	0	0	41	2	3	0	1	47	49.5
0	0	0	0	0	0	0	0	0	1	0	49	2	0	0	0	52	51.2
0	0	0	0	0	0	0	0	0	0	3	37	1	3	0	1	45	45.7
0	0	0	0	0	0	0	0	0	3	3	178	10	8	1	2	205	208.1
0	0	0	0	0	0	0	0	0	1	1	28	1	0	0	0	31	29.6
0	0	0	0	0	0	0	0	0	0	0	24	2	2	0	1	29	31
0	0	0	0	0	0	0	0	0	2	0	19	3	2	0	0	26	25.4
0	0	0	0	0	0	0	0	0	1	0	16	1	0	0	0	18	17.2
0	0	0	0	0	0	0	0	0	4	1	87	7	4	0	1	104	103.2
0	0	0	0	0	0	0	0	0	2	0	34	1	1	0	1	39	38.9
0	0	0	0	0	0	0	0	0	3	0	18	1	0	0	1	23	21.6
0	0	0	0	0	0	0	0	0	0	0	32	1	2	0	0	35	36
0	0	0	0	0	0	0	0	0	1	0	35	2	0	0	1	39	39.2
0	0	0	0	0	0	0	0	0	6	0	119	5	3	0	3	136	135.7
0	0	0	0	0	0	0	0	0	2	0	46	4	1	0	0	53	51.9
0	0	0	0	0	0	0	0	0	3	0	67	4	3	0	1	78	78.1
0	0	0	0	0	0	0	0	0	0	0	26	3	1	0	0	30	30.5
0	0	0	0	0	0	0	0	0	4	0	30	0	0	0	1	35	32.8
0	0	0	0	0	0	0	0	0	9	0	169	11	5	0	2	196	193.3
0	0	0	0	0	0	0	0	0	1	0	27	6	0	0	0	34	33.2
0	0	0	0	0	0	0	0	0	1	0	39	6	0	0	1	47	47.2
0	0	0	0	0	0	0	0	0	0	1	32	4	0	0	0	37	36.4
0	0	0	0	0	0	0	0	0	1	0	27	0	2	0	1	31	32.2
0	0	0	0	0	0	0	0	0	3	1	125	16	2	0	2	149	149
0	0	0	0	0	0	0	0	0	0	0	43	1	0	0	0	44	44
0	0	0	0	0	0	0	0	0	1	0	32	1	0	0	0	34	33.2
0	0	0	0	0	0	0	0	0	0	1	30	1	1	0	3	36	38.9
0	0	0	0	0	0	0	0	0	1	0	31	3	2	0	0	37	37.2
0	0	0	0	0	0	0	0	0	2	1	136	6	3	0	3	151	153.3
0	0	0	0	0	0	0	0	0	1	1	32	2	0	0	0	36	34.6
0	0	0	0	0	0	0	0	0	0	0	47	4	2	1	1	55	58.3
0	0	0	0	0	0	0	0	0	0	0	47	3	0	0	0	50	50
0	0	0	0	0	0	0	0	0	0	0	47	2	1	0	1	51	52.5
0	0	0	0	0	0	0	0	0	1	1	173	11	3	1	2	192	195.4
0	0	0	0	0	0	0	0	0	0	0	32	6	0	0	1	39	40
0	0	0	0	0	0	0	0	0	1	0	37	3	0	0	1	42	42.2
0	0	0	0	0	0	0	0	0	0	1	35	4	1	0	1	42	42.9
0	0	0	0	0	0	0	0	0	0	0	42	3	1	0	1	47	48.5
0	0	0	0	0	0	0	0	0	1	1	146	16	2	0	4	170	173.6
0	0	0	0	0	0	0	0	0	0	3	37	2	1	0	0	43	41.7
0	0	0	0	0	0	0	0	0	0	0	45	4	0	0	0	49	49
0	0	0	0	0	0	0	0	0	0	0	33	0	1	0	0	34	34.5
0	0	0	0	0	0	0	0	0	0	0	30	0	2	0	1	33	35
0	0	0	0	0	0	0	0	0	0	3	145	6	4	0	1	159	160.2
0	0	0	0	0	0	0	0	0	1	0	27	4	0	0	0	32	31.2
0	0	0	0	0	0	0	0	0	0	0	45	1	0	0	0	46	46
0	0	0	0	0	0	0	0	0	0	0	37	3	1	0	0	41	41.5
0	0	0	0	0	0	0	0	0	0	0	32	0	1	0	2	35	37.5
0	0	0	0	0	0	0	0	0	1	0	141	8	2	0	2	154	156.2
0	0	0	0	0	0	0	0	0	42	13	1969	142	45	2	30	2243	2257

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	5	1	0	0	0	6	6	1	0	13	3	0	0	0	17	16.2
1	0	3	0	1	0	0	5	4.7	0	0	22	4	0	0	0	26	26
0	0	9	3	0	0	0	12	12	0	0	23	6	0	0	1	30	31
0	0	21	0	0	0	0	21	21	0	0	38	7	0	0	1	46	47
1	0	38	4	1	0	0	44	43.7	1	0	96	20	0	0	2	119	120.2
0	0	12	4	0	0	0	16	16	1	0	28	2	0	0	0	31	30.2
0	0	24	1	0	0	0	25	25	0	0	24	1	2	0	0	27	28
0	0	26	5	0	0	0	31	31	1	0	42	6	0	2	0	51	52.8
0	0	18	2	0	0	0	20	20	1	0	42	4	0	0	2	49	50.2
0	0	80	12	0	0	0	92	92	3	0	136	13	2	2	2	158	161.2
0	0	24	3	2	0	0	29	30	0	0	39	5	1	0	0	45	45.5
0	0	21	1	1	0	0	23	23.5	0	0	33	3	1	0	1	38	39.5
1	0	17	3	0	0	0	21	20.2	1	0	31	1	3	0	0	36	36.7
0	0	13	2	0	0	0	15	15	3	0	41	5	0	0	1	50	48.6
1	0	75	9	3	0	0	88	88.7	4	0	144	14	5	0	2	169	170.3
0	0	4	5	0	0	0	9	9	1	0	44	5	3	0	1	54	55.7
2	0	8	1	2	0	0	13	12.4	2	1	33	1	2	0	1	40	39.8
2	0	11	1	0	0	0	14	12.4	0	1	18	2	0	0	0	21	20.4
1	0	14	1	0	1	0	17	17.5	3	1	25	5	0	0	0	34	31
5	0	37	8	2	1	0	53	51.3	6	3	120	13	5	0	2	149	146.9
0	0	10	1	1	0	0	12	12.5	1	1	21	7	0	0	1	31	30.6
0	0	17	3	0	0	0	20	20	0	0	28	4	0	0	0	32	32
0	0	13	2	0	0	0	15	15	3	0	30	2	1	0	0	36	34.1
0	0	19	4	2	0	0	25	26	2	0	33	8	3	0	1	47	47.9
0	0	59	10	3	0	0	72	73.5	6	1	112	21	4	0	2	146	144.6
0	0	16	1	1	0	0	18	18.5	2	0	29	4	1	0	1	37	36.9
0	0	13	1	1	0	0	15	15.5	0	0	37	2	3	0	2	44	47.5
0	1	13	2	1	0	0	17	16.9	0	0	24	3	0	0	0	27	27
0	0	14	1	1	0	0	16	16.5	0	2	25	1	1	0	1	30	30.3
0	1	56	5	4	0	0	66	67.4	2	2	115	10	5	0	4	138	141.7
1	1	14	1	0	0	0	17	15.6	1	0	34	5	2	0	0	42	42.2
0	0	14	5	1	0	0	20	20.5	1	1	51	4	0	0	0	57	55.6
0	0	16	3	1	0	0	20	20.5	0	0	43	3	0	0	1	47	48
0	0	22	4	0	0	0	26	26	0	0	47	4	2	0	1	54	56
1	1	66	13	2	0	0	83	82.6	2	1	175	16	4	0	2	200	201.8
0	0	17	0	0	0	0	17	17	0	0	40	0	2	0	0	42	43
1	0	20	3	0	0	0	24	23.2	0	0	43	1	0	0	0	44	44
0	0	15	3	2	0	0	20	21	0	1	32	2	3	0	0	38	38.9
0	0	20	3	3	0	0	26	27.5	1	0	42	3	2	1	2	51	54.5
1	0	72	9	5	0	0	87	88.7	1	1	157	6	7	1	2	175	180.4
0	0	16	0	0	0	0	16	16	0	0	30	5	1	0	0	36	36.5
0	0	17	2	0	0	0	19	19	0	0	48	5	0	0	0	53	53
0	0	21	2	1	0	0	24	24.5	0	1	53	10	2	0	0	66	66.4
0	0	19	2	0	0	0	21	21	0	0	41	6	3	0	0	50	51.5
0	0	73	6	1	0	0	80	80.5	0	1	172	26	6	0	0	205	207.4
0	0	21	6	2	0	0	29	30	1	0	49	8	0	0	1	59	59.2
0	0	26	1	1	0	0	28	28.5	0	0	90	9	2	0	0	101	102
0	1	34	1	1	0	0	37	36.9	0	0	119	22	3	4	0	148	154.7
0	1	30	7	0	0	0	38	37.4	0	0	155	23	1	0	0	179	179.5
0	2	111	15	4	0	0	132	132.8	1	0	413	62	6	4	1	487	495.4
0	0	40	0	0	0	0	40	40	0	0	145	19	3	0	0	167	168.5
0	0	44	1	0	0	0	45	45	0	0	158	20	2	0	1	181	183
0	0	37	5	0	0	0	42	42	0	1	168	17	2	0	0	188	188.4
0	0	37	4	0	0	0	41	41	0	0	137	17	1	1	1	157	159.8
0	0	158	10	0	0	0	168	168	0	1	608	73	8	1	2	693	699.7
0	0	35	2	2	1	0	40	42.3	0	2	170	9	1	0	0	182	181.3
0	0	36	2	0	0	0	38	38	1	2	143	11	1	0	0	158	156.5
0	0	30	2	0	0	0	32	32	16	0	112	6	1	0	1	136	124.7
0	0	19	1	0	0	0	20	20	3	0	83	5	0	0	0	91	88.6
0	0	120	7	2	1	0	130	132.3	20	4	508	31	3	0	1	567	551.1
9	4	945	108	27	2	0	1095	1102	46	14	2756	305	55	8	22	3206	3221

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 8
Date : 11/11/17
Location : Enniskerry Road/Ballycorus Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	4	4.5
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	2	1	0	0	6	6.5
08:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2
08:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2
09:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2
09:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
09:45	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	13	1	0	0	0	16	14.4
10:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:15	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2
10:30	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
10:45	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	2	0	11	1	0	0	0	14	12.4
11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
11:15	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	1.4
11:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
11:45	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	5	1	1	0	0	9	7.9
12:00	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5	5.5
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0	5	3.4
12:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	2	0	11	0	1	0	0	14	12.9
13:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
13:15	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	6	6
13:30	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	4	3.4
13:45	0	0	0	0	0	0	0	0	0	1	0	4	0	1	0	0	6	5.7
H/TOT	0	0	0	0	0	0	0	0	0	1	1	12	4	1	0	0	19	18.1
14:00	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
14:15	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
14:30	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2
14:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	3	0	8	0	0	0	0	11	8.6
15:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:15	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	4	3.2
15:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
15:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	1	0	9	1	0	0	0	11	10.2
16:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:45	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
17:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
12 TOT	0	0	0	0	0	0	0	0	0	14	1	96	11	4	0	0	126	116.2

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	2	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	2	0	0	0	2	2	0	0	3	0	0	0	0	3	3
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	5	1	0	0	0	6	6	0	0	4	1	0	1	0	6	7.3
0	0	10	0	0	0	0	10	10	0	0	2	0	0	0	0	2	2
1	1	8	0	0	0	0	10	8.6	0	0	0	0	0	0	0	0	0
1	1	25	1	0	0	0	28	26.6	0	0	7	1	0	1	0	9	10.3
0	0	12	1	0	0	0	13	13	0	0	0	1	0	0	0	1	1
0	0	9	0	0	0	0	9	9	1	1	1	0	0	0	0	3	1.6
0	0	16	0	0	0	0	16	16	1	0	1	0	0	0	0	2	1.2
3	0	12	0	0	0	0	15	12.6	0	0	1	0	0	0	0	1	1
3	0	49	1	0	0	0	53	50.6	2	1	3	1	0	0	0	7	4.8
2	0	15	0	0	0	0	17	15.4	0	0	3	0	0	0	0	3	3
0	0	13	0	0	0	0	13	13	2	0	3	0	1	0	0	6	4.9
1	0	14	2	0	0	0	17	16.2	0	0	3	0	0	0	0	3	3
0	0	16	1	0	0	0	17	17	0	0	1	1	1	1	0	4	5.8
3	0	58	3	0	0	0	64	61.6	2	0	10	1	2	1	0	16	16.7
0	0	7	2	0	0	0	9	9	1	0	1	0	0	0	0	2	1.2
1	0	18	0	1	0	0	20	19.7	2	0	3	0	0	0	0	5	3.4
0	0	19	1	0	0	0	20	20	0	0	5	0	0	1	0	6	7.3
1	0	23	2	0	0	0	26	25.2	4	0	2	0	0	0	0	6	2.8
2	0	67	5	1	0	0	75	73.9	7	0	11	0	0	1	0	19	14.7
2	0	14	0	0	0	0	16	14.4	1	1	3	1	0	0	0	6	4.6
0	0	22	0	0	0	0	22	22	1	0	4	0	0	0	0	5	4.2
2	0	21	2	0	0	0	25	23.4	0	0	1	1	0	0	0	2	2
0	0	33	2	0	0	0	35	35	0	0	7	0	0	0	0	7	7
4	0	90	4	0	0	0	98	94.8	2	1	15	2	0	0	0	20	17.8
2	0	23	1	0	0	0	26	24.4	0	0	4	0	0	0	0	4	4
0	0	51	2	0	0	0	53	53	2	0	6	0	0	0	0	8	6.4
0	1	17	3	0	0	0	21	20.4	0	0	2	2	0	0	0	4	4
1	0	18	0	0	0	0	19	18.2	4	0	6	0	0	1	0	11	9.1
3	1	109	6	0	0	0	119	116	6	0	18	2	0	1	0	27	23.5
0	0	18	1	1	0	0	20	20.5	0	0	4	0	1	0	0	5	5.5
1	0	19	0	0	2	0	22	23.8	2	0	5	1	0	0	0	8	6.4
0	0	20	2	1	0	0	23	23.5	0	0	1	1	0	0	0	2	2
1	0	20	0	0	0	0	21	20.2	0	0	4	1	0	0	0	5	5
2	0	77	3	2	2	0	86	88	2	0	14	3	1	0	0	20	18.9
0	0	22	1	0	0	0	23	23	0	0	3	1	0	0	0	4	4
1	0	15	1	0	0	0	17	16.2	0	0	5	0	0	1	0	6	7.3
0	0	8	0	1	0	0	9	9.5	0	0	4	0	0	0	0	4	4
0	0	19	1	0	0	0	20	20	0	0	6	0	0	0	0	6	6
1	0	64	3	1	0	0	69	68.7	0	0	18	1	0	1	0	20	21.3
0	0	32	4	0	0	0	36	36	0	0	3	0	0	0	0	3	3
1	0	26	2	0	0	0	29	28.2	0	0	6	0	0	0	0	6	6
0	0	17	2	0	0	0	19	19	0	0	7	0	0	0	0	7	7
0	0	14	0	0	0	0	14	14	0	0	2	0	0	0	0	2	2
1	0	89	8	0	0	0	98	97.2	0	0	18	0	0	0	0	18	18
0	0	15	0	1	0	0	16	16.5	0	0	4	0	0	0	0	4	4
0	0	13	0	0	0	0	13	13	0	0	4	1	0	0	0	5	5
0	0	7	1	0	0	0	8	8	0	0	3	0	0	0	0	3	3
0	0	3	1	0	0	0	4	4	0	0	5	0	0	0	0	5	5
0	0	38	2	1	0	0	41	41.5	0	0	16	1	0	0	0	17	17
0	0	4	0	0	0	0	4	4	0	0	3	0	0	0	0	3	3
0	0	11	0	0	0	0	11	11	1	0	3	0	0	0	0	4	3.2
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
0	0	9	0	0	0	0	9	9	0	0	1	0	0	0	0	1	1
0	0	31	0	0	0	0	31	31	1	0	8	0	0	0	0	9	8.2
20	2	697	38	5	2	0	764	751.9	22	2	141	12	3	5	0	185	174.2

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	6	8
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	9	2	0	1	4	16	21.3
0	0	0	0	0	0	0	0	0	0	0	22	3	0	1	6	32	39.3
0	0	0	0	0	0	0	0	0	0	0	14	1	1	0	2	18	20.5
0	0	0	0	0	0	0	0	0	1	0	17	3	1	0	1	23	23.7
0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16
0	0	0	0	0	0	0	0	0	2	0	28	2	0	0	1	33	32.4
0	0	0	0	0	0	0	0	0	3	0	74	7	2	0	4	90	92.6
0	0	0	0	0	0	0	0	0	1	0	25	1	1	3	0	31	34.6
0	0	0	0	0	0	0	0	0	0	0	34	3	0	0	1	38	39
0	0	0	0	0	0	0	0	0	3	0	19	1	1	1	0	25	24.4
0	0	0	0	0	0	0	0	0	0	0	34	1	0	0	0	35	35
0	0	0	0	0	0	0	0	0	4	0	112	6	2	4	1	129	133
0	0	0	0	0	0	0	0	0	3	0	28	1	0	1	1	34	33.9
0	0	0	0	0	0	0	0	0	3	0	42	1	2	0	1	49	48.6
0	0	0	0	0	0	0	0	0	1	0	34	3	0	0	0	38	37.2
0	0	0	0	0	0	0	0	0	1	0	28	2	0	1	0	32	32.5
0	0	0	0	0	0	0	0	0	8	0	132	7	2	2	2	153	152.2
0	0	0	0	0	0	0	0	0	12	1	37	2	0	1	2	55	48.1
0	0	0	0	0	0	0	0	0	10	0	27	3	0	1	0	41	34.3
0	0	0	0	0	0	0	0	0	13	0	35	2	0	1	0	51	41.9
0	0	0	0	0	0	0	0	0	6	0	31	0	0	0	1	38	34.2
0	0	0	0	0	0	0	0	0	41	1	130	7	0	3	3	185	158.5
0	0	0	0	0	0	0	0	0	8	0	40	4	0	1	1	54	49.9
0	0	0	0	0	0	0	0	0	16	0	46	1	0	0	1	64	52.2
0	0	0	0	0	0	0	0	0	3	0	54	1	1	1	0	60	59.4
0	0	0	0	0	0	0	0	0	9	0	57	2	0	0	0	68	60.8
0	0	0	0	0	0	0	0	0	36	0	197	8	1	2	2	246	222.3
0	0	0	0	0	0	0	0	0	11	0	51	2	0	0	0	64	55.2
0	0	0	0	0	0	0	0	0	2	0	56	4	0	0	1	63	62.4
0	0	0	0	0	0	0	0	0	16	1	46	2	1	0	0	66	53.1
0	0	0	0	0	0	0	0	0	7	0	58	0	0	0	1	66	61.4
0	0	0	0	0	0	0	0	0	36	1	211	8	1	0	2	259	232.1
0	0	0	0	0	0	0	0	0	2	0	50	2	0	0	0	54	52.4
0	0	0	0	0	0	0	0	0	5	0	37	4	1	1	1	49	47.8
0	0	0	0	0	0	0	0	0	3	1	53	4	1	0	0	62	59.5
0	0	0	0	0	0	0	0	0	2	0	51	3	1	1	0	58	58.2
0	0	0	0	0	0	0	0	0	12	1	191	13	3	2	1	223	217.9
0	0	0	0	0	0	0	0	0	4	1	60	2	0	0	1	68	65.2
0	0	0	0	0	0	0	0	0	4	0	56	4	2	0	2	68	67.8
0	0	0	0	0	0	0	0	0	1	0	50	2	1	0	0	54	53.7
0	0	0	0	0	0	0	0	0	3	0	42	3	1	0	2	51	51.1
0	0	0	0	0	0	0	0	0	12	1	208	11	4	0	5	241	237.8
0	0	0	0	0	0	0	0	0	3	0	40	3	1	0	1	48	47.1
0	0	0	0	0	0	0	0	0	1	0	43	1	0	0	3	48	50.2
0	0	0	0	0	0	0	0	0	3	0	28	0	0	0	0	31	28.6
0	0	0	0	0	0	0	0	0	0	0	36	1	0	1	0	38	39.3
0	0	0	0	0	0	0	0	0	7	0	147	5	1	1	4	165	165.2
0	0	0	0	0	0	0	0	0	0	0	38	2	2	0	0	42	43
0	0	0	0	0	0	0	0	0	0	0	34	1	0	0	1	36	37
0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	1	23	24
0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	29	29
0	0	0	0	0	0	0	0	0	0	0	122	4	2	0	2	130	133
0	0	0	0	0	0	0	0	0	0	0	24	1	0	0	0	25	25
0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	25	25
0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	18	18
0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	1	17	18
0	0	0	0	0	0	0	0	0	0	0	82	2	0	0	1	85	86
0	0	0	0	0	0	0	0	0	159	4	1628	81	18	15	33	1938	1870

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	0	0	0	0	2	2	0	0	4	1	0	0	0	5	5
2	0	1	1	0	0	0	4	2.4	0	0	7	1	0	1	2	11	14.3
0	0	1	0	0	0	0	1	1	0	1	10	1	0	0	0	12	11.4
1	0	3	1	0	0	0	5	4.2	0	0	12	0	1	0	4	17	21.5
3	0	7	2	0	0	0	12	9.6	0	1	33	3	1	1	6	45	52.2
0	0	2	1	0	0	0	3	3	0	0	4	1	0	0	1	6	7
0	0	1	0	0	0	0	1	1	0	0	11	1	1	0	2	15	17.5
0	0	6	0	0	0	0	6	6	0	0	14	1	0	0	0	15	15
0	0	6	1	0	0	0	7	7	0	0	23	2	0	0	0	25	25
0	0	15	2	0	0	0	17	17	0	0	52	5	1	0	3	61	64.5
0	0	6	2	0	0	0	8	8	7	0	22	1	1	0	2	33	29.9
12	1	5	1	1	0	0	20	10.3	6	0	31	2	0	0	0	39	34.2
4	0	13	1	0	0	0	18	14.8	3	0	47	0	0	1	1	52	51.9
2	0	12	1	0	0	0	15	13.4	19	0	35	2	0	0	2	58	44.8
18	1	36	5	1	0	0	61	46.5	35	0	135	5	1	1	5	182	160.8
0	0	18	0	2	0	0	20	21	5	0	41	2	0	0	0	48	44
4	0	9	1	0	0	0	14	10.8	7	0	44	1	1	0	0	53	47.9
0	0	27	1	0	0	0	28	28	9	0	44	3	1	1	1	59	54.6
0	0	13	2	0	0	0	15	15	4	0	45	4	0	0	0	53	49.8
4	0	67	4	2	0	0	77	74.8	25	0	174	10	2	1	1	213	196.3
1	0	6	0	0	0	0	7	6.2	7	0	37	2	0	0	0	46	40.4
1	0	13	0	0	0	0	14	13.2	4	0	52	2	1	0	0	59	56.3
1	0	22	4	0	1	0	28	28.5	5	0	51	3	0	0	2	61	59
0	0	10	2	1	0	0	13	13.5	0	1	42	3	1	1	1	49	51.2
3	0	51	6	1	1	0	62	61.4	16	1	182	10	2	1	3	215	206.9
0	0	38	2	0	0	0	40	40	1	0	64	2	0	0	0	67	66.2
0	0	44	1	0	0	0	45	45	2	0	51	2	0	0	1	56	55.4
1	0	38	1	0	0	0	40	39.2	3	0	57	1	1	0	1	63	62.1
0	0	37	2	0	0	0	39	39	2	0	70	2	0	0	3	77	78.4
1	0	157	6	0	0	0	164	163.2	8	0	242	7	1	0	5	263	262.1
1	0	33	3	0	0	0	37	36.2	0	0	56	3	1	0	1	61	62.5
0	0	32	2	0	0	0	34	34	1	0	53	2	1	0	0	57	56.7
0	0	19	0	1	0	0	20	20.5	5	1	40	2	1	0	0	49	44.9
1	0	16	1	0	0	0	18	17.2	2	0	58	3	2	1	2	68	70.7
2	0	100	6	1	0	0	109	107.9	8	1	207	10	5	1	3	235	234.8
0	0	12	1	0	0	0	13	13	3	0	51	3	0	0	0	57	54.6
2	0	15	2	0	0	0	19	17.4	1	0	50	2	0	0	1	54	54.2
2	0	19	0	0	0	0	21	19.4	4	0	46	1	2	0	0	53	50.8
2	0	18	2	0	0	0	22	20.4	0	1	38	1	0	0	2	42	43.4
6	0	64	5	0	0	0	75	70.2	8	1	185	7	2	0	3	206	203
0	0	17	0	1	0	0	18	18.5	0	0	41	1	1	0	0	43	43.5
0	0	13	0	0	0	0	13	13	0	0	48	3	0	0	1	52	53
0	1	22	0	0	0	0	23	22.4	2	0	38	1	1	0	2	44	44.9
0	0	22	2	0	0	1	25	26	0	0	49	2	0	0	1	52	53
0	1	74	2	1	0	1	79	79.9	2	0	176	7	2	0	4	191	194.4
0	0	20	5	0	0	0	25	25	1	0	36	2	0	0	2	41	42.2
0	0	11	0	1	0	0	12	12.5	0	0	29	2	0	0	2	33	35
0	0	20	1	0	0	0	21	21	0	0	43	3	0	0	1	47	48
0	0	11	0	0	0	0	11	11	0	1	40	4	0	0	0	45	44.4
0	0	62	6	1	0	0	69	69.5	1	1	148	11	0	0	5	166	169.6
0	0	19	1	0	0	0	20	20	0	1	33	1	1	0	1	37	37.9
0	0	16	0	0	0	0	16	16	0	0	26	1	2	0	0	29	30
1	0	15	0	0	0	0	16	15.2	0	0	33	2	0	0	0	35	35
0	0	7	1	0	0	0	8	8	0	0	34	2	1	0	1	38	39.5
1	0	57	2	0	0	0	60	59.2	0	1	126	6	4	0	2	139	142.4
0	0	9	0	1	0	0	10	10.5	0	0	36	2	0	0	1	39	40
0	0	16	1	0	0	0	17	17	0	0	20	1	0	0	1	22	23
0	0	10	0	0	0	0	10	10	0	0	30	1	0	0	0	31	31
0	0	8	0	0	0	0	8	8	0	0	20	2	1	0	0	23	23.5
0	0	43	1	1	0	0	45	45.5	0	0	106	6	1	0	2	115	117.5
38	2	733	47	8	1	1	830	804.7	103	6	1766	87	22	5	42	2031	2005

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
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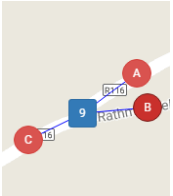
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 9
Date : 07/11/17
Location : Ballycorus Road/Rathmichael Road/Brides Glen Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
14:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:30	1	0	0	0	0	0	0	1	0.2	0	0	1	0	0	0	0	1	1
14:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	0	0	1	0.2	0	0	3	1	0	0	0	4	4
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
15:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	4	5
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
12 TOT	1	0	0	0	0	0	0	1	0.2	1	0	21	3	0	0	1	26	26.2

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	8	2	0	0	0	10	10	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	6	1	1	0	0	9	8.7	0	0	2	0	0	0	0	2	2
0	0	5	1	0	0	0	6	6	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	11	2	1	0	0	15	14.7	0	0	4	0	0	0	0	4	4
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	16	2	0	0	0	18	18	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	0	0	1	0	0	1	1.5
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	10	10	0	0	2	0	1	0	0	3	3.5
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	9	2	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	1	0	0	0	1	1
0	0	4	1	2	0	0	7	8	0	0	2	0	0	0	0	2	2
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	18	4	2	0	0	24	25	0	0	2	1	0	0	0	3	3
0	0	10	1	0	0	0	11	11	1	0	1	0	0	0	0	2	1.2
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
1	0	4	1	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
1	0	19	2	0	0	0	22	21.2	1	0	1	0	0	0	0	2	1.2
1	0	10	1	0	0	0	12	11.2	0	0	0	0	0	0	0	0	0
1	0	3	0	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
2	0	21	1	0	0	0	24	22.4	0	0	1	0	0	0	0	1	1
0	0	2	1	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	7	3	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	20	4	0	0	0	24	24	0	0	2	0	0	0	0	2	2
0	0	5	0	0	0	0	5	5	0	0	2	0	0	0	0	2	2
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	12	1	0	0	0	13	13	0	0	1	0	0	0	0	1	1
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	27	2	0	0	0	29	29	0	0	3	0	0	0	0	3	3
1	0	10	1	0	0	0	12	11.2	0	0	2	0	0	0	0	2	2
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
1	0	11	1	0	0	0	13	12.2	0	0	1	0	0	0	0	1	1
3	0	5	1	0	0	0	9	6.6	0	0	1	0	0	0	0	1	1
5	0	35	3	0	0	0	43	39	0	0	4	0	0	0	0	4	4
0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
1	0	6	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0
0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
1	0	40	0	0	0	0	41	40.2	0	0	0	0	0	0	0	0	0
10	0	233	25	4	0	0	272	266	1	0	22	1	1	0	0	25	24.7

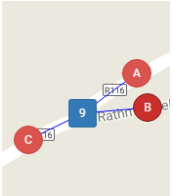
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	13	14
0	0	0	0	0	0	0	0	0	1	0	14	2	0	0	0	17	16.2
0	0	0	0	0	0	0	0	0	0	0	11	4	1	0	1	17	18.5
0	0	0	0	0	0	0	0	0	1	0	42	6	3	0	1	53	54.7
0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	14	14
0	0	0	0	0	0	0	0	0	1	0	11	1	0	0	0	13	12.2
0	0	0	0	0	0	0	0	0	1	0	13	0	0	0	0	14	13.2
0	0	0	0	0	0	0	0	0	0	0	20	2	0	0	0	22	22
0	0	0	0	0	0	0	0	0	2	0	55	6	0	0	0	63	61.4
0	0	0	0	0	0	0	0	0	1	0	22	3	1	0	0	27	26.7
0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	18	18
0	0	0	0	0	0	0	0	0	3	0	7	1	0	0	0	11	8.6
0	0	0	0	0	0	0	0	0	0	0	8	3	0	0	0	11	11
0	0	0	0	0	0	0	0	0	4	0	54	8	1	0	0	67	64.3
0	0	0	0	0	0	0	0	0	2	1	6	0	1	0	0	10	8.3
0	0	0	0	0	0	0	0	0	0	0	8	4	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	12	1	2	1	0	16	18.3
0	0	0	0	0	0	0	0	0	1	0	9	1	0	0	0	11	10.2
0	0	0	0	0	0	0	0	0	3	1	35	6	3	1	0	49	48.8
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	1	0	7	2	0	0	0	10	9.2
0	0	0	0	0	0	0	0	0	1	1	8	2	0	0	0	12	10.6
0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
0	0	0	0	0	0	0	0	0	2	1	34	6	0	0	0	43	40.8
0	0	0	0	0	0	0	0	0	0	0	11	2	3	0	0	16	17.5
0	0	0	0	0	0	0	0	0	1	0	6	3	0	1	0	11	11.5
0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
0	0	0	0	0	0	0	0	0	1	0	32	5	3	1	0	42	44
0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
0	0	0	0	0	0	0	0	0	0	1	11	1	1	0	0	14	13.9
0	0	0	0	0	0	0	0	0	0	0	9	3	0	1	0	13	14.3
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	1	41	4	1	1	0	48	49.2
0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	9	8.4
0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	16
0	0	0	0	0	0	0	0	0	1	0	14	1	0	0	0	16	15.2
0	0	0	0	0	0	0	0	0	1	1	48	3	0	0	0	53	51.6
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	1	0	17	1	0	0	0	19	18.2
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	1	0	23	3	0	0	0	27	26.2
0	0	0	0	0	0	0	0	0	2	0	65	4	0	0	0	71	69.4
0	0	0	0	0	0	0	0	0	0	0	19	0	1	0	0	20	20.5
0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	21	2	0	0	0	23	23
0	0	0	0	0	0	0	0	0	0	0	18	2	0	0	0	20	20
0	0	0	0	0	0	0	0	0	0	0	69	4	1	0	0	74	74.5
0	0	0	0	0	0	0	0	0	1	0	10	3	0	0	0	14	13.2
0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
0	0	0	0	0	0	0	0	0	0	0	16	1	2	0	0	19	20
0	0	0	0	0	0	0	0	0	1	0	11	0	0	0	0	12	11.2
0	0	0	0	0	0	0	0	0	2	0	59	4	2	0	0	67	66.4
0	0	0	0	0	0	0	0	0	0	0	12	1	1	0	1	15	16.5
0	0	0	0	0	0	0	0	0	0	1	11	0	0	0	0	12	11.4
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	2	10	0	0	0	0	12	10.8
0	0	0	0	0	0	0	0	0	0	3	45	2	1	0	1	52	51.7
0	0	0	0	0	0	0	0	0	18	7	579	58	15	3	2	682	676.8

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	3	0	0	0	0	3	3	0	0	6	0	0	0	0	6	6
0	0	3	0	1	0	0	4	4.5	1	0	4	2	0	0	1	8	8.2
2	0	8	1	0	0	0	11	9.4	0	0	6	0	0	0	0	6	6
1	0	15	0	0	0	0	16	15.2	0	0	8	1	0	0	0	9	9
3	0	29	1	1	0	0	34	32.1	1	0	24	3	0	0	1	29	29.2
0	0	19	0	0	0	0	19	19	0	0	17	0	0	0	0	17	17
1	1	12	2	0	0	0	16	14.6	0	0	21	4	1	1	1	28	30.8
1	0	15	2	0	0	0	18	17.2	0	0	21	0	0	0	0	21	21
0	0	14	1	0	0	0	15	15	0	0	11	1	1	0	1	14	15.5
2	1	60	5	0	0	0	68	65.8	0	0	70	5	2	1	2	80	84.3
1	0	11	0	2	0	0	14	14.2	0	0	10	1	0	0	0	11	11
0	0	5	0	0	0	0	5	5	0	0	8	0	0	0	0	8	8
0	0	7	0	0	0	0	7	7	0	0	14	2	0	0	0	16	16
0	0	4	1	0	0	0	5	5	0	0	5	2	1	0	0	8	8.5
1	0	27	1	2	0	0	31	31.2	0	0	37	5	1	0	0	43	43.5
0	0	6	1	0	0	0	7	7	0	0	5	1	0	0	0	6	6
0	0	4	0	0	0	0	4	4	0	0	8	1	1	0	0	10	10.5
0	0	8	2	0	0	0	10	10	0	0	8	1	0	1	0	10	11.3
0	0	5	1	0	0	0	6	6	0	0	9	2	0	0	0	11	11
0	0	23	4	0	0	0	27	27	0	0	30	5	1	1	0	37	38.8
0	0	2	0	0	0	0	2	2	1	0	8	1	1	0	0	11	10.7
0	0	5	1	1	0	0	7	7.5	0	0	8	3	0	0	0	11	11
0	0	2	1	0	0	0	3	3	0	0	6	0	0	0	0	6	6
0	0	6	1	0	0	0	7	7	0	0	4	2	1	0	0	7	7.5
0	0	15	3	1	0	0	19	19.5	1	0	26	6	2	0	0	35	35.2
0	0	2	1	0	0	0	3	3	0	0	9	2	0	0	0	11	11
0	0	5	2	0	0	0	7	7	0	0	13	0	1	0	0	14	14.5
0	0	8	3	0	0	0	11	11	0	0	16	0	1	0	0	17	17.5
0	0	6	0	0	0	0	6	6	1	0	10	1	0	0	0	12	11.2
0	0	21	6	0	0	0	27	27	1	0	48	3	2	0	0	54	54.2
0	0	4	1	0	0	0	5	5	1	0	9	0	0	0	0	10	9.2
0	0	4	0	0	0	0	4	4	1	0	6	3	0	0	0	10	9.2
0	0	6	2	0	0	0	8	8	0	0	8	3	0	1	0	12	13.3
0	0	3	0	0	0	0	3	3	0	0	8	1	0	0	0	9	9
0	0	17	3	0	0	0	20	20	2	0	31	7	0	1	0	41	40.7
0	0	3	0	0	0	0	3	3	0	0	13	4	2	0	0	19	20
0	0	3	0	0	0	0	3	3	0	0	4	0	1	0	0	5	5.5
0	0	13	1	0	0	0	14	14	0	0	8	1	1	0	0	10	10.5
0	0	5	0	0	0	0	5	5	0	0	15	0	0	0	0	15	15
0	0	24	1	0	0	0	25	25	0	0	40	5	4	0	0	49	51
0	0	8	0	0	0	0	8	8	0	0	11	1	0	0	0	12	12
0	0	7	1	0	0	0	8	8	1	0	19	0	1	0	0	21	20.7
0	0	4	0	0	0	0	4	4	0	0	25	2	0	0	0	27	27
0	0	6	0	0	0	0	6	6	1	0	10	1	0	0	0	12	11.2
0	0	25	1	0	0	0	26	26	2	0	65	4	1	0	0	72	70.9
1	0	3	0	0	0	0	4	3.2	0	0	16	0	0	0	0	16	16
0	0	8	0	0	0	0	8	8	0	0	16	1	0	0	0	17	17
0	0	12	1	0	0	0	13	13	1	0	22	2	1	0	0	26	25.7
0	0	12	1	0	0	0	13	13	0	0	38	0	0	0	0	38	38
1	0	35	2	0	0	0	38	37.2	1	0	92	3	1	0	0	97	96.7
0	0	10	0	0	0	0	10	10	0	0	34	5	0	0	0	39	39
0	0	12	1	0	0	0	13	13	0	1	34	2	0	0	0	37	36.4
1	0	10	1	0	0	0	12	11.2	0	1	41	2	0	0	0	44	43.4
0	0	7	1	0	0	0	8	8	0	1	33	0	0	0	0	34	33.4
1	0	39	3	0	0	0	43	42.2	0	3	142	9	0	0	0	154	152.2
1	0	7	1	0	0	0	9	8.2	0	1	24	2	0	0	0	27	26.4
0	1	6	2	0	0	0	9	8.4	0	0	44	0	0	0	0	44	44
0	0	14	0	0	0	0	14	14	0	0	30	0	0	0	0	30	30
0	3	8	0	0	0	0	11	9.2	0	1	31	2	0	0	0	34	33.4
1	4	35	3	0	0	0	43	39.8	0	2	129	4	0	0	0	135	133.8
9	5	350	33	4	0	0	401	392.8	8	5	734	59	14	3	3	826	830.5

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 9
Date : 09/11/17
Location : Ballycorus Road/Rathmichael Road/Brides Glen Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
11:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
13:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2
12 TOT	0	0	0	0	0	0	0	0	0	1	0	28	2	0	0	0	31	30.2

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	2	0	0	0	0	2	2
0	0	10	3	0	0	0	13	13	0	0	2	0	0	0	0	2	2
0	0	2	1	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
1	0	4	0	0	0	0	5	4.2	0	0	2	0	0	0	0	2	2
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
1	0	20	1	0	0	0	22	21.2	0	0	3	0	0	0	0	3	3
0	0	8	0	0	0	0	8	8	0	0	2	0	1	0	0	3	3.5
0	0	6	0	0	0	0	6	6	0	0	2	0	0	0	0	2	2
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
0	0	23	1	0	0	0	24	24	0	0	5	0	1	0	0	6	6.5
1	0	7	1	0	0	0	9	8.2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	2	0	0	0	0	2	2
1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
2	0	14	3	0	0	0	19	17.4	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	1	0	0	0	0	0	1	0.4
0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
1	0	3	0	0	0	0	4	3.2	0	0	3	0	0	0	0	3	3
1	0	6	1	0	0	0	8	7.2	0	1	4	0	0	0	0	5	4.4
0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	12	2	0	0	0	14	14	0	0	4	0	0	0	0	4	4
0	0	4	1	0	0	0	5	5	1	0	0	0	0	0	0	1	0.2
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
1	0	5	1	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0
1	0	18	2	0	0	0	21	20.2	1	0	1	0	0	0	0	2	1.2
0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	1	0	0	0	0	1	1
1	0	19	3	0	0	0	23	22.2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	9	1	0	0	0	10	10	0	0	1	1	0	0	0	2	2
0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	17	3	0	0	0	20	20	0	0	3	1	0	0	0	4	4
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	0	8	8	0	0	3	0	0	0	0	3	3
0	0	4	1	1	0	0	6	6.5	0	0	1	0	0	0	0	1	1
0	0	19	4	1	0	0	24	24.5	0	0	4	0	0	0	0	4	4
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
1	0	6	1	0	0	0	8	7.2	0	0	1	0	0	0	0	1	1
1	0	11	1	0	0	0	13	12.2	0	0	1	0	0	0	0	1	1
0	0	7	1	0	0	0	8	8	0	0	1	0	0	0	0	1	1
2	0	28	3	0	0	0	33	31.4	0	0	3	0	0	0	0	3	3
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
1	0	11	1	0	0	0	13	12.2	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	7	7	0	0	1	0	0	0	0	1	1
1	0	30	1	0	0	0	32	31.2	0	0	1	0	0	0	0	1	1
9	0	216	27	1	0	0	253	246.3	1	1	33	1	1	0	0	37	36.1

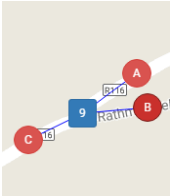
B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	1	7	1	0	0	0	9	8.4
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	10	5	1	0	0	16	16.5
0	0	0	0	0	0	0	0	0	0	1	28	7	1	0	0	37	36.9
0	0	0	0	0	0	0	0	0	0	0	11	3	1	0	0	15	15.5
0	0	0	0	0	0	0	0	0	1	0	11	4	1	0	0	17	16.7
0	0	0	0	0	0	0	0	0	1	0	12	2	0	0	0	15	14.2
0	0	0	0	0	0	0	0	0	0	1	18	0	1	0	0	20	19.9
0	0	0	0	0	0	0	0	0	2	1	52	9	3	0	0	67	66.3
0	0	0	0	0	0	0	0	0	0	0	27	2	1	0	0	30	30.5
0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	21	21
0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	8	2	1	0	0	11	11.5
0	0	0	0	0	0	0	0	0	0	0	70	5	2	0	0	77	78
0	0	0	0	0	0	0	0	0	3	0	7	3	0	0	0	13	10.6
0	0	0	0	0	0	0	0	0	1	0	10	1	0	1	0	13	13.5
0	0	0	0	0	0	0	0	0	0	0	8	2	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
0	0	0	0	0	0	0	0	0	4	0	37	7	0	1	0	49	47.1
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	13	0	0	1	0	14	15.3
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	34	2	0	1	0	37	38.3
0	0	0	0	0	0	0	0	0	2	0	16	0	1	0	0	19	17.9
0	0	0	0	0	0	0	0	0	0	0	8	6	0	0	0	14	14
0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
0	0	0	0	0	0	0	0	0	2	0	45	9	1	0	0	57	55.9
0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	13	1	1	0	0	15	15.5
0	0	0	0	0	0	0	0	0	0	0	17	1	1	0	0	19	19.5
0	0	0	0	0	0	0	0	0	0	0	56	4	2	0	0	62	63
0	0	0	0	0	0	0	0	0	1	0	12	4	0	0	0	17	16.2
0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	11	11.5
0	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	19	19
0	0	0	0	0	0	0	0	0	0	0	17	2	1	0	0	20	20.5
0	0	0	0	0	0	0	0	0	1	0	55	9	2	0	0	67	67.2
0	0	0	0	0	0	0	0	0	1	0	16	3	1	0	0	21	20.7
0	0	0	0	1	0	0	1	1.5	1	0	11	0	1	0	0	13	12.7
0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	0	0	1	0	0	1	1.5	2	0	50	3	2	0	0	57	56.4
0	0	0	0	0	0	0	0	0	0	2	21	1	0	0	0	24	22.8
0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	17	17
0	0	0	0	0	0	0	0	0	0	2	66	3	0	0	0	71	69.8
0	0	0	0	0	0	0	0	0	1	0	19	1	0	0	0	21	20.2
0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
0	0	0	0	0	0	0	0	0	1	0	17	0	0	1	0	19	19.5
0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	11	11.5
0	0	0	0	0	0	0	0	0	2	0	68	1	1	1	0	73	73.2
0	0	0	0	0	0	0	0	0	3	1	16	0	0	0	0	20	17
0	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	9	8.2
0	0	0	0	0	0	0	0	0	1	2	16	1	1	0	0	21	19.5
0	0	0	0	0	0	0	0	0	0	2	9	1	0	0	0	12	10.8
0	0	0	0	0	0	0	0	0	5	5	49	2	1	0	0	62	55.5
0	0	0	0	1	0	0	1	1.5	18	9	610	61	15	3	0	716	707.6

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	3	0	0	0	0	3	3	0	0	3	1	1	0	0	5	5.5
0	0	3	1	1	0	0	5	5.5	2	0	3	0	0	0	0	5	3.4
2	0	5	0	0	0	0	7	5.4	0	0	6	0	0	0	0	6	6
1	0	20	1	0	0	0	22	21.2	0	0	11	1	0	0	0	12	12
3	0	31	2	1	0	0	37	35.1	2	0	23	2	1	0	0	28	26.9
0	0	14	0	0	0	0	14	14	0	0	16	3	0	0	0	19	19
0	0	13	1	0	0	0	14	14	0	0	15	0	0	0	0	15	15
1	0	12	1	0	0	0	14	13.2	0	0	22	2	0	0	0	24	24
0	0	13	0	0	0	0	13	13	0	0	13	0	0	0	0	13	13
1	0	52	2	0	0	0	55	54.2	0	0	66	5	0	0	0	71	71
0	0	12	0	1	1	0	14	15.8	0	0	12	2	1	0	0	15	15.5
0	1	11	0	0	0	0	12	11.4	0	0	13	1	1	0	0	15	15.5
0	0	11	0	0	0	0	11	11	0	0	17	1	0	0	0	18	18
0	0	9	0	0	0	0	9	9	1	0	7	0	0	1	0	9	9.5
0	1	43	0	1	1	0	46	47.2	1	0	49	4	2	1	0	57	58.5
0	0	7	1	0	0	0	8	8	0	0	6	2	0	0	0	8	8
0	0	3	0	0	0	0	3	3	1	0	8	2	2	0	0	13	13.2
0	0	7	2	0	0	0	9	9	1	0	7	0	0	0	0	8	7.2
0	0	9	0	0	0	0	9	9	1	0	6	0	0	1	0	8	8.5
0	0	26	3	0	0	0	29	29	3	0	27	4	2	1	0	37	36.9
0	0	4	2	0	0	0	6	6	0	0	7	0	1	0	0	8	8.5
0	0	3	0	0	0	0	3	3	1	0	11	1	0	0	0	13	12.2
0	0	1	1	0	0	0	2	2	0	0	11	1	0	0	0	12	12
0	0	8	0	0	0	0	8	8	0	0	12	3	2	0	0	17	18
0	0	16	3	0	0	0	19	19	1	0	41	5	3	0	0	50	50.7
0	0	6	0	0	0	0	6	6	1	0	9	1	1	0	0	12	11.7
0	0	3	1	0	0	0	4	4	0	0	12	3	1	0	0	16	16.5
0	0	4	0	1	0	0	5	5.5	0	0	9	0	0	0	0	9	9
0	0	5	0	0	0	0	5	5	1	1	10	2	1	0	0	15	14.1
0	0	18	1	1	0	0	20	20.5	2	1	40	6	3	0	0	52	51.3
0	0	5	0	1	0	0	6	6.5	0	0	13	3	0	0	0	16	16
0	0	5	1	0	0	0	6	6	0	0	13	2	1	0	0	16	16.5
0	0	7	1	0	0	0	8	8	0	2	13	0	1	0	0	16	15.3
0	0	7	2	0	0	0	9	9	0	0	16	0	0	0	0	16	16
0	0	24	4	1	0	0	29	29.5	0	2	55	5	2	0	0	64	63.8
0	0	6	1	0	0	0	7	7	0	0	7	0	0	0	0	7	7
1	0	8	0	0	0	0	9	8.2	0	0	21	0	0	0	0	21	21
0	0	3	0	1	0	0	4	4.5	0	0	16	2	2	0	0	20	21
0	0	6	1	0	0	0	7	7	0	0	6	0	3	0	0	9	10.5
1	0	23	2	1	0	0	27	26.7	0	0	50	2	5	0	0	57	59.5
1	0	4	1	0	0	0	6	5.2	0	0	18	1	1	0	0	20	20.5
1	0	3	0	0	0	0	4	3.2	0	0	11	0	0	0	0	11	11
0	0	7	2	0	0	0	9	9	0	0	21	1	1	0	0	23	23.5
1	0	6	0	0	0	0	7	6.2	0	0	24	2	0	1	0	27	28.3
3	0	20	3	0	0	0	26	23.6	0	0	74	4	2	1	0	81	83.3
0	0	11	0	1	0	0	12	12.5	0	0	12	4	1	0	0	17	17.5
0	0	10	1	0	0	0	11	11	0	0	16	1	1	0	0	18	18.5
0	0	7	0	0	0	0	7	7	0	0	27	1	1	0	0	29	29.5
0	0	8	1	0	0	0	9	9	0	0	32	2	0	0	0	34	34
0	0	36	2	1	0	0	39	39.5	0	0	87	8	3	0	0	98	99.5
0	0	11	1	0	0	0	12	12	1	0	33	2	0	0	0	36	35.2
1	0	7	1	0	0	0	9	8.2	1	0	36	1	0	0	0	38	37.2
0	0	11	0	0	0	0	11	11	1	0	33	4	0	0	0	38	37.2
0	0	7	0	0	0	0	7	7	0	0	35	2	0	0	0	37	37
1	0	36	2	0	0	0	39	38.2	3	0	137	9	0	0	0	149	146.6
0	0	13	0	2	0	0	15	16	0	0	19	1	1	1	0	22	23.8
0	0	6	0	0	0	0	6	6	0	0	26	2	0	0	0	28	28
0	0	8	0	0	0	0	8	8	3	0	26	2	0	0	0	31	28.6
0	0	5	0	0	0	0	5	5	2	0	19	0	0	0	0	21	19.4
0	0	32	0	2	0	0	34	35	5	0	90	5	1	1	0	102	99.8
9	1	357	24	8	1	0	400	397.5	17	3	739	59	24	4	0	846	847.8

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	SV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

IDASO

Survey Name : IDA-17-107 Glenamuck District Distributor
Site : 9
Date : 11/11/17
Location : Ballycorus Road/Rathmichael Road/Brides Glen Road



	A=>A									A=>B								
TIME	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12 TOT	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16

A=>C									B=>A								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	3	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	11	0	0	0	0	11	11	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
2	0	2	0	0	0	0	4	2.4	0	0	1	0	0	0	0	1	1
2	0	12	0	0	0	0	14	12.4	0	0	2	0	0	0	0	2	2
1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
0	0	2	2	0	0	0	4	4	3	0	0	0	1	0	0	4	2.1
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
1	0	11	2	0	0	0	14	13.2	3	0	1	0	1	0	0	5	3.1
0	0	3	1	1	0	0	5	5.5	0	0	1	0	0	0	0	1	1
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	22	2	1	0	0	25	25.5	0	0	2	0	0	0	0	2	2
0	0	27	1	0	0	0	28	28	0	1	0	0	0	0	0	1	0.4
0	0	8	0	0	0	0	8	8	0	0	1	0	0	0	0	1	1
1	0	5	0	0	1	0	7	7.5	0	0	1	0	0	0	0	1	1
0	0	6	0	0	0	0	6	6	0	0	1	0	0	0	0	1	1
1	0	46	1	0	1	0	49	49.5	0	1	3	0	0	0	0	4	3.4
0	0	9	0	0	0	0	9	9	0	0	1	0	0	0	0	1	1
0	0	6	1	0	0	0	7	7	0	0	1	0	0	0	0	1	1
0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
0	0	29	1	0	0	0	30	30	0	0	3	0	0	0	0	3	3
0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
1	0	7	0	0	0	0	8	7.2	0	0	1	0	0	0	0	1	1
1	0	6	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0
2	0	22	2	0	0	0	26	24.4	0	0	1	0	0	0	0	1	1
1	0	4	1	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
0	0	8	0	0	0	0	8	8	0	0	1	0	0	0	0	1	1
1	0	23	1	0	0	0	25	24.2	0	0	1	0	0	0	0	1	1
0	0	4	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
0	0	3	0	2	0	0	5	6	0	0	1	0	0	0	0	1	1
0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	19	1	3	0	0	23	24.5	0	0	2	0	0	0	0	2	2
0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	1	0	0	0	0	0	1	0.4
0	0	15	0	0	0	0	15	15	0	1	1	0	0	0	0	2	1.4
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	10	1	0	0	0	11	11	0	0	1	0	0	0	0	1	1
7	0	222	14	4	1	0	248	245.7	3	2	18	0	1	0	0	24	20.9

B=>B									B=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	9	8.2
0	0	0	0	0	0	0	0	0	2	1	4	0	0	0	0	7	4.8
0	0	0	0	0	0	0	0	0	3	1	19	2	0	0	0	25	22
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
0	0	0	0	0	0	0	0	0	1	0	10	0	0	0	0	11	10.2
0	0	0	0	0	0	0	0	0	2	0	7	0	0	0	0	9	7.4
0	0	0	0	0	0	0	0	0	3	0	31	1	0	0	0	35	32.6
0	0	0	0	0	0	0	0	0	1	0	11	1	0	0	0	13	12.2
0	0	0	0	0	0	0	0	0	1	0	16	1	0	0	0	18	17.2
0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
0	0	0	0	0	0	0	0	0	2	0	38	4	0	0	0	44	42.4
0	0	0	0	0	0	0	0	0	2	0	8	1	0	0	0	11	9.4
0	0	0	0	0	0	0	0	0	1	0	16	1	1	0	0	19	18.7
0	0	0	0	0	0	0	0	0	1	0	16	1	0	0	0	18	17.2
0	0	0	0	0	0	0	0	0	2	0	25	0	0	0	0	27	25.4
0	0	0	0	0	0	0	0	0	6	0	65	3	1	0	0	75	70.7
0	0	0	0	0	0	0	0	0	0	0	19	0	1	0	0	20	20.5
0	0	0	0	0	0	0	0	0	2	0	15	1	0	0	0	18	16.4
0	0	0	0	0	0	0	0	0	1	0	25	2	0	0	0	28	27.2
0	0	0	0	0	0	0	0	0	1	0	13	2	0	0	0	16	15.2
0	0	0	0	0	0	0	0	0	4	0	72	5	1	0	0	82	79.3
1	0	0	0	0	0	0	1	0.2	1	0	17	1	0	0	0	19	18.2
0	0	0	0	0	0	0	0	0	0	1	18	1	0	0	0	20	19.4
0	0	0	0	0	0	0	0	0	0	1	18	1	0	0	0	20	19.4
0	0	0	0	0	0	0	0	0	1	0	14	0	1	0	0	16	15.7
1	0	0	0	0	0	0	1	0.2	2	2	67	3	1	0	0	75	72.7
0	0	0	0	0	0	0	0	0	2	0	9	0	1	0	0	12	10.9
0	0	0	0	0	0	0	0	0	1	0	19	0	0	2	0	22	23.8
0	0	0	0	0	0	0	0	0	0	0	14	2	1	0	0	17	17.5
0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	20	20
0	0	0	0	0	0	0	0	0	3	0	61	3	2	2	0	71	72.2
0	0	0	0	0	0	0	0	0	1	0	21	0	0	0	0	22	21.2
0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	6
0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	12	12.5
0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	11
0	0	0	0	0	0	0	0	0	1	0	45	4	1	0	0	51	50.7
0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	18
0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	51	1	0	0	0	52	52
0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	13	13.5
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	29	0	1	0	0	30	30.5
0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	34	34
1	0	0	0	0	0	0	1	0.2	24	3	514	26	8	2	0	577	562.6

C=>A									C=>B								
PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU	PCL	MCL	CAR	LGV	OGV1	OGV2	5V (BU	TOT	PCU
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	1	0	0	0	0	1	1	2	0	0	0	0	0	0	2	0.4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	2	1	0	0	0	3	3
0	0	5	0	0	0	0	5	5	2	0	5	1	0	0	0	8	6.4
0	0	2	0	0	0	0	2	2	0	0	2	0	0	0	0	2	2
0	0	5	1	1	1	0	8	9.8	0	0	1	0	0	0	0	1	1
0	0	2	0	0	0	0	2	2	0	0	5	0	0	0	0	5	5
0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5
0	0	10	1	1	1	0	13	14.8	0	0	13	0	0	0	0	13	13
0	0	4	1	0	0	0	5	5	0	0	6	1	0	0	0	7	7
0	0	3	0	0	0	0	3	3	0	2	6	0	1	0	0	9	8.3
0	0	4	0	0	0	0	4	4	15	0	7	3	0	0	0	25	13
0	0	3	0	0	0	0	3	3	4	0	11	2	0	0	0	17	13.8
0	0	14	1	0	0	0	15	15	19	2	30	6	1	0	0	58	42.1
0	0	3	1	0	0	0	4	4	0	0	10	2	2	0	0	14	15
0	0	10	0	1	0	0	11	11.5	3	0	5	1	0	0	0	9	6.6
0	0	7	1	0	0	0	8	8	0	0	16	1	0	0	0	17	17
0	0	8	0	0	0	0	8	8	0	0	19	2	1	1	0	23	24.8
0	0	28	2	1	0	0	31	31.5	3	0	50	6	3	1	0	63	63.4
1	0	8	1	0	1	0	11	11.5	1	0	5	0	0	0	0	6	5.2
0	0	5	0	0	0	0	5	5	0	0	8	0	0	0	0	8	8
1	0	12	1	0	0	0	14	13.2	3	0	15	1	0	2	0	21	21.2
1	0	5	0	0	0	0	6	5.2	1	0	11	1	1	0	0	14	13.7
3	0	30	2	0	1	0	36	34.9	5	0	39	2	1	2	0	49	48.1
1	0	11	2	0	0	0	14	13.2	1	1	8	1	0	0	0	11	9.6
0	0	10	0	1	0	0	11	11.5	1	0	18	1	0	0	0	20	19.2
0	0	9	0	0	0	0	9	9	1	0	16	2	0	0	0	19	18.2
1	0	32	2	0	0	0	35	34.2	0	0	30	1	0	0	0	31	31
2	0	62	4	1	0	0	69	67.9	3	1	72	5	0	0	0	81	78
0	0	10	0	0	0	0	10	10	2	0	17	3	0	0	0	22	20.4
0	0	13	0	0	0	0	13	13	2	0	21	1	0	0	0	24	22.4
2	0	10	1	0	0	0	13	11.4	2	0	12	2	1	0	0	17	15.9
2	0	2	0	1	0	0	5	3.9	2	0	13	0	0	1	0	16	15.7
4	0	35	1	1	0	0	41	38.3	8	0	63	6	1	1	0	79	74.4
0	0	8	0	0	0	0	8	8	0	0	10	0	1	0	0	11	11.5
0	0	7	0	0	0	0	7	7	2	0	10	2	0	0	0	14	12.4
0	0	6	2	0	0	0	8	8	5	0	11	2	0	0	0	18	14
0	0	12	2	0	0	0	14	14	3	0	24	2	0	0	0	29	26.6
0	0	33	4	0	0	0	37	37	10	0	55	6	1	0	0	72	64.5
0	0	7	0	0	0	0	7	7	0	0	16	0	1	0	0	17	17.5
0	0	7	0	1	0	0	8	8.5	0	0	8	0	0	1	0	9	10.3
0	0	9	0	0	0	0	9	9	0	1	9	0	0	0	0	10	9.4
0	0	9	0	0	0	0	9	9	0	0	22	2	0	0	1	25	26
0	0	32	0	1	0	0	33	33.5	0	1	55	2	1	1	1	61	63.2
0	0	8	1	0	0	0	9	9	0	0	19	1	0	0	0	20	20
0	0	7	0	0	0	0	7	7	0	0	12	0	1	0	0	13	13.5
0	0	1	0	1	0	0	2	2.5	0	0	14	0	0	0	0	14	14
0	0	3	0	0	0	0	3	3	0	0	9	0	0	0	0	9	9
0	0	19	1	1	0	0	21	21.5	0	0	54	1	1	0	0	56	56.5
0	0	4	1	0	0	0	5	5	0	0	19	0	0	0	0	19	19
0	0	4	1	0	0	0	5	5	0	0	14	1	0	0	0	15	15
0	0	6	0	0	0	0	6	6	1	0	12	0	0	0	0	13	12.2
0	0	5	0	0	0	0	5	5	0	0	7	0	0	0	0	7	7
0	0	19	2	0	0	0	21	21	1	0	52	1	0	0	0	54	53.2
0	0	2	0	0	0	0	2	2	0	0	8	1	1	0	0	10	10.5
1	0	6	0	0	0	0	7	6.2	0	0	12	0	0	0	0	12	12
0	0	7	0	0	0	0	7	7	0	0	6	0	0	0	0	6	6
0	0	3	0	0	0	0	3	3	0	0	10	0	0	0	0	10	10
1	0	18	0	0	0	0	19	18.2	0	0	36	1	1	0	0	38	38.5
10	0	305	18	6	2	0	341	338.6	51	4	524	37	10	5	1	632	601.3

C=>C								
PCL	MCL	CAR	LGV	OGV1	OGV2	GV (BU	TOT	PCU
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Journey time surveys (JTS) - 2017 [07.11. - 11.11.2017] - Glenamuck

Travel times [seconds] - days

R50: Average journey time within the 3 hours per day

7th Nov

07:00 - 10:00	1	2	3	4	5
1		451	395	269	276
2	378		151	178	222
3	291	145		79	140
4	262	165	83		161
5	457	253	158	189	

9th Nov

07:00 - 10:00	1	2	3	4	5
1		421	356	517	301
2	456		161	159	249
3	282	140		82	154
4	282	176	121		183
5	369	265	171	236	

11th Nov

07:00 - 10:00	1	2	3	4	5
1		368	262	225	265
2	405		148	168	232
3	300	176		61	137
4	294	181	66		104
5	296	281	140	138	

7th Nov

10:00 - 13:00	1	2	3	4	5
1		343	257	247	244
2	370		345	167	230
3	286	151		65	140
4	266	166	86		111
5	325	217	151	136	

9th Nov

10:00 - 13:00	1	2	3	4	5
1		391	310	284	285
2	418		281	163	300
3	297	151		96	168
4	310	165	90		177
5	507	283	207	261	

11th Nov

10:00 - 13:00	1	2	3	4	5
1		411	376	310	323
2	385		173	184	256
3	349	217		79	149
4	280	148	82		131
5	298	252	174	197	

7th Nov

13:00 - 16:00	1	2	3	4	5
1		418	388	417	425
2	385		181	143	236
3	300	160		382	161
4	399	176	232		199
5	472	262	166	151	

9th Nov

13:00 - 16:00	1	2	3	4	5
1		405	402	383	609
2	568		197	150	326
3	307	457		86	213
4	386	300	97		272
5	465	413	238	213	

11th Nov

13:00 - 16:00	1	2	3	4	5
1		423	462	327	248
2	418		188	175	247
3	333	154		95	155
4	460	177	161		138
5	591	260	163	174	

7th Nov

16:00 - 19:00	1	2	3	4	5
1		706	733	358	742
2	391		183	188	262
3	400	179		77	171
4	329	198	104		110
5	415	365	282	242	

9th Nov

16:00 - 19:00	1	2	3	4	5
1		437	402	615	517
2	400		185	172	263
3	429	174		76	180
4	452	182	100		125
5	497	318	238	187	

11th Nov

16:00 - 19:00	1	2	3	4	5
1		407	303	280	262
2	389		194	177	261
3	301	167		83	149
4	236	199	155		119
5	209	211	151	122	

R15 is the 15% quantile

7th Nov

07:00 - 10:00	1	2	3	4	5
1		380	366	252	250
2	340		144	156	193
3	257	134		63	116
4	225	146	81		100
5	300	200	129	123	

9th Nov

07:00 - 10:00	1	2	3	4	5
1		372	325	399	277
2	345		136	139	216
3	265	128		76	129
4	235	136	84		126
5	277	216	148	131	

11th Nov

07:00 - 10:00	1	2	3	4	5
1		354	233	200	250
2	277		131	155	211
3	288	154		59	122
4	268	166	62		95
5	274	243	131	122	

7th Nov

10:00 - 13:00	1	2	3	4	5
1		301	200	200	189
2	330		333	150	219
3	259	144		62	123
4	250	150	80		103
5	300	202	127	123	

9th Nov

10:00 - 13:00	1	2	3	4	5
1		336	266	244	245
2	359		242	140	258
3	255	129		83	144
4	266	142	77		152
5	436	243	178	224	

11th Nov

10:00 - 13:00	1	2	3	4	5
1		358	327	269	281
2	335		151	160	228
3	304	189		69	130
4	244	129	71		114
5	259	219	151	171	

7th Nov

13:00 - 16:00	1	2	3	4	5
1		351	326	350	357
2	323		152	120	198
3	252	134		320	135
4	335	147	195		167
5	396	220	139	127	

9th Nov

13:00 - 16:00	1	2	3	4	5
1		348	345	329	524
2	488		169	129	280
3	264	393		74	183
4	332	258	83		233
5	400	355	205	183	

11th Nov

13:00 - 16:00	1	2	3	4	5
1		364	397	281	213
2	359		162	147	212
3	286	132		82	133
4	395	152	138		119
5	508	224	140	150	

7th Nov

16:00 - 19:00	1	2	3	4	5
1		571	593	308	638
2	336		157	161	225
3	328	154		66	147
4	283	170	89		95
5	357	314	242	208	

9th Nov

16:00 - 19:00	1	2	3	4	5
1		385	353	541	455
2	352		163	151	231
3	378	153		66	151
4	398	160	88		110
5	437	279	209	164	

11th Nov

16:00 - 19:00	1	2	3	4	5
1		350	261	241	225
2	335		167	150	224
3	258	143		71	128
4	203	171	133		102
5	204	181	130	104	

Travel times [seconds] - avg

avg 7/9/11 Nov

07:00 - 10:0	1	2	3	4	5
1		413	337	337	281
2	413		153	168	234
3	291	154		74	144
4	279	174	90		149
5	374	266	156	188	

avg 7/9/11 Nov

10:00 - 13:0	1	2	3	4	5
1		382	314	280	284
2	391		266	171	262
3	311	173		80	152
4	285	160	86		140
5	377	251	177	198	

avg 7/9/11 Nov

13:00 - 16:0	1	2	3	4	5
1		415	417	376	427
2	457		189	156	270
3	313	257		187	176
4	415	217	163		203
5	509	312	189	179	

avg 7/9/11 Nov

16:00 - 19:0	1	2	3	4	5
1		517	479	418	507
2	393		187	179	262
3	377	173		79	167
4	339	193	120		118
5	374	298	223	183	

avg 7/9/11 Nov

07:00 - 10:0	1	2	3	4	5
1		369	308	284	259
2	321		137	150	206
3	270	139		66	122
4	243	150	76		107
5	284	220	136	125	

avg 7/9/11 Nov

10:00 - 13:0	1	2	3	4	5
1		332	264	238	238
2	341		242	150	235
3	273	154		71	132
4	253	140	76		123
5	332	221	152	173	

avg 7/9/11 Nov

13:00 - 16:0	1	2	3	4	5
1		354	356	320	365
2	390		161	132	230
3	267	220		159	150
4	354	186	139		173
5	435	266	161	153	

avg 7/9/11 Nov

16:00 - 19:0	1	2	3	4	5
1		435	402	363	439
2	341		162	154	227
3	321	150		68	142
4	295	167	103		102
5	333	258	194	159	

% Origin breakdown [%]

7th Nov

07:00 - 10:00	1	2	3	4	5
1		16.7%	50.0%	0.0%	33.3%
2	0.0%		16.7%	16.7%	66.7%
3	0.0%	11.9%		7.1%	81.0%
4	11.8%	41.2%	11.8%		35.2%
5	6.7%	42.2%	33.3%	17.8%	

9th Nov

07:00 - 10:00	1	2	3	4	5
1		50.0%	50.0%	0.0%	0.0%
2	3.7%		11.1%	14.8%	70.4%
3	8.1%	9.7%		1.6%	80.6%
4	4.3%	34.9%	30.4%		30.4%
5	7.0%	27.9%	51.1%	14.0%	

11th Nov

07:00 - 10:00	1	2	3	4	5
1		0.0%	75.0%	0.0%	25.0%
2	0.0%		30.0%	0.0%	70.0%
3	0.0%	13.3%		0.0%	86.7%
4	0.0%	0.0%	33.3%		66.7%
5	5.6%	5.6%	88.8%	0.0%	

avg 7/9/11 Nov

07:00 - 10:00	1	2	3	4	5
1		22.5%	52.9%	2.1%	22.5%
2	1.1%		20.7%	11.5%	66.7%
3	5.0%	11.2%		3.8%	80.0%
4	6.7%	31.7%	20.0%		41.6%
5	5.4%	33.3%	49.7%	11.6%	

7th Nov

10:00 - 13:00	1	2	3	4	5
1		16.5%	65.5%	4.0%	14.0%
2	4.5%		18.3%	13.6%	63.6%
3	0.0%	0.0%		4.5%	95.5%
4	6.3%	12.5%	25.0%		56.2%
5	0.0%	28.6%	57.1%	14.3%	

9th Nov

10:00 - 13:00	1	2	3	4	5
1		0.0%	100.0%	0.0%	0.0%
2	7.1%		7.1%	21.4%	64.4%
3	0.0%	14.8%		3.7%	81.5%
4	0.0%	33.4%	22.2%		44.4%
5	2.6%	28.9%	65.9%	2.6%	

11th Nov

10:00 - 13:00	1	2	3	4	5
1		0.0%	100.0%	0.0%	0.0%
2	0.0%		35.3%	23.5%	41.2%
3	2.9%	8.5%		8.6%	80.0%
4	8.3%	25.0%	16.7%		50.0%
5	4.0%	32.0%	52.0%	12.0%	

avg 7/9/11 Nov

10:00 - 13:00	1	2	3	4	5
1		0.0%	87.5%	12.5%	0.0%
2	2.7%		20.0%	17.3%	60.0%
3	1.8%	8.0%		5.4%	84.8%
4	5.8%	15.4%	19.2%		59.6%
5	1.9%	30.0%	59.3%	8.8%	

7th Nov

13:00 - 16:00	1	2	3	4	5
1		14.3%	42.9%	14.2%	28.6%
2	0.0%		12.5%	18.8%	68.7%
3	0.0%	17.9%		7.7%	74.4%
4	16.7%	25.0%	25.0%		33.3%
5	0.0%	25.0%	43.7%	31.3%	

9th Nov

13:00 - 16:00	1	2	3	4	5
1		40.0%	20.0%	0.0%	40.0%
2	5.9%		17.6%	5.9%	70.6%
3	0.0%	6.4%		6.5%	87.1%
4	0.0%	10.0%	30.0%		60.0%
5	0.0%	19.6%	65.2%	15.2%	

11th Nov

13:00 - 16:00	1	2	3	4	5
1		0.0%	85.7%	0.0%	14.3%
2	0.0%		0.0%	36.8%	63.2%
3	4.7%	9.3%		9.3%	76.7%
4	0.0%	25.0%	12.5%		62.5%
5	1.8%	33.9%	57.1%	7.2%	

avg 7/9/11 Nov

13:00 - 16:00	1	2	3	4	5
1		23.1%	46.2%	11.5%	19.2%
2	1.6%		7.9%	17.5%	73.0%
3	4.7%	10.1%		8.7%	76.5%
4	8.2%	16.3%	22.4%		53.1%
5	2.4%	25.6%	57.0%	15.0%	

7th Nov

16:00 - 19:00	1	2	3	4	5
1		12.5%	62.5%	0.0%	25.0%
2	0.0%		23.9%	19.0%	57.1%
3	5.1%	2.6%		17.9%	74.4%
4	0.0%	18.8%	43.8%		37.4%
5	0.0%	12.7%	82.1%	5.2%	

9th Nov

16:00 - 19:00	1	2	3	4	5
1		0.0%	50.0%	0.0%	50.0%
2	0.0%		12.4%	6.3%	81.3%
3	5.1%	17.9%		7.8%	69.2%
4	0.0%	28.6%	28.6%		42.8%
5	0.7%	15.6%	80.9%	2.8%	

11th Nov

16:00 - 19:00	1	2	3	4	5
1		20.0%	80.0%	0.0%	0.0%
2	0.0%		14.3%	0.0%	85.7%
3	9.1%	18.2%		3.0%	69.7%
4	12.5%	12.5%	0.0%		75.0%
5	5.1%	12.8%	56.4%	25.7%	

avg 7/9/11 Nov

16:00 - 19:00	1	2	3	4	5
1		18.5%	59.3%	0.0%	22.2%
2	0.0%		15.1%	19.2%	65.7%
3	4.8%	13.1%		10.4%	71.7%
4	1.9%	21.2%	30.7%		46.2%
5	0.6%	15.0%	77.8%	6.6%	

Capture rate [%]

BlueScan Capture rate

	1	2	3	4	5	All sites
7th Nov	25.6%	25.0%	23.2%	24.6%	25.1%	24.7%
9th Nov	26.0%	24.5%	22.9%	22.6%	25.0%	24.2%
11th Nov	25.2%	23.3%	22.6%	25.3%	24.8%	24.2%
Average	25.6%	24.3%	22.9%	24.2%	25.0%	**24.4%**

Travel times [kph]

Distances [km] - given by google-maps

07:00 - 10:00	1	2	3	4	5
1		5.6	4.0	3.7	3.9
2	5.6		2.5	2.3	3.5
3	4.0	2.5		0.8	2.0
4	3.7	2.3	0.8		1.6
5	3.9	3.5	2.0	1.6	

07:00 - 10:00	1	2	3	4	5
1		5.6	4.0	3.7	3.9
2	5.6		2.5	2.3	3.5
3	4.0	2.5		0.8	2.0
4	3.7	2.3	0.8		1.6
5	3.9	3.5	2.0	1.6	

07:00 - 10:00	1	2	3	4	5
1		5.6	4.0	3.7	3.9
2	5.6		2.5	2.3	3.5
3	4.0	2.5		0.8	2.0
4	3.7	2.3	0.8		1.6
5	3.9	3.5	2.0	1.6	

V50 is the average speed within the 3 hours

7th Nov

07:00 - 10:00	1	2	3	4	5
1		44.7	36.5	49.6	50.9
2	53.3		59.8	46.6	56.9
3	49.5	62.1		36.5	51.4
4	50.8	50.2	34.7		35.8
5	30.7	49.9	45.6	30.6	

9th Nov

07:00 - 10:00	1	2	3	4	5
1		47.9	40.5	25.8	46.6
2	44.2		55.9	52.1	50.7
3	51.1	64.5		35.1	46.8
4	47.2	47.2	23.9		31.5
5	38.0	47.5	42.2	24.4	

11th Nov

07:00 - 10:00	1	2	3	4	5
1		54.8	55.1	59.2	53.0
2	49.8		60.8	49.3	54.3
3	48.0	51.1		47.2	52.7
4	45.3	45.7	43.6		55.4
5	47.4	44.8	51.6	41.7	

7th Nov

10:00 - 13:00	1	2	3	4	5
1		58.8	56.0	53.9	57.7
2	54.5		26.1	49.6	54.8
3	50.3	59.6		44.3	51.4
4	50.1	49.9	33.5		51.9
5	43.2	58.1	47.7	42.5	

9th Nov

10:00 - 13:00	1	2	3	4	5
1		51.6	46.5	46.9	49.3
2	48.3		32.0	50.8	42.0
3	48.5	59.8		30.0	42.9
4	43.0	50.2	32.0		32.5
5	27.7	44.5	34.8	22.1	

11th Nov

10:00 - 13:00	1	2	3	4	5
1		49.1	38.3	43.0	43.5
2	52.4		52.0	45.0	49.2
3	41.3	41.5		36.5	48.3
4	47.6	55.9	35.1		44.0
5	47.2	50.0	41.5	29.2	

7th Nov

13:00 - 16:00	1	2	3	4	5
1		48.2	37.1	31.9	33.1
2	52.4		49.7	57.9	53.4
3	48.0	56.3		7.5	44.7
4	33.4	47.2	12.4		28.9
5	29.7	48.1	43.4	38.1	

9th Nov

13:00 - 16:00	1	2	3	4	5
1		49.8	35.9	34.8	23.1
2	35.5		45.8	55.4	38.7
3	47.0	19.7		33.7	33.8
4	34.5	27.6	29.7		21.2
5	30.2	30.5	30.3	27.1	

11th Nov

13:00 - 16:00	1	2	3	4	5
1		47.7	31.2	40.7	56.6
2	48.2		47.9	47.4	51.0
3	43.3	58.6		30.3	46.6
4	29.0	46.9	17.9		41.7
5	23.8	48.5	44.2	33.1	

7th Nov

16:00 - 19:00	1	2	3	4	5
1		28.6	19.7	37.2	18.9
2	51.6		49.2	44.2	48.1
3	36.0	50.3		37.4	42.1
4	40.5	41.8	27.7		52.4
5	33.8	34.5	25.6	23.8	

9th Nov

16:00 - 19:00	1	2	3	4	5
1		46.1	35.9	21.7	27.2
2	50.4		48.6	48.3	47.9
3	33.6	51.7		38.1	40.0
4	29.5	45.5	28.8		46.1
5	28.2	39.7	30.3	30.9	

11th Nov

16:00 - 19:00	1	2	3	4	5
1		49.5	47.5	47.6	53.6
2	51.8		46.4	46.8	48.3
3	47.9	54.1		34.7	48.3
4	56.4	41.6	18.6		48.4
5	67.2	59.9	47.7	47.4	

V85 is the 85th percentile of speed

7th Nov

07:00 - 10:00	1	2	3	4	5
1		53.1	39.3	52.9	56.2
2	59.3		62.5	53.1	65.4
3	56.0	67.2		45.7	62.1
4	59.1	56.6	35.6		57.4
5	46.8	63.0	55.6	46.8	

9th Nov

07:00 - 10:00	1	2	3	4	5
1		54.2	44.3	33.4	50.7
2	58.4		66.2	59.5	58.4
3	54.4	70.1		37.9	56.0
4	56.7	60.7	34.3		45.7
5	50.7	58.3	48.5	44.0	

11th Nov

07:00 - 10:00	1	2	3	4	5
1		56.9	61.8	66.6	56.2
2	72.8		68.7	53.4	59.7
3	50.0	58.4		48.8	59.0
4	49.7	49.9	46.5		60.6
5	51.2	51.9	54.9	47.2	

7th Nov

10:00 - 13:00	1	2	3	4	5
1		67.0	72.0	66.6	74.3
2	61.1		27.0	55.2	57.5
3	55.7	62.5		46.5	58.3
4	53.3	55.2	36.0		55.7
5	46.8	62.3	56.7	46.8	

9th Nov

10:00 - 13:00	1	2	3	4	5
1		60.0	54.1	54.6	57.3
2	56.2		37.2	59.1	48.8
3	56.5	69.8		34.7	50.0
4	50.1	58.3	37.4		37.9
5	32.2	51.9	40.4	25.7	

11th Nov

10:00 - 13:00	1	2	3	4	5
1		56.3	44.0	49.5	50.0
2	60.2		59.6	51.8	55.3
3	47.4	47.6		41.7	55.4
4	54.6	64.2	40.6		50.5
5	54.2	57.5	47.7	33.7	

7th Nov

13:00 - 16:00	1	2	3	4	5
1		57.4	44.2	38.1	39.3
2	62.4		59.2	69.0	63.6
3	57.1	67.2		9.0	53.3
4	39.8	56.3	14.8		34.5
5	35.5	57.3	51.8	45.4	

9th Nov

13:00 - 16:00	1	2	3	4	5
1		57.9	41.7	40.5	26.8
2	41.3		53.3	64.2	45.0
3	54.5	22.9		38.9	39.3
4	40.1	32.1	34.7		24.7
5	35.1	35.5	35.1	31.5	

11th Nov

13:00 - 16:00	1	2	3	4	5
1		55.4	36.3	47.4	65.9
2	56.2		55.6	56.3	59.4
3	50.3	68.2		35.1	54.1
4	33.7	54.5	20.9		48.4
5	27.6	56.3	51.4	38.4	

7th Nov

16:00 - 19:00	1	2	3	4	5
1		35.3	24.3	43.2	22.0
2	60.0		57.3	51.4	56.0
3	43.9	58.4		43.6	49.0
4	47.1	48.7	32.4		60.6
5	39.3	40.1	29.8	27.7	

9th Nov

16:00 - 19:00	1	2	3	4	5
1		52.4	40.8	24.6	30.9
2	57.3		55.2	54.8	54.5
3	38.1	58.8		43.6	47.7
4	33.5	51.8	32.7		52.4
5	32.1	45.2	34.4	35.1	

11th Nov

16:00 - 19:00	1	2	3	4	5
1		57.6	55.2	55.3	62.4
2	60.2		53.9	55.2	56.3
3	55.8	62.9		40.6	56.3
4	65.6	48.4	21.7		56.5
5	68.8	69.6	55.4	55.4	

Travel times [kph]

07:00 - 10:0	1	2	3	4	5
1		5.6	4.0	3.7	3.9
2	5.6		2.5	2.3	3.5
3	4.0	2.5		0.8	2.0
4	3.7	2.3	0.8		1.6
5	3.9	3.5	2.0	1.6	

avg 7/9/11 Nov

07:00 - 10:0	1	2	3	4	5
1		49	44	45	50
2	49		59	49	54
3	50	59		40	50
4	48	48	34		41
5	39	47	46	32	

avg 7/9/11 Nov

10:00 - 13:0	1	2	3	4	5
1		53	47	48	50
2	52		37	48	49
3	47	54		37	48
4	47	52	34		43
5	39	51	41	31	

avg 7/9/11 Nov

13:00 - 16:0	1	2	3	4	5
1		49	35	36	38
2	45		48	54	48
3	46	45		24	42
4	32	41	20		31
5	28	42	39	33	

avg 7/9/11 Nov

16:00 - 19:0	1	2	3	4	5
1		41	34	35	33
2	51		48	46	48
3	39	52		37	43
4	42	43	25		49
5	43	45	35	34	

avg 7/9/11 Nov

07:00 - 10:0	1	2	3	4	5
1		55	48	51	54
2	64		66	55	61
3	53	65		44	59
4	55	56	39		55
5	50	58	53	46	

avg 7/9/11 Nov

10:00 - 13:0	1	2	3	4	5
1		61	57	57	61
2	59		41	55	54
3	53	60		41	55
4	53	59	38		48
5	44	57	48	35	

avg 7/9/11 Nov

13:00 - 16:0	1	2	3	4	5
1		57	41	42	44
2	53		56	63	56
3	54	53		28	49
4	38	48	23		36
5	33	50	46	38	

avg 7/9/11 Nov

16:00 - 19:0	1	2	3	4	5
1		48	40	41	38
2	59		55	54	56
3	46	60		43	51
4	49	50	29		56
5	47	52	40	39	

APPENDIX B

Calibration Results

AM Local Area Model Calibration Results

COMPARISON OF MODELLED FLOWS WITH INPUT COUNTS FOR THE FOLLOWING LINKS OR TURNS:									
NO.	ANODE	BNODE	CNODE	COUNT	MODELLED FLOW	CAPACITY	DIFFEENCE	R- % DIFF.	GEH
1	5003	5157	0	637	650	1600	13	2.08	0.52
2	5157	5003	0	560	571	1600	11	2.04	0.48
3	5157	9583	0	402	357	763	-44	-11.25	2.32
4	9582	5157	0	964	869	2500	-94	-9.87	3.14
5	5157	9582	m/d	580	586/592	1275	6	1.07	0.26
6	9584	9582	0	1127	1031	2500	-95	-8.47	2.91
7	9581	9582	0	733	747	2006	14	1.91	0.51
8	9582	9763	0	592	583	2500	-8	-1.58	0.39
9	9763	9582	0	78	91	1857	13	16.26	1.38
10	9582	9584	0	942	1007	1576	65	6.95	2.1
11	9583	9584	0	544	481	1112	-62	-11.51	2.76
12	9584	5378	0	652	472	3460	-179	-27.54	7.57
13	5378	9584	0	787	729	1107	-57	-7.37	2.11
14	9584	9581	0	600	633	941	33	5.48	1.33
15	5158	5378	0	1096	1073	3237	-22	-2.14	0.71
16	5398	5378	0	72	61	1105	-10	-15.69	1.39
17	5378	5398	0	381	404	10000	23	6.12	1.18
18	5378	5158	0	602	472	1698	-129	-21.52	5.59
19	5158	5408	0	23	12	10000	-10	-49.44	2.73
20	5408	5158	0	29	28	739	0	-2.49	0.13
21	5158	5377	0	267	214	1600	-52	-19.94	3.43
22	5377	5158	0	708	797	1567	89	12.6	3.25
23	5380	5140	0	459	513	893	54	11.73	2.44
24	5140	5373	0	597	677	1380	80	13.34	3.16
25	5373	5140	0	226	224	212	-1	-0.77	0.12
26	5140	9755	0	415	373	1250	-41	-10.24	2.14
27	9755	5140	0	569	506	529	-62	-11.15	2.74
28	5140	5380	m/d	338	181/184	1600	-156	-46.41	9.74
29	9755	5379	0	400	378	1380	-21	-5.55	1.13
30	5379	9754	0	76	69	2500	-6	-9.46	0.84
31	9754	5379	0	19	4	1131	-14	-76.39	4.24
32	5379	5141	0	233	346	755	113	48.62	6.66
33	5141	5379	m/d	457	516/519	1380	59	12.97	2.69
34	5379	5419	0	174	160	2014	-13	-7.87	1.06
35	5419	5379	0	185	170	1081	-14	-8.25	1.15
36	5379	9755	0	565	496	1249	-68	-12.24	3
37	5141	5414	0	129	260	1892	131	101.3	9.37
38	5414	5141	0	82	163	172	81	98.36	7.29
39	5141	9752	0	153	154	1211	1	0.46	0.06
40	9752	5141	0	398	421	1044	23	5.71	1.12
41	5317	9584	0	494	397	986	-96	-19.72	4.62
42	9584	5317	0	520	478	1699	-41	-8.16	1.9
43	5375	5376	0	531	677	1600	146	27.43	5.93
44	5376	5375	0	214	226	1600	12	5.57	0.8
45	9732	5419	0	105	153	1902	48	45.88	4.24
46	5419	9732	0	65	111	10000	46	70.68	4.9
47	6521	9759	0	341	387	1250	46	13.5	2.41
48	9759	6521	u/m	121	125/117	2500	-3	-3.37	0.37
49	9743	9759	0	11	7	1171	-3	-34.47	1.26
50	9759	9743	0	9	7	1250	-1	-22.82	0.73

MODELLED v COUNTS SATISFYING THE DMRB RULES: (IN ALL 4 TESTS THE OK % SHOULD BE > 85%)			
DMRB Criteria	% Met	Satisied Counts	Number of Counts
FLOW < 700: MODELLED WITHIN +-100 OF OBSERVED	86.05%	37	43
700<FLOW<2700: MODELLED WITHIN 15% OF OBSERVED	100.0%	7	7
FLOW > 2700 - NO SUCH LINKS INCLUDED	NA	NA	NA
COMPLIANCE SUMMED OVER ALL FLOW RANGES	88.00%	44	50
ALL LINKS - GEH STATISTIC < 5.0	86.00%	43	50

Summary of the Main Convergence Statistics	
Number of Ass-Sim Loops	28
Assignment Delta (%)	0.078
# of (Final) Ass Iterations	14
Total # of FW Ass Iterations	681
Simulation Convergence	0.0004
Number of Sim Iterations	7
% of OK Flows < 1.00%	99.09
... and previous 3 loops:	99.09
	99.00
	98.91
Mean GEH Flow Statistic	0.0056
Mean Abs Flow Difference %	0.016
Rel Mean Abs Flow Diff. %	0.042
Rel Mean Standard Dev. %	0.082
% of OK Turn Delays	99.09
Mean Abs Diff in Ass/Sim Del	1.72
Relative to mean delay:(%)	2.85
Convergence Gap (%)	0.051

PM Local Area Model Calibration Results

COMPARISON OF MODELLED FLOWS WITH INPUT COUNTS FOR THE FOLLOWING LINKS OR TURNS:									
NO.	ANODE	BNODE	CNODE	COUNT	MODELLED FLOW	CAPACITY	DIFFEENCE	R- % DIFF.	GEH
1	5003	5157	0	742	798	1600	56	7.58	2.03
2	5157	5003	0	584	561	1600	-22	-4.01	0.98
3	5157	9583	0	641	685	1047	44	6.94	1.73
4	9582	5157	0	1054	956	2500	-97	-9.29	3.09
5	5157	9582	m/d	592	503/509	1122	-88	-15.08	3.82
6	9584	9582	0	780	661	2500	-118	-15.23	4.43
7	9581	9582	0	985	1084	2433	99	10.06	3.08
8	9582	9763	0	86	89	2500	3	3.59	0.33
9	9763	9582	0	154	179	1530	25	16.22	1.94
10	9582	9584	0	1264	1385	1494	121	9.58	3.33
11	9583	9584	0	242	189	837	-52	-21.97	3.62
12	9584	5378	0	1060	1038	3460	-21	-2.05	0.67
13	5378	9584	0	1130	1053	1249	-76	-6.81	2.33
14	9584	9581	0	741	793	990	52	7.06	1.89
15	5158	5378	0	810	794	3127	-15	-1.98	0.57
16	5398	5378	0	730	737	1307	7	0.94	0.25
17	5378	5398	0	478	478	10000	0	-0.04	0.01
18	5378	5158	0	1057	1038	1699	-18	-1.77	0.58
19	5158	5408	0	23	12	10000	-10	-48.43	2.67
20	5408	5158	0	20	13	599	-6	-36.75	1.82
21	5158	5377	0	640	580	1600	-59	-9.34	2.42
22	5377	5158	0	395	335	1479	-59	-15.15	3.13
23	5380	5140	0	442	371	1047	-70	-16.04	3.52
24	5140	5373	0	242	314	1380	72	29.72	4.31
25	5373	5140	0	317	31	213	-2	-0.99	0.18
26	5140	9755	0	693	547	1244	-145	-21.08	5.87
27	9755	5140	0	319	484	672	165	51.64	8.22
28	5140	5380	m/d	239	207/210	1600	-31	-13.25	2.12
29	9755	5379	0	658	543	1380	-114	-17.55	4.71
30	5379	9754	0	83	75	2500	-7	-9.2	0.86
31	9754	5379	0	17	10	979	-6	-40.18	1.85
32	5379	5141	0	560	474	888	-85	-15.43	3.8
33	5141	5379	m/d	285	458/461	1380	173	60.57	8.96
34	5379	5419	0	97	98	2013	1	1.25	0.12
35	5419	5379	0	78	111	1045	33	41.99	3.37
36	5379	9755	0	298	477	1249	179	60.02	9.09
37	5141	5414	0	140	88	1408	-51	-37.14	4.87
38	5414	5141	0	107	183	172	76	71.44	6.34
39	5141	9752	0	492	406	1215	-85	-17.41	4.04
40	9752	5141	0	192	306	1236	114	59.45	7.23
41	5317	9584	0	414	408	1005	-5	-1.51	0.31
42	9584	5317	0	473	542	1820	69	14.55	3.06
43	5375	5376	0	253	318	1600	65	25.65	3.84
44	5376	5375	0	373	320	1600	-52	-14.25	2.85
45	9732	5419	0	77	69	1901	-7	-10.59	0.95
46	5419	9732	0	88	75	10000	-12	-14.95	1.46
47	6521	9759	0	168	166	1250	-1	-1.02	0.13
48	9759	6521	u/m	458	412/405	2500	-52	-11.64	2.57
49	9743	9759	0	130	203	1215	73	56.12	5.65
50	9759	9743	0	5	3	1250	-1	-47.44	1.21

MODELLED v COUNTS SATISFYING THE DMRB RULES: (IN ALL 4 TESTS THE OK % SHOULD BE > 85%)			
DMRB Criteria	% Met	Satisied Counts	Number of Counts
FLOW < 700: MODELLED WITHIN +-100 OF OBSERVED	84.62%	33	39
700<FLOW<2700: MODELLED WITHIN 15% OF OBSERVED	90.91%	10	11
FLOW > 2700 - NO SUCH LINKS INCLUDED	NA	NA	NA
COMPLIANCE SUMMED OVER ALL FLOW RANGES	86.00%	43	50
ALL LINKS - GEH STATISTIC < 5.0	86.00%	43	50

Summary of the Main Convergence Statistics	
Number of Ass-Sim Loops	30
Assignment Delta (%)	0.088
# of (Final) Ass Iterations	4
Total # of FW Ass Iterations	514
Simulation Convergence	0.0008
Number of Sim Iterations	7
% of OK Flows < 1.00%	99.91
... and previous 3 loops:	99.64
	99.00
	98.82
Mean GEH Flow Statistic	0.0063
Mean Abs Flow Difference %	0.027
Rel Mean Abs Flow Diff. %	0.065
Rel Mean Standard Dev. %	0.13
% of OK Turn Delays	98.54
Mean Abs Diff in Ass/Sim Del	0.38
Relative to mean delay:(%)	0.91
Convergence Gap (%)	0.060

APPENDIX C

TRANSYT Output Files

TRANSYT 15

Version: 15.5.1.7048
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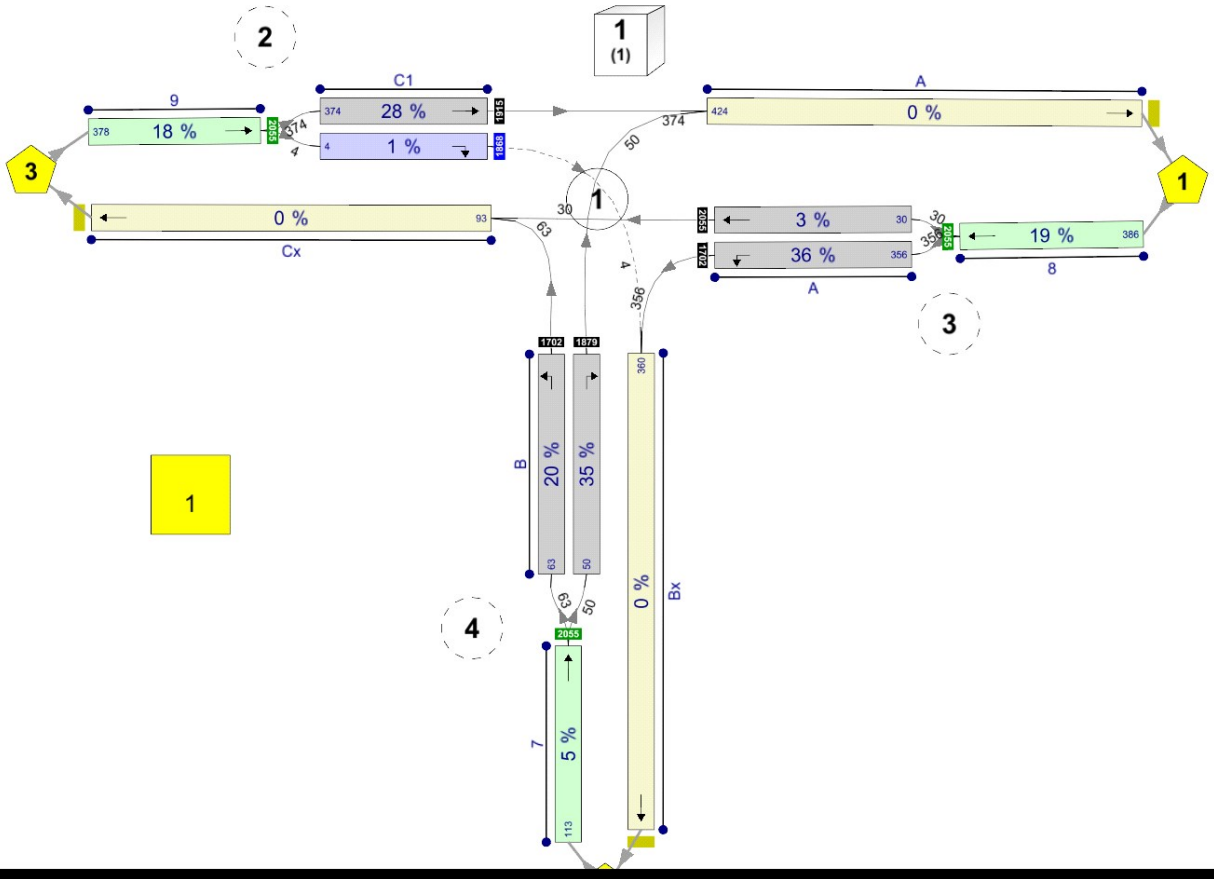
Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:40:47

»Network Diagrams
«A7 - DS AM 2020 : D7 - AM Peak 2020* :
»Network Options
»Arms and Traffic Streams
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»Traffic Stream Results
»Network Results

Network Diagrams



[redacted]

A7 - DS AM 2020
D7 - AM Peak 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	ü	ü		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		ü

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	ü		ü

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				ü				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	ü	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	ü	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	ü	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	ü	Sum of lanes	1702	ü	1800	ü		Normal	
	2	(untitled)			40.00	ü	Sum of lanes	2055			ü		Normal	
B	1	(untitled)			50.00	ü	Sum of lanes	1702			ü		Normal	
	2	(untitled)			50.00	ü	Sum of lanes	1879			ü		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	ü	Sum of lanes	1915			ü		Normal	
	2	(untitled)			40.00	ü	Sum of lanes	1868	ü	1800	ü	ü	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		ü	N/A	N/A	0	3.00	ü	0	99999.00		2055
8	1	1	(untitled)		ü	N/A	N/A	0	3.00	ü	0	99999.00		2055
9	1	1	(untitled)		ü	N/A	N/A	0	3.00	ü	0	99999.00		2055
A	1	2	(untitled)		ü	N/A	N/A	0	3.00		100	12.00	ü	1702
	2	1	(untitled)		ü	N/A	N/A	0	3.00	ü	0	99999.00		2055
B	1	1	(untitled)		ü	N/A	N/A	0	3.00		100	12.00	ü	1702
	2	2	(untitled)		ü	N/A	N/A	0	3.00		100	16.00		1879
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		ü	N/A	N/A	0	3.00	ü	0	99999.00	ü	1915
	2	1	(untitled)		ü	N/A	N/A	0	3.00		100	15.00		1868
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	ü	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	113	113
8	1	386	386
9	1	378	378
A	1	356	356
	2	30	30
B	1	63	63
	2	50	50
Ax	1	424	424
Bx	1	360	360
C1	1	374	374
	2	4	4
Cx	1	93	93

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	ü	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	ü	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	ü	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	ü	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	ü	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	ü	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	ü	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	ü	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	ü	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	ü	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	ü	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	ü	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	ü	ü	Lane Balancing			ü			ü	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	356	30
	2	50	0	63
	3	374	4	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	63
	6		2	1	7/1, B/2, Ax/1	Normal	50
	7		1	3	8/1, A/2, Cx/1	Normal	30
	8		1	2	8/1, A/1, Bx/1	Normal	356
	9		3	1	9/1, C1/1, Ax/1	Normal	374
	10		3	2	9/1, C1/2, Bx/1	Normal	4

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		ü	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	0, 39, 82
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	52, 58, 87, 101
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	61, 74, 87, 101
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	ü	1	A,B,C,D	112	61	69	1	7
	2	ü	2	A,B,E	66	74	8	1	1
	3	ü	3	E,F	79	87	8	1	7
	4	ü	4	G	94	101	7	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	ü	112	74	82
	B	1	ü	112	74	82
	C	1	ü	112	61	69
	D	1	ü	112	61	69
	E	1	ü	66	87	21
	F	1	ü	79	87	8
	G	1	ü	94	101	7

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	D	112	61	69
A	2	1	1	C	112	61	69
B	1	1	1	E	66	87	21
B	2	1	1	F	79	87	8
C1	1	1	1	A	112	74	82
C1	2	1	1	B	112	74	82

Phase Timings Diagram for Controller Stream 1

Stage Sequence Diagram for Controller Stream 1

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	5	1537	113	2055	120	0.05	0.00	0.00	0.02	0.00	0.02
	8	1	19	369	386	2055	120	0.22	0.34	0.66	0.33	0.02	0.35
	9	1	18	389	378	2055	120	0.20	0.02	0.04	0.29	0.00	0.29
	A	1	36	151	356	1702	69	14.18	5.67	81.47	19.91	2.13	22.05
		2	3	3496	30	2055	69	10.66	0.42	5.99	1.26	0.15	1.41
	B	1	20	346	63	1702	21	43.03	1.79	20.62	10.69	0.67	11.36
		2	35	154	50	1879	8	59.70	1.68	19.32	11.77	0.62	12.40
	Ax	1	0	Unrestricted	424	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	360	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	28	219	374	1915	82	7.62	4.73	68.00	11.25	1.73	12.97
		2	1	16152	4	1044	82	10.64	1.45	20.83	0.17	0.02	0.19
	Cx	1	0	Unrestricted	93	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	113	113	0		2055	2055	5		1537	0.00	120	12
	8	1	386	386	0		2055	2013	19		369	0.00	120	12
	9	1	378	378	0		2055	2055	18		389	0.00	120	12
	A	1	356	356	0		1702	993	36		151	0.01	69	70
		2	30	30	0		2055	1199	3		3496	0.00	69	70
	B	1	63	63	0		1702	312	20		346	0.00	21	22
		2	50	50	0		1879	141	35		154	0.00	8	9
	Ax	1	424	424	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	120	12
	Bx	1	360	360	0		Unrestricted	Unrestricted	0		Unrestricted	0.77	120	12
	C1	1	374	374	0		1915	1325	28		219	0.00	82	83
		2	4	4	0		1044	722	1		16152	0.00	82	83
	Cx	1	93	93	0		Unrestricted	Unrestricted	0		Unrestricted	1.10	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.22	0.00	0.02	0.33	0.33	0.47	1.12	0.68	0.02	0.02
	9	1	36.00	0.20	0.00	0.02	0.29	0.29	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	14.18	1.30	0.10	19.91	19.91	47.76	167.03	3.00	2.13	2.13
		2	4.80	10.66	0.09	0.00	1.26	1.26	40.71	12.20	0.01	0.15	0.15
	B	1	6.00	43.03	0.73	0.03	10.69	10.69	84.39	52.40	0.76	0.67	0.67
		2	6.00	59.70	0.73	0.10	11.77	11.77	99.39	46.84	2.86	0.62	0.62
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	7.62	0.74	0.06	11.25	11.25	36.86	136.18	1.66	1.73	1.73
		2	4.80	10.64	0.01	0.00	0.17	0.17	41.68	1.67	0.00	0.02	0.02
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.00	69.57	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	8	1	0.00	0.34	52.17	0.66	0.00	0.00	0.00			0.00	2.46	2.46	
	9	1	0.00	0.02	52.17	0.04	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	5.67	6.96	81.47	0.00	0.00	0.00	0.10	5.34	0.00	0.00	0.00	
		2	0.00	0.42	6.96	5.99	0.00	0.00	0.00	0.00	0.42	69.00	0.00	69.00	
	B	1	0.00	1.79	8.70	20.62	0.00	0.00	0.00	0.03	1.74	0.00	0.00	0.00	
		2	0.00	1.68	8.70	19.32	0.00	0.00	0.00	0.10	1.64	5.00	0.00	5.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			43.00	0.00	43.00	
	C1	1	0.00	4.73	6.96	68.00	0.00	0.00	0.00	0.06	3.90	0.00	0.00	0.00	
		2	0.00	1.45	6.96	20.83	0.00	0.00	0.00	0.00	0.04	69.00	0.00	69.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			88.00	0.00	88.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
7	05/12/2018 10:40:36	05/12/2018 10:40:37	08:00	120	61.05	3.92	35.86	A/1	0	0	A/1	8/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	36	151	2631	1051	5.37	55.70	5.35	61.05

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	2631	2631	0		36		151	1051	1057

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	18.17	5.37	3.60	0.32	55.70	55.70	16.21	417.44	8.97	5.35	5.35

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	81.47	0.00	293.00	2.46	295.46

TRANSYT 15

Version: 15.5.1.7048
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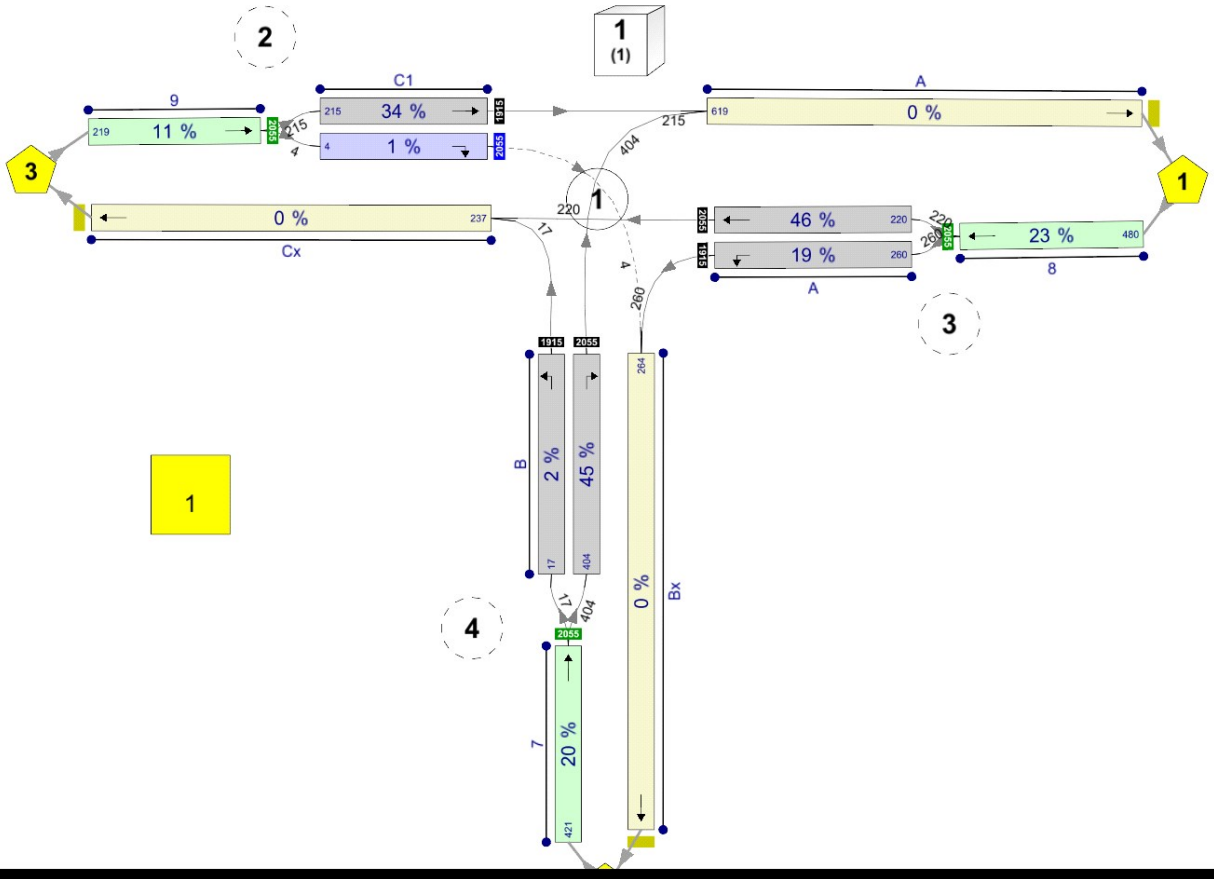
Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:41:58

»Network Diagrams
«A8 - DS PM 2020 : D8 - PM Peak 2020* :
»Network Options
»Arms and Traffic Streams
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»Traffic Stream Results
»Network Results

Network Diagrams



[redacted]

A8 - DS PM 2020
D8 - PM Peak 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	2055			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		0	15.00		2055
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	421	421
8	1	480	480
9	1	219	219
A	1	260	260
	2	220	220
B	1	17	17
	2	404	404
Ax	1	619	619
Bx	1	264	264
C1	1	215	215
	2	4	4
Cx	1	237	237

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	260	220
	2	404	0	17
	3	215	4	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	17
	6		2	1	7/1, B/2, Ax/1	Normal	404
	7		1	3	8/1, A/2, Cx/1	Normal	220
	8		1	2	8/1, A/1, Bx/1	Normal	260
	9		3	1	9/1, C1/1, Ax/1	Normal	215
	10		3	2	9/1, C1/2, Bx/1	Normal	4

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F, D	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	62, 76, 2
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	0, 24, 53, 84
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	19, 31, 87, 101
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	112	19	27	1	7
	2	✓	2	A,B,E	24	31	7	1	1
	3	✓	3	E,F,D	36	87	51	1	7
	4	✓	4	G	94	101	7	1	7

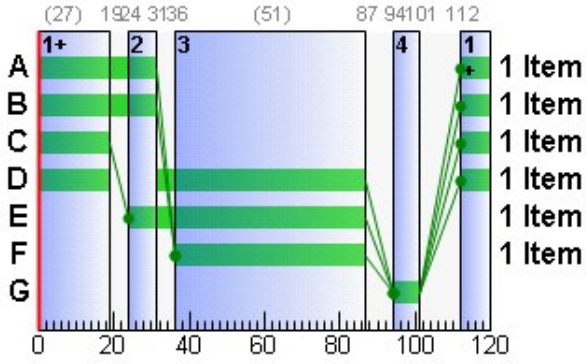
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	112	31	39
	B	1	✓	112	31	39
	C	1	✓	112	19	27
	D	1	✓	31	87	56
		2	✓	112	19	27
	E	1	✓	24	87	63
	F	1	✓	36	87	51
	G	1	✓	94	101	7

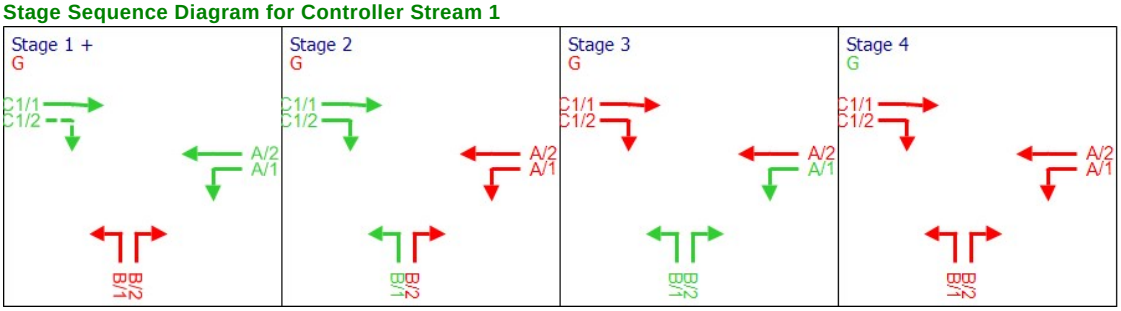
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	D	31	87	56	112	19	27
A	2	1	1	C	112	19	27			
B	1	1	1	E	24	87	63			
B	2	1	1	F	36	87	51			
C1	1	1	1	A	112	31	39			
C1	2	1	1	B	112	31	39			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	20	339	421	2055	120	0.23	0.03	0.04	0.37	0.00	0.37
	8	1	23	285	480	2055	120	0.27	0.04	0.07	0.51	0.00	0.51
	9	1	11	745	219	2055	120	0.10	0.01	0.01	0.09	0.00	0.09
	A	1	19	370	260	1915	83	3.68	1.90	27.33	3.78	1.02	4.80
		2	46	96	220	2055	27	42.66	6.49	93.26	37.02	2.39	39.41
	B	1	2	5307	17	1915	63	13.33	0.26	3.04	0.89	0.10	0.99
		2	45	98	404	2055	51	25.66	9.61	110.57	40.89	3.56	44.45
	Ax	1	0	Unrestricted	619	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	264	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	34	167	215	1915	39	31.47	5.46	78.49	26.69	2.02	28.71
		2	1	8458	4	1141	39	35.70	0.10	1.47	0.56	0.04	0.60
	Cx	1	0	Unrestricted	237	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	421	421	0		2055	2055	20		339	0.00	120	12
	8	1	480	480	0		2055	2055	23		285	0.00	120	12
	9	1	219	219	0		2055	2055	11		745	0.00	120	12
	A	1	260	260	0		1915	1356	19		370	0.00	83	85
		2	220	220	0		2055	480	46		96	0.00	27	28
	B	1	17	17	0		1915	1021	2		5307	0.00	63	64
		2	404	404	0		2055	891	45		98	0.00	51	52
	Ax	1	619	619	0		Unrestricted	Unrestricted	0		Unrestricted	0.80	120	12
	Bx	1	264	264	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	120	12
	C1	1	215	215	0		1915	638	34		167	0.00	39	40
		2	4	4	0		1141	380	1		8458	0.00	39	40
	Cx	1	237	237	0		Unrestricted	Unrestricted	0		Unrestricted	1.34	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.23	0.00	0.03	0.37	0.37	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.27	0.00	0.04	0.51	0.51	0.00	0.00	0.00	0.00	0.00
	9	1	36.00	0.10	0.00	0.01	0.09	0.09	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	3.68	0.24	0.02	3.78	3.78	31.34	80.12	1.36	1.02	1.02
		2	4.80	42.66	2.41	0.19	37.02	37.02	86.75	185.08	5.77	2.39	2.39
	B	1	6.00	13.33	0.06	0.00	0.89	0.89	45.71	7.77	0.00	0.10	0.10
		2	6.00	25.66	2.69	0.19	40.89	40.89	70.20	277.97	5.62	3.56	3.56
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	31.47	1.79	0.09	26.69	26.69	74.79	158.25	2.55	2.02	2.02
		2	4.80	35.70	0.04	0.00	0.56	0.56	76.71	3.07	0.00	0.04	0.04
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.03	69.57	0.04	0.00	0.00	0.00			0.00	9.00	9.00	
	8	1	0.00	0.04	52.17	0.07	0.00	0.00	0.00			0.00	0.00	0.00	
	9	1	0.00	0.01	52.17	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	1.90	6.96	27.33	0.00	0.00	0.00	0.02	1.83	0.00	0.00	0.00	
		2	0.00	6.49	6.96	93.26	0.00	0.00	0.00	0.19	5.82	0.00	0.00	0.00	
	B	1	0.00	0.26	8.70	3.04	0.00	0.00	0.00	0.00	0.26	63.00	0.00	63.00	
		2	0.00	9.61	8.70	110.57	0.04	0.00	0.00	0.19	7.82	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			17.00	0.00	17.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			25.00	0.00	25.00	
	C1	1	0.00	5.46	6.96	78.49	0.00	0.00	0.00	0.09	4.86	0.00	0.00	0.00	
		2	0.00	0.10	6.96	1.47	0.00	0.00	0.00	0.00	0.09	27.00	0.00	27.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			80.00	0.00	80.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
8	05/12/2018 10:41:47	05/12/2018 10:41:47	08:00	120	119.93	7.80	45.88	A/2	0	0	A/2	8/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	46	96	3360	1022	8.36	110.81	9.12	119.93

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	3360	3360	0		46		96	1022	1029

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	19.25	8.36	7.25	0.56	110.81	110.81	21.65	712.26	15.30	9.12	9.12

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	110.57	0.00	212.00	9.00	221.00

TRANSYT 15

Version: 15.5.1.7048
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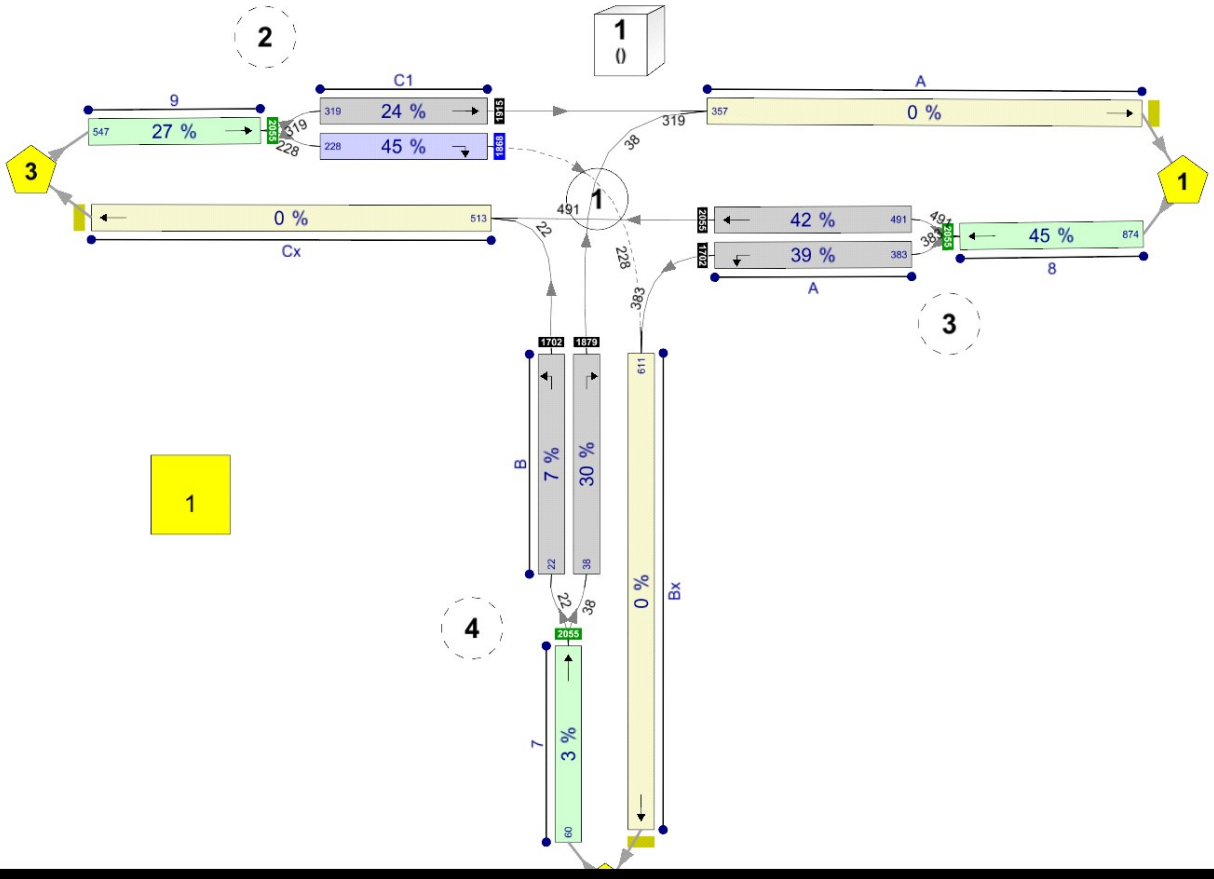
Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:42:41

»Network Diagrams
«A5 - DS AM 2035 : D5 - AM Peak 2035* :
»Network Options
»Arms and Traffic Streams
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»Traffic Stream Results
»Network Results

Network Diagrams



[redacted]

A5 - DS AM 2035
D5 - AM Peak 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1702	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	1879			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1868	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		100	15.00		1868
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	60	60
8	1	874	874
9	1	547	547
A	1	383	383
	2	491	491
B	1	22	22
	2	38	38
Ax	1	357	357
Bx	1	611	611
C1	1	319	319
	2	228	228
Cx	1	513	513

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	383	491
	2	38	0	22
	3	319	228	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	22
	6		2	1	7/1, B/2, Ax/1	Normal	38
	7		1	3	8/1, A/2, Cx/1	Normal	491
	8		1	2	8/1, A/1, Bx/1	Normal	383
	9		3	1	9/1, C1/1, Ax/1	Normal	319
	10		3	2	9/1, C1/2, Bx/1	Normal	228

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	0, 39, 82
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	52, 58, 87, 101
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	68, 83, 95, 109
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	0	68	68	1	7
	2	✓	2	A,B,E	73	83	10	1	1
	3	✓	3	E,F	88	95	7	1	7
	4	✓	4	G	102	109	7	1	7

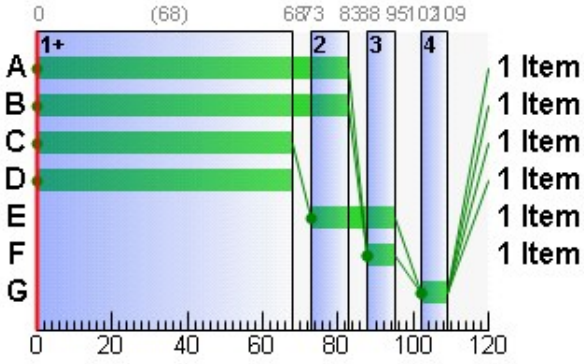
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	0	83	83
	B	1	✓	0	83	83
	C	1	✓	0	68	68
	D	1	✓	0	68	68
	E	1	✓	73	95	22
	F	1	✓	88	95	7
	G	1	✓	102	109	7

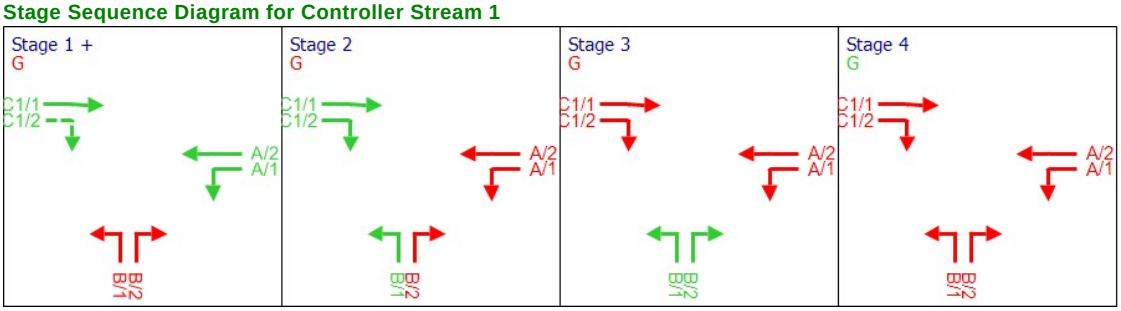
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	D	0	68	68
A	2	1	1	C	0	68	68
B	1	1	1	E	73	95	22
B	2	1	1	F	88	95	7
C1	1	1	1	A	0	83	83
C1	2	1	1	B	0	83	83

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	3	2983	60	2055	120	0.03	0.00	0.00	0.01	0.00	0.01
	8	1	45	99	874	2055	120	1.04	3.10	5.94	3.60	0.82	4.42
	9	1	27	238	547	2055	120	0.32	0.05	0.09	0.69	0.00	0.69
	A	1	39	130	383	1702	68	14.89	5.91	85.02	22.49	2.22	24.72
		2	42	117	491	2055	68	15.06	9.00	129.43	29.16	3.23	32.39
	B	1	7	1235	22	1702	22	40.18	0.60	6.92	3.49	0.22	3.71
		2	30	197	38	1879	7	59.59	1.27	14.59	8.93	0.47	9.40
	Ax	1	0	Unrestricted	357	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	611	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	24	278	319	1915	83	6.90	3.85	55.31	8.68	1.39	10.08
		2	45	101	228	729	83	20.75	3.75	53.85	18.66	1.41	20.07
	Cx	1	0	Unrestricted	513	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	60	60	0		2055	2055	3		2983	0.00	120	12
	8	1	874	874	0		2055	1934	45		99	0.00	120	12
	9	1	547	547	0		2055	2055	27		238	0.00	120	12
	A	1	383	383	0		1702	979	39		130	0.09	68	69
		2	491	491	0		2055	1182	42		117	0.08	68	69
	B	1	22	22	0		1702	326	7		1235	0.00	22	23
		2	38	38	0		1879	125	30		197	0.00	7	8
	Ax	1	357	357	0		Unrestricted	Unrestricted	0		Unrestricted	0.51	120	12
	Bx	1	611	611	0		Unrestricted	Unrestricted	0		Unrestricted	0.71	120	12
	C1	1	319	319	0		1915	1341	24		278	0.00	83	84
		2	228	228	0		729	510	45		101	0.00	83	84
	Cx	1	513	513	0		Unrestricted	Unrestricted	0		Unrestricted	0.74	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	1.04	0.07	0.19	3.60	3.60	7.49	59.86	5.57	0.82	0.82
	9	1	36.00	0.32	0.00	0.05	0.69	0.69	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	14.89	1.46	0.13	22.49	22.49	46.33	173.67	3.76	2.22	2.22
		2	4.80	15.06	1.91	0.15	29.16	29.16	52.54	253.54	4.41	3.23	3.23
	B	1	6.00	40.18	0.24	0.00	3.49	3.49	81.01	17.75	0.07	0.22	0.22
		2	6.00	59.59	0.56	0.07	8.93	8.93	99.12	35.73	1.94	0.47	0.47
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	6.90	0.57	0.04	8.68	8.68	34.78	109.82	1.11	1.39	1.39
		2	4.80	20.75	1.13	0.18	18.66	18.66	49.28	106.99	5.36	1.41	1.41
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.00	69.57	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	8	1	0.00	3.10	52.17	5.94	0.00	0.00	0.00			0.00	17.00	17.00	
	9	1	0.00	0.05	52.17	0.09	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	5.91	6.96	85.02	0.00	0.00	0.00	0.13	5.85	0.00	0.00	0.00	
		2	0.00	9.00	6.96	129.43	0.12	0.00	0.00	0.15	7.10	0.00	0.00	0.00	
	B	1	0.00	0.60	8.70	6.92	0.00	0.00	0.00	0.00	0.60	21.00	0.00	21.00	
		2	0.00	1.27	8.70	14.59	0.00	0.00	0.00	0.07	1.25	5.00	0.00	5.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			31.00	0.00	31.00	
	C1	1	0.00	3.85	6.96	55.31	0.00	0.00	0.00	0.04	3.23	0.00	0.00	0.00	
		2	0.00	3.75	6.96	53.85	0.00	0.00	0.00	0.18	2.52	0.00	0.00	0.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			36.00	0.00	36.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
5	05/12/2018 10:42:32	05/12/2018 10:42:33	08:00	120	105.49	6.74	45.19	8/1	0	0	C1/2	8/1	8/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	45	99	4443	1051	5.46	95.71	9.78	105.49

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4443	4443	0		45		99	1051	1057

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	17.78	5.46	5.95	0.79	95.71	95.71	17.55	757.36	22.23	9.78	9.78

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	129.43	0.00	112.00	17.00	129.00

TRANSYT 15

Version: 15.5.1.7048
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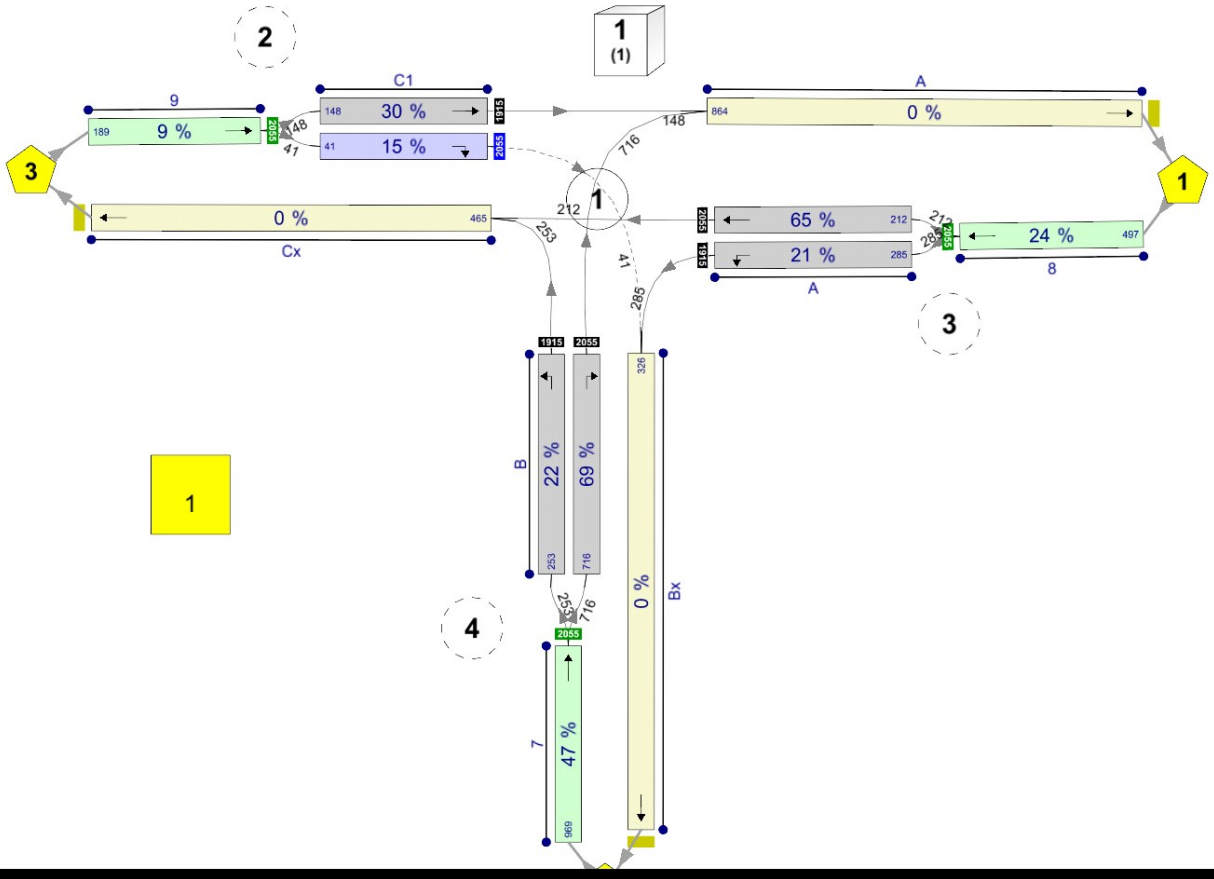
Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:43:21

»Network Diagrams
«A6 - DS PM 2035 : D6 - PM Peak 2035* :
»Network Options
»Arms and Traffic Streams
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»Traffic Stream Results
»Network Results

Network Diagrams



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A6 - DS PM 2035
D6 - PM Peak 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	2055			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		0	15.00		2055
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	969	969
8	1	497	497
9	1	189	189
A	1	285	285
	2	212	212
B	1	253	253
	2	716	716
Ax	1	864	864
Bx	1	326	326
C1	1	148	148
	2	41	41
Cx	1	465	465

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	285	212
	2	716	0	253
	3	148	41	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	253
	6		2	1	7/1, B/2, Ax/1	Normal	716
	7		1	3	8/1, A/2, Cx/1	Normal	212
	8		1	2	8/1, A/1, Bx/1	Normal	285
	9		3	1	9/1, C1/1, Ax/1	Normal	148
	10		3	2	9/1, C1/2, Bx/1	Normal	41

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F, D	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	62, 76, 2
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	0, 24, 53, 84
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	10, 22, 87, 101
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	112	10	18	1	7
	2	✓	2	A,B,E	15	22	7	1	1
	3	✓	3	E,F,D	27	87	60	1	7
	4	✓	4	G	94	101	7	1	7

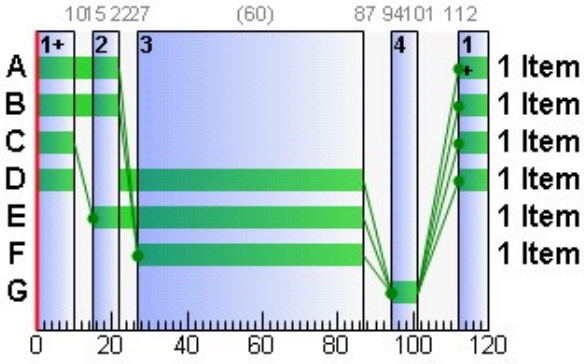
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	112	22	30
	B	1	✓	112	22	30
	C	1	✓	112	10	18
	D	1	✓	22	87	65
		2	✓	112	10	18
	E	1	✓	15	87	72
	F	1	✓	27	87	60
	G	1	✓	94	101	7

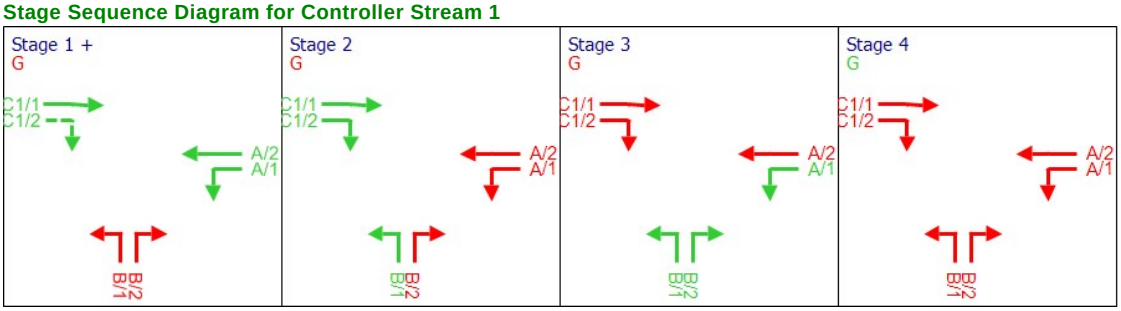
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	D	22	87	65	112	10	18
A	2	1	1	C	112	10	18			
B	1	1	1	E	15	87	72			
B	2	1	1	F	27	87	60			
C1	1	1	1	A	112	22	30			
C1	2	1	1	B	112	22	30			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	47	91	969	2055	120	0.78	0.21	0.30	2.98	0.00	2.98
	8	1	24	272	497	2055	120	0.28	0.04	0.07	0.55	0.00	0.55
	9	1	9	879	189	2055	120	0.09	0.00	0.01	0.07	0.00	0.07
	A	1	21	328	285	1915	83	3.77	2.09	29.99	4.24	1.12	5.36
		2	65	38	212	2055	18	57.52	7.19	103.38	48.10	2.67	50.78
	B	1	22	314	253	1915	72	11.04	3.83	43.99	11.01	1.40	12.41
		2	69	31	716	2055	60	25.98	18.64	214.36	73.38	6.86	80.25
	Ax	1	0	Unrestricted	864	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	326	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	30	201	148	1915	30	37.33	4.01	57.65	21.79	1.49	23.28
		2	15	486	41	1033	30	45.85	1.46	21.03	7.42	0.44	7.85
	Cx	1	0	Unrestricted	465	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	969	969	0		2055	2055	47		91	0.00	120	12
	8	1	497	497	0		2055	2055	24		272	0.00	120	12
	9	1	189	189	0		2055	2055	9		879	0.00	120	12
	A	1	285	285	0		1915	1356	21		328	0.00	83	85
		2	212	212	0		2055	325	65		38	0.00	18	19
	B	1	253	253	0		1915	1165	22		314	0.00	72	73
		2	716	716	0		2055	1045	69		31	0.00	60	61
	Ax	1	864	864	0		Unrestricted	Unrestricted	0		Unrestricted	0.72	120	12
	Bx	1	326	326	0		Unrestricted	Unrestricted	0		Unrestricted	0.54	120	12
	C1	1	148	148	0		1915	495	30		201	0.00	30	31
		2	41	41	0		1033	267	15		486	0.00	30	31
	Cx	1	465	465	0		Unrestricted	Unrestricted	0		Unrestricted	0.82	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.78	0.00	0.21	2.98	2.98	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.28	0.00	0.04	0.55	0.55	0.00	0.00	0.00	0.00	0.00
	9	1	36.00	0.09	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	3.77	0.27	0.03	4.24	4.24	31.42	87.86	1.67	1.12	1.12
		2	4.80	57.52	2.79	0.60	48.10	48.10	100.56	195.67	17.51	2.67	2.67
	B	1	6.00	11.04	0.75	0.03	11.01	11.01	43.99	110.39	0.90	1.40	1.40
		2	6.00	25.98	4.43	0.74	73.38	73.38	76.46	525.42	22.04	6.86	6.86
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	37.33	1.47	0.06	21.79	21.79	80.25	116.87	1.91	1.49	1.49
		2	4.80	45.85	0.51	0.01	7.42	7.42	85.18	34.51	0.42	0.44	0.44
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.21	69.57	0.30	0.00	0.00	0.00			0.00	51.00	51.00	
	8	1	0.00	0.04	52.17	0.07	0.00	0.00	0.00			0.00	4.00	4.00	
	9	1	0.00	0.00	52.17	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	2.09	6.96	29.99	0.00	0.00	0.00	0.03	2.01	0.00	0.00	0.00	
		2	0.00	7.19	6.96	103.38	0.00	0.00	0.00	0.60	6.54	0.00	0.00	0.00	
	B	1	0.00	3.83	8.70	43.99	0.00	0.00	0.00	0.03	3.33	0.00	0.00	0.00	
		2	0.00	18.64	8.70	214.36	2.11	0.00	0.00	0.74	12.47	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			16.00	0.00	16.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	
	C1	1	0.00	4.01	6.96	57.65	0.00	0.00	0.00	0.06	3.72	0.00	0.00	0.00	
		2	0.00	1.46	6.96	21.03	0.00	0.00	0.00	0.03	1.04	14.00	0.00	14.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
6	05/12/2018 10:43:11	05/12/2018 10:43:11	08:00	120	183.53	11.94	68.54	B/2	0	0	B/2	7/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	69	31	4965	1013	8.66	169.55	13.98	183.53

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4965	4965	0		69		31	1013	1020

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	20.18	8.66	10.21	1.73	169.55	169.55	22.46	1070.72	44.44	13.98	13.98

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	214.36	0.00	68.00	55.00	123.00

TRANSYT 15

Version: 15.5.1.7048
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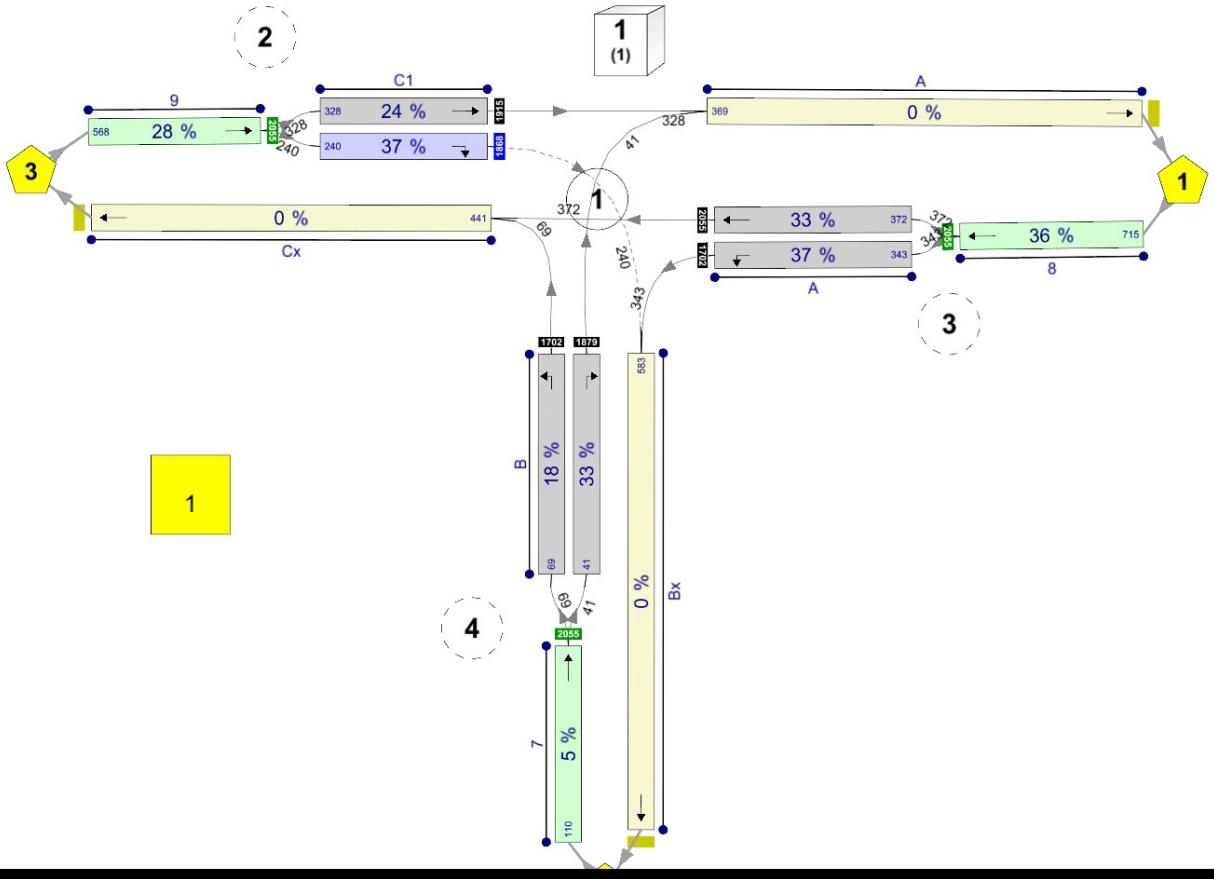
Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:44:29

»Network Diagrams
«A3 - DS&CM+NO BAN AM 2035 : D3 - AM Peak* :
»Network Options
»Arms and Traffic Streams
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»Traffic Stream Results
»Network Results

Network Diagrams



[redacted]

A3 - DS&CM+NO BAN AM 2035
D3 - AM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1702	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	1879			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1868	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		100	15.00		1868
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	110	110
8	1	715	715
9	1	568	568
A	1	343	343
	2	372	372
B	1	69	69
	2	41	41
Ax	1	369	369
Bx	1	583	583
C1	1	328	328
	2	240	240
Cx	1	441	441

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	343	372
	2	41	0	69
	3	328	240	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	69
	6		2	1	7/1, B/2, Ax/1	Normal	41
	7		1	3	8/1, A/2, Cx/1	Normal	372
	8		1	2	8/1, A/1, Bx/1	Normal	343
	9		3	1	9/1, C1/1, Ax/1	Normal	328
	10		3	2	9/1, C1/2, Bx/1	Normal	240

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	0, 39, 82
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	52, 58, 87, 101
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	56, 75, 87, 101
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	112	56	64	1	7
	2	✓	2	A,B,E	61	75	14	1	1
	3	✓	3	E,F	80	87	7	1	7
	4	✓	4	G	94	101	7	1	7

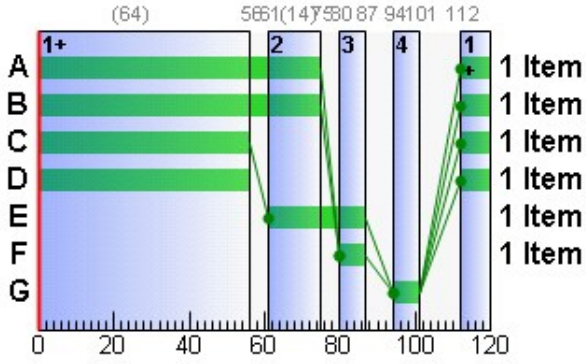
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	112	75	83
	B	1	✓	112	75	83
	C	1	✓	112	56	64
	D	1	✓	112	56	64
	E	1	✓	61	87	26
	F	1	✓	80	87	7
	G	1	✓	94	101	7

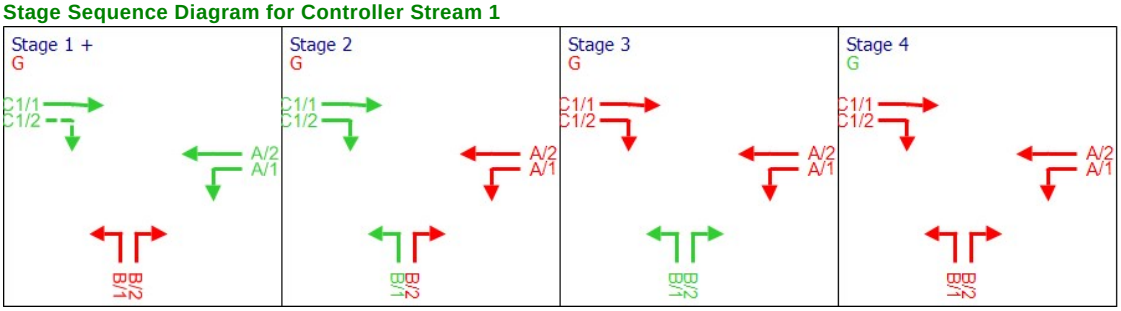
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	D	112	56	64
A	2	1	1	C	112	56	64
B	1	1	1	E	61	87	26
B	2	1	1	F	80	87	7
C1	1	1	1	A	112	75	83
C1	2	1	1	B	112	75	83

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	5	1581	110	2055	120	0.05	0.00	0.00	0.02	0.00	0.02
	8	1	36	148	715	2055	120	0.62	1.49	2.86	1.74	0.33	2.07
	9	1	28	226	568	2055	120	0.33	0.05	0.10	0.75	0.00	0.75
	A	1	37	142	343	1702	64	16.85	5.87	84.35	22.79	2.21	25.00
		2	33	169	372	2055	64	16.13	6.69	96.20	23.66	2.48	26.14
	B	1	18	400	69	1702	26	38.60	1.86	21.39	10.51	0.69	11.20
		2	33	175	41	1879	7	60.40	1.38	15.84	9.77	0.51	10.28
	Ax	1	0	Unrestricted	369	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	583	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	24	268	328	1915	83	6.96	3.96	56.89	9.00	1.44	10.44
		2	37	142	240	924	83	16.41	3.71	53.40	15.53	1.40	16.93
	Cx	1	0	Unrestricted	441	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	110	110	0		2055	2055	5		1581	0.00	120	12
	8	1	715	715	0		2055	1967	36		148	0.00	120	12
	9	1	568	568	0		2055	2055	28		226	0.00	120	12
	A	1	343	343	0		1702	922	37		142	0.05	64	65
		2	372	372	0		2055	1113	33		169	0.04	64	65
	B	1	69	69	0		1702	383	18		400	0.00	26	27
		2	41	41	0		1879	125	33		175	0.00	7	8
	Ax	1	369	369	0		Unrestricted	Unrestricted	0		Unrestricted	0.51	120	12
	Bx	1	583	583	0		Unrestricted	Unrestricted	0		Unrestricted	0.74	120	12
	C1	1	328	328	0		1915	1341	24		268	0.00	83	84
		2	240	240	0		924	647	37		142	0.00	83	84
	Cx	1	441	441	0		Unrestricted	Unrestricted	0		Unrestricted	0.74	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.62	0.02	0.10	1.74	1.74	3.69	23.29	3.11	0.33	0.33
	9	1	36.00	0.33	0.00	0.05	0.75	0.75	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	16.85	1.50	0.11	22.79	22.79	51.32	172.73	3.29	2.21	2.21
		2	4.80	16.13	1.58	0.08	23.66	23.66	53.11	195.05	2.51	2.48	2.48
	B	1	6.00	38.60	0.72	0.02	10.51	10.51	79.87	54.52	0.59	0.69	0.69
		2	6.00	60.40	0.61	0.08	9.77	9.77	99.70	38.55	2.33	0.51	0.51
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	6.96	0.59	0.04	9.00	9.00	34.96	113.50	1.19	1.44	1.44
		2	4.80	16.41	0.98	0.11	15.53	15.53	46.43	108.17	3.27	1.40	1.40
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.00	69.57	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	8	1	0.00	1.49	52.17	2.86	0.00	0.00	0.00			0.00	5.16	5.16	
	9	1	0.00	0.05	52.17	0.10	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	5.87	6.96	84.35	0.00	0.00	0.00	0.11	5.64	0.00	0.00	0.00	
		2	0.00	6.69	6.96	96.20	0.00	0.00	0.00	0.08	5.77	0.00	0.00	0.00	
	B	1	0.00	1.86	8.70	21.39	0.00	0.00	0.00	0.02	1.80	0.00	0.00	0.00	
		2	0.00	1.38	8.70	15.84	0.00	0.00	0.00	0.08	1.35	5.00	0.00	5.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			31.00	0.00	31.00	
	C1	1	0.00	3.96	6.96	56.89	0.00	0.00	0.00	0.04	3.32	0.00	0.00	0.00	
		2	0.00	3.71	6.96	53.40	0.00	0.00	0.00	0.11	2.58	0.00	0.00	0.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			24.00	0.00	24.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
3	05/12/2018 10:44:20	05/12/2018 10:44:20	08:00	120	102.82	6.60	37.21	A/1	0	0	A/1	8/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	37	142	4179	1047	5.69	93.77	9.05	102.82

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4179	4179	0		37		142	1047	1053

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	17.95	5.69	6.00	0.60	93.77	93.77	17.28	705.81	16.29	9.05	9.05

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	96.20	0.00	79.00	5.16	84.16

TRANSYT 15

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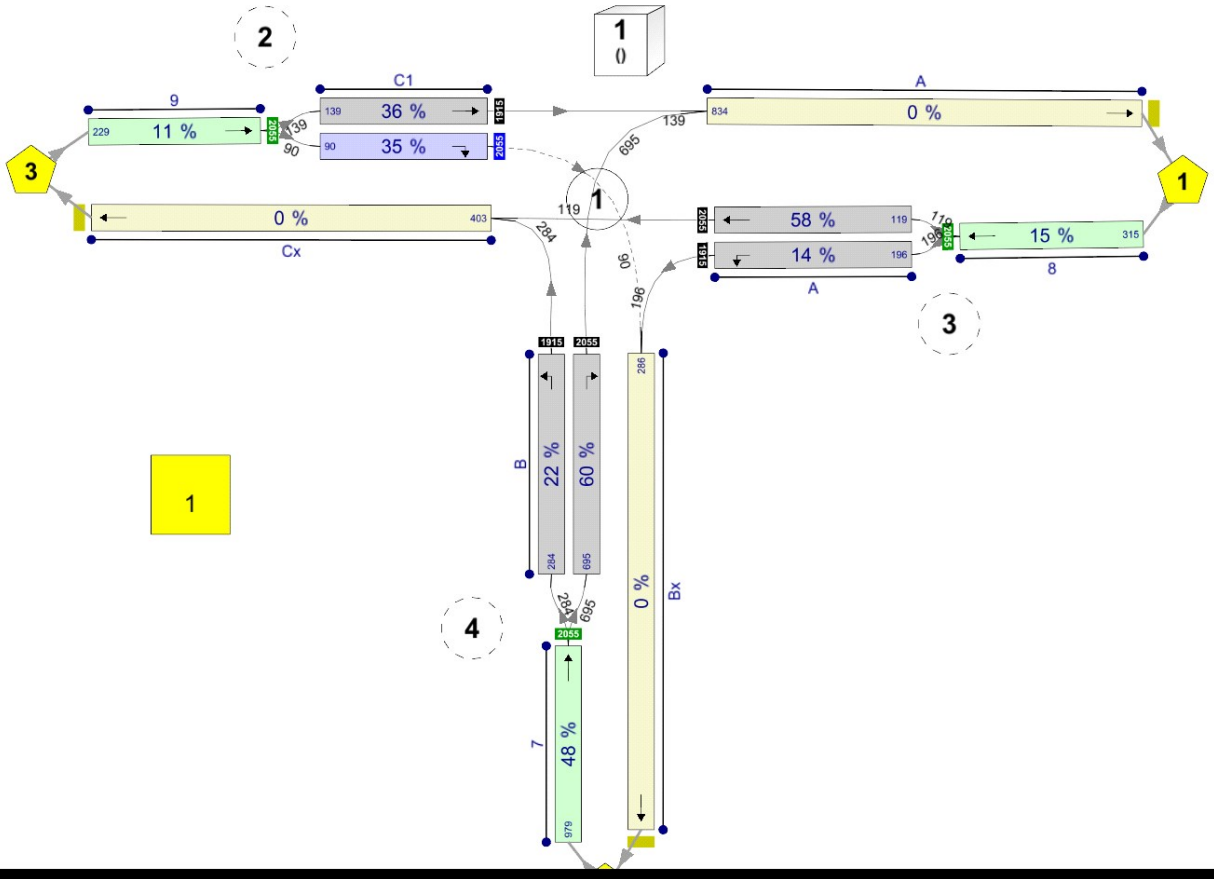
Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:45:12

»Network Diagrams
«A4 - DS&CM+NO BAN PM 2035 : D4 - PM Peak* :
»Network Options
»Arms and Traffic Streams
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»Traffic Stream Results
»Network Results

Network Diagrams



[redacted]

A4 - DS&CM+NO BAN PM 2035
D4 - PM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	2055			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		0	15.00		2055
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	979	979
8	1	315	315
9	1	229	229
A	1	196	196
	2	119	119
B	1	284	284
	2	695	695
Ax	1	834	834
Bx	1	286	286
C1	1	139	139
	2	90	90
Cx	1	403	403

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	196	119
	2	695	0	284
	3	139	90	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	284
	6		2	1	7/1, B/2, Ax/1	Normal	695
	7		1	3	8/1, A/2, Cx/1	Normal	119
	8		1	2	8/1, A/1, Bx/1	Normal	196
	9		3	1	9/1, C1/1, Ax/1	Normal	139
	10		3	2	9/1, C1/2, Bx/1	Normal	90

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F, D	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	62, 76, 2
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	0, 24, 53, 84
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	11, 23, 95, 109
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	0	11	11	1	7
	2	✓	2	A,B,E	16	23	7	1	1
	3	✓	3	E,F,D	28	95	67	1	7
	4	✓	4	G	102	109	7	1	7

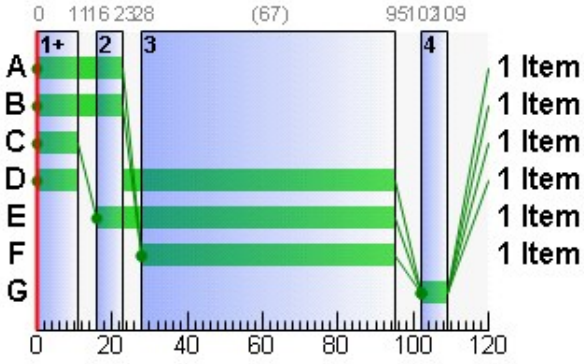
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	0	23	23
	B	1	✓	0	23	23
	C	1	✓	0	11	11
	D	1	✓	23	95	72
		2	✓	0	11	11
	E	1	✓	16	95	79
	F	1	✓	28	95	67
	G	1	✓	102	109	7

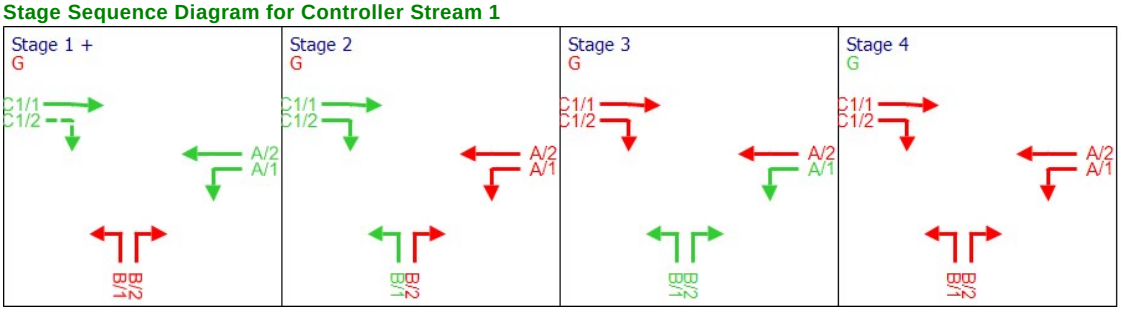
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	D	23	95	72	0	11	11
A	2	1	1	C	0	11	11			
B	1	1	1	E	16	95	79			
B	2	1	1	F	28	95	67			
C1	1	1	1	A	0	23	23			
C1	2	1	1	B	0	23	23			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	48	89	979	2055	120	0.80	0.22	0.31	3.07	0.00	3.07
	8	1	15	487	315	2055	120	0.16	0.01	0.03	0.20	0.00	0.20
	9	1	11	708	229	2055	120	0.11	0.01	0.01	0.10	0.00	0.10
	A	1	14	523	196	1915	83	3.47	1.47	21.12	2.69	0.73	3.41
		2	58	55	119	2055	11	63.39	4.16	59.77	29.75	1.55	31.30
	B	1	22	305	284	1915	79	8.23	3.66	42.10	9.22	1.34	10.56
		2	60	51	695	2055	67	19.30	15.50	178.23	52.92	5.69	58.61
	Ax	1	0	Unrestricted	834	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	286	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	36	148	139	1915	23	44.09	4.08	58.65	24.17	1.52	25.69
		2	35	156	90	1282	23	51.42	2.72	39.09	18.25	1.02	19.28
	Cx	1	0	Unrestricted	403	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	979	979	0		2055	2055	48		89	0.00	120	12
	8	1	315	315	0		2055	2055	15		487	0.00	120	12
	9	1	229	229	0		2055	2055	11		708	0.00	120	12
	A	1	196	196	0		1915	1356	14		523	0.00	83	85
		2	119	119	0		2055	206	58		55	0.00	11	12
	B	1	284	284	0		1915	1277	22		305	0.00	79	80
		2	695	695	0		2055	1165	60		51	0.00	67	68
	Ax	1	834	834	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	120	12
	Bx	1	286	286	0		Unrestricted	Unrestricted	0		Unrestricted	0.70	120	12
	C1	1	139	139	0		1915	383	36		148	0.00	23	24
		2	90	90	0		1282	256	35		156	0.00	23	24
	Cx	1	403	403	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.80	0.00	0.22	3.07	3.07	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.16	0.00	0.01	0.20	0.20	0.00	0.00	0.00	0.00	0.00
	9	1	36.00	0.11	0.00	0.01	0.10	0.10	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	3.47	0.18	0.01	2.69	2.69	29.66	57.41	0.73	0.73	0.73
		2	4.80	63.39	1.71	0.39	29.75	29.75	103.60	111.88	11.41	1.55	1.55
	B	1	6.00	8.23	0.62	0.03	9.22	9.22	37.64	105.94	0.95	1.34	1.34
		2	6.00	19.30	3.29	0.44	52.92	52.92	65.32	440.82	13.13	5.69	5.69
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	44.09	1.60	0.10	24.17	24.17	87.04	117.91	3.07	1.52	1.52
		2	4.80	51.42	1.19	0.09	18.25	18.25	90.62	78.75	2.81	1.02	1.02
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.22	69.57	0.31	0.00	0.00	0.00			0.00	36.00	36.00	
	8	1	0.00	0.01	52.17	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	9	1	0.00	0.01	52.17	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	1.47	6.96	21.12	0.00	0.00	0.00	0.01	1.32	0.00	0.00	0.00	
		2	0.00	4.16	6.96	59.77	0.00	0.00	0.00	0.39	3.96	0.00	0.00	0.00	
	B	1	0.00	3.66	8.70	42.10	0.00	0.00	0.00	0.03	3.19	0.00	0.00	0.00	
		2	0.00	15.50	8.70	178.23	1.03	0.00	0.00	0.44	10.48	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			16.00	0.00	16.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			20.00	0.00	20.00	
	C1	1	0.00	4.08	6.96	58.65	0.00	0.00	0.00	0.10	3.81	0.00	0.00	0.00	
		2	0.00	2.72	6.96	39.09	0.00	0.00	0.00	0.12	2.54	0.00	0.00	0.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
4	05/12/2018 10:45:04	05/12/2018 10:45:04	08:00	120	152.22	9.89	59.68	B/2	0	0	B/2	7/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	60	51	4569	1006	7.79	140.38	11.85	152.22

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4569	4569	0		60		51	1006	1013

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	20.43	7.79	8.58	1.31	140.38	140.38	20.68	912.70	32.11	11.85	11.85

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	178.23	0.00	55.00	36.00	91.00

TRANSYT 15

Version: 15.5.1.7048
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Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:45:54

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»Signal Timings
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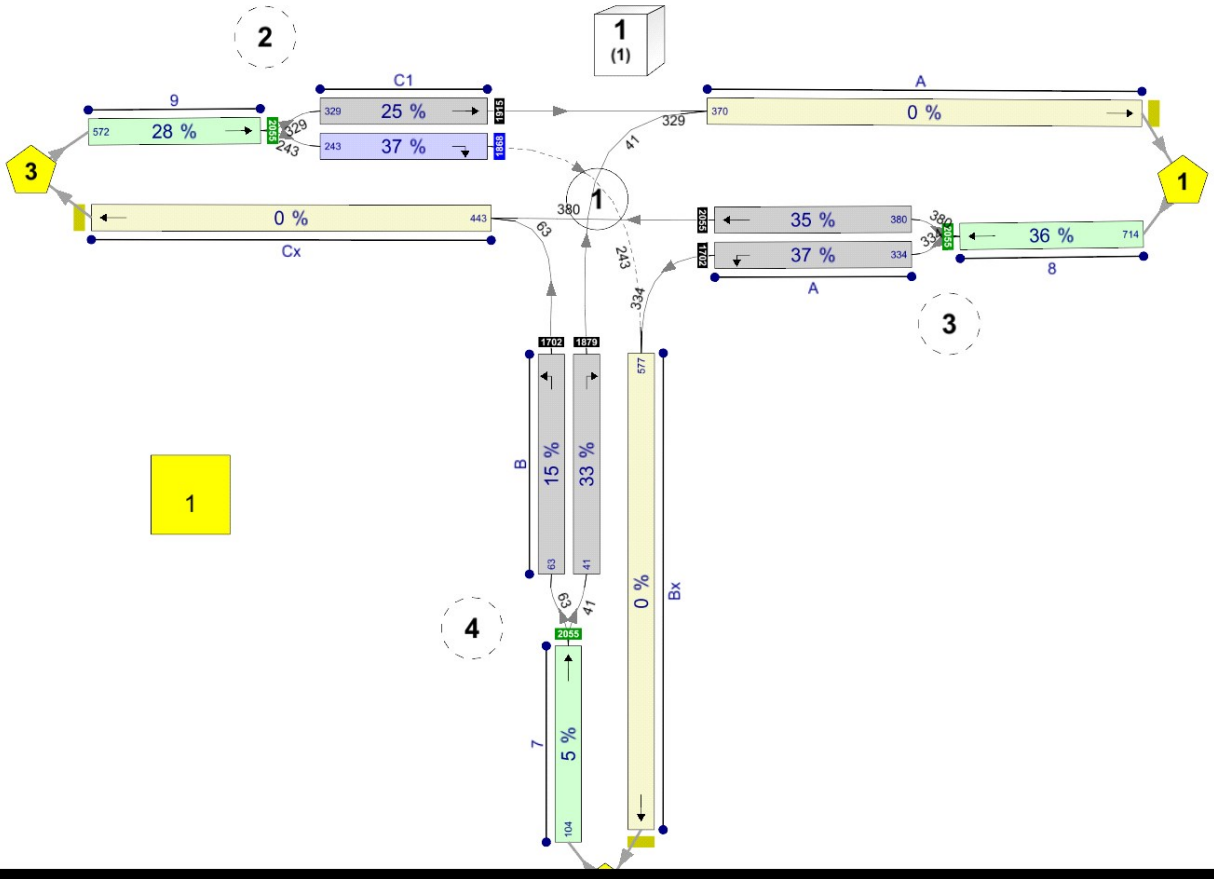
Network Diagrams



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A1 - DS&CM+BAN AM 2035
D1 - AM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1702	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	1879			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1868	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		100	15.00		1868
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	104	104
8	1	714	714
9	1	572	572
A	1	334	334
	2	380	380
B	1	63	63
	2	41	41
Ax	1	370	370
Bx	1	577	577
C1	1	329	329
	2	243	243
Cx	1	443	443

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	334	380
	2	41	0	63
	3	329	243	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	63
	6		2	1	7/1, B/2, Ax/1	Normal	41
	7		1	3	8/1, A/2, Cx/1	Normal	380
	8		1	2	8/1, A/1, Bx/1	Normal	334
	9		3	1	9/1, C1/1, Ax/1	Normal	329
	10		3	2	9/1, C1/2, Bx/1	Normal	243

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	0, 39, 82
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	52, 58, 87, 101
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	54, 75, 87, 101
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	112	54	62	1	7
	2	✓	2	A,B,E	59	75	16	1	1
	3	✓	3	E,F	80	87	7	1	7
	4	✓	4	G	94	101	7	1	7

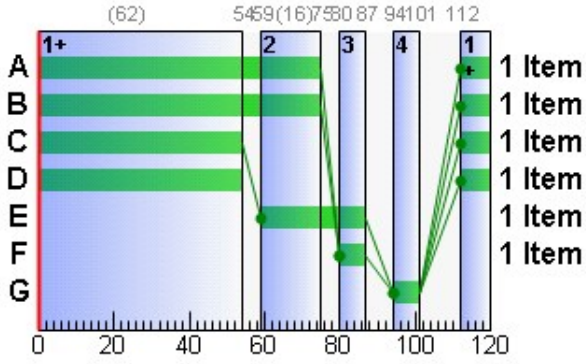
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	112	75	83
	B	1	✓	112	75	83
	C	1	✓	112	54	62
	D	1	✓	112	54	62
	E	1	✓	59	87	28
	F	1	✓	80	87	7
	G	1	✓	94	101	7

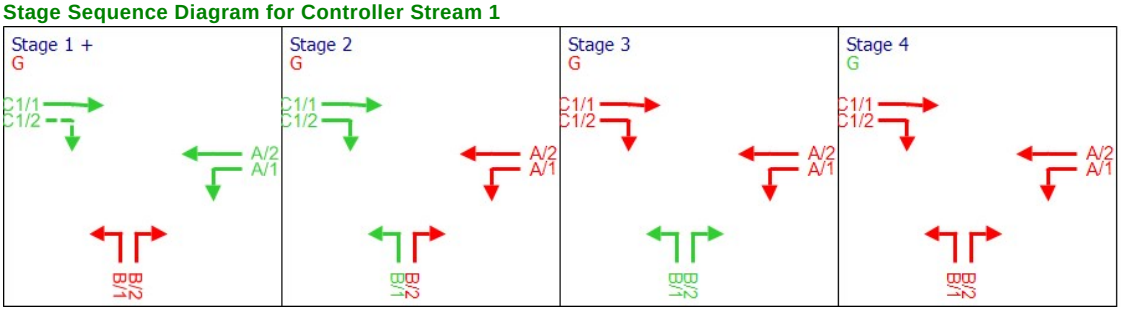
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	D	112	54	62
A	2	1	1	C	112	54	62
B	1	1	1	E	59	87	28
B	2	1	1	F	80	87	7
C1	1	1	1	A	112	75	83
C1	2	1	1	B	112	75	83

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	5	1678	104	2055	120	0.05	0.00	0.00	0.02	0.00	0.02
	8	1	36	148	714	2055	120	0.64	1.69	3.24	1.79	0.37	2.16
	9	1	28	223	572	2055	120	0.34	0.05	0.10	0.76	0.00	0.76
	A	1	37	141	334	1702	62	17.93	5.88	84.49	23.62	2.21	25.83
		2	35	156	380	2055	62	17.42	7.23	103.95	26.11	2.65	28.76
	B	1	15	488	63	1702	28	36.65	1.66	19.08	9.11	0.62	9.72
		2	33	175	41	1879	7	60.40	1.38	15.84	9.77	0.51	10.28
	Ax	1	0	Unrestricted	370	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	577	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	25	267	329	1915	83	6.96	3.97	57.06	9.03	1.44	10.48
		2	37	146	243	950	83	16.40	3.76	54.03	15.71	1.41	17.13
	Cx	1	0	Unrestricted	443	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	104	104	0		2055	2055	5		1678	0.00	120	12
	8	1	714	714	0		2055	1965	36		148	0.00	120	12
	9	1	572	572	0		2055	2055	28		223	0.00	120	12
	A	1	334	334	0		1702	894	37		141	0.05	62	63
		2	380	380	0		2055	1079	35		156	0.04	62	63
	B	1	63	63	0		1702	411	15		488	0.00	28	29
		2	41	41	0		1879	125	33		175	0.00	7	8
	Ax	1	370	370	0		Unrestricted	Unrestricted	0		Unrestricted	0.51	120	12
	Bx	1	577	577	0		Unrestricted	Unrestricted	0		Unrestricted	0.75	120	12
	C1	1	329	329	0		1915	1341	25		267	0.00	83	84
		2	243	243	0		950	665	37		146	0.00	83	84
	Cx	1	443	443	0		Unrestricted	Unrestricted	0		Unrestricted	0.77	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.64	0.02	0.10	1.79	1.79	4.13	26.37	3.11	0.37	0.37
	9	1	36.00	0.34	0.00	0.05	0.76	0.76	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	17.93	1.55	0.11	23.62	23.62	52.79	172.99	3.33	2.21	2.21
		2	4.80	17.42	1.74	0.10	26.11	26.11	55.66	208.66	2.86	2.65	2.65
	B	1	6.00	36.65	0.63	0.01	9.11	9.11	78.01	48.73	0.41	0.62	0.62
		2	6.00	60.40	0.61	0.08	9.77	9.77	99.70	38.55	2.33	0.51	0.51
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	6.96	0.60	0.04	9.03	9.03	34.98	113.88	1.20	1.44	1.44
		2	4.80	16.40	1.00	0.10	15.71	15.71	46.40	109.60	3.14	1.41	1.41
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.00	69.57	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	8	1	0.00	1.69	52.17	3.24	0.00	0.00	0.00			0.00	7.27	7.27	
	9	1	0.00	0.05	52.17	0.10	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	5.88	6.96	84.49	0.00	0.00	0.00	0.11	5.68	0.00	0.00	0.00	
		2	0.00	7.23	6.96	103.95	0.00	0.00	0.00	0.10	6.11	0.00	0.00	0.00	
	B	1	0.00	1.66	8.70	19.08	0.00	0.00	0.00	0.01	1.61	0.00	0.00	0.00	
		2	0.00	1.38	8.70	15.84	0.00	0.00	0.00	0.08	1.35	5.00	0.00	5.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			31.00	0.00	31.00	
	C1	1	0.00	3.97	6.96	57.06	0.00	0.00	0.00	0.04	3.33	0.00	0.00	0.00	
		2	0.00	3.76	6.96	54.03	0.00	0.00	0.00	0.10	2.60	0.00	0.00	0.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			24.00	0.00	24.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
1	05/12/2018 10:45:45	05/12/2018 10:45:45	08:00	120	105.15	6.76	37.38	A/1	0	0	A/1	8/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	37	141	4170	1045	5.83	95.93	9.22	105.15

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4170	4170	0		37		141	1045	1051

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	17.93	5.83	6.15	0.60	95.93	95.93	17.63	718.78	16.38	9.22	9.22

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	103.95	0.00	79.00	7.27	86.27

TRANSYT 15

Version: 15.5.1.7048
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Filename: GDDR_Enniskerry Road Junction RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_Enniskerry Road
Report generation date: 05/12/2018 10:46:34

»Network Diagrams
«A2 - DS&CM+BAN PM 2035 : D2 - PM Peak* :
»Network Options
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»Traffic Stream Results
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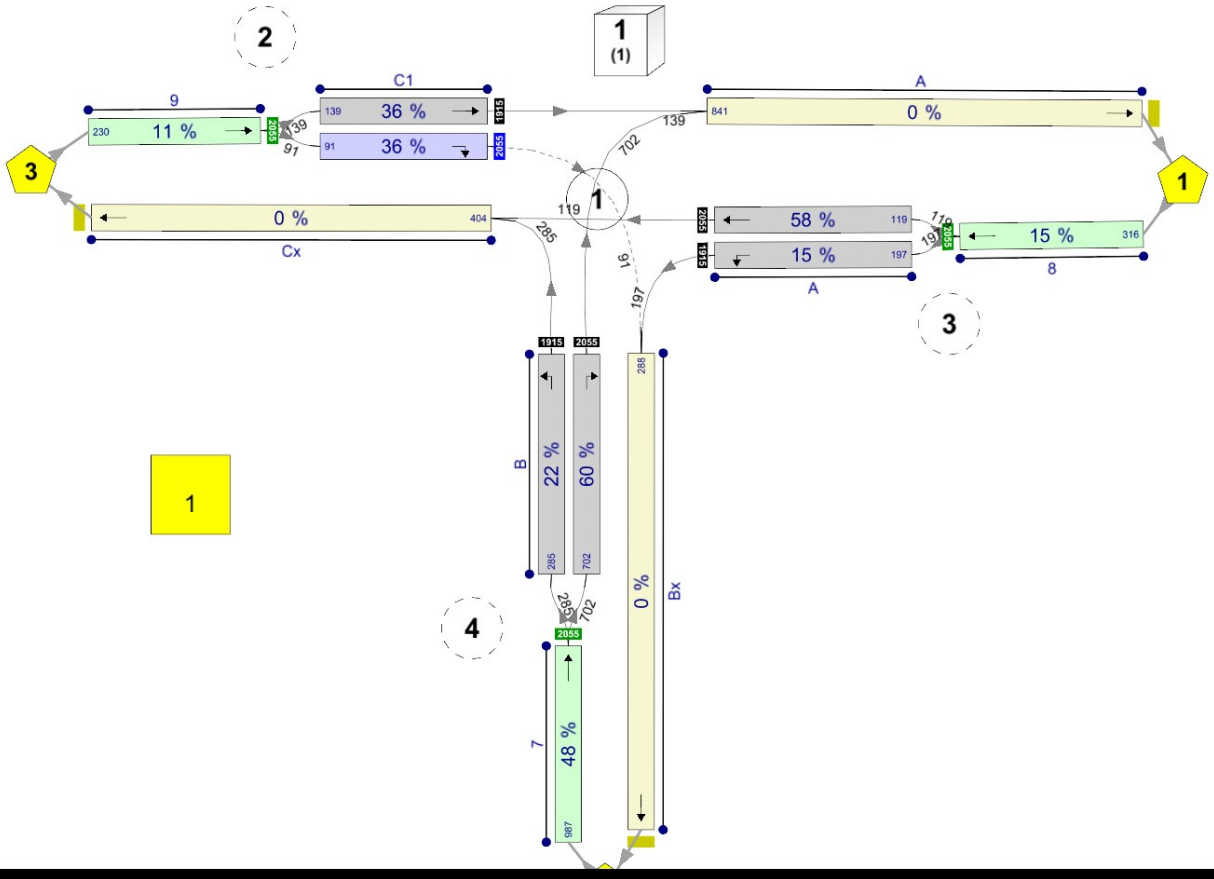
Network Diagrams



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A2 - DS&CM+BAN PM 2035
D2 - PM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
7	(untitled)		4
8	(untitled)		3
9	(untitled)		2
A	(untitled)		1
B	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
C1	(untitled)		1
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
7	1	(untitled)			400.00	✓	Sum of lanes	2055					Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
9	1	(untitled)			300.00	✓	Sum of lanes	2055					Normal	
A	1	(untitled)			40.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055			✓		Normal	
B	1	(untitled)			50.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			50.00	✓	Sum of lanes	2055			✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
C1	1	(untitled)			40.00	✓	Sum of lanes	1915			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2055	✓	1800	✓	✓	Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
A	1	2	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	1	1	(untitled)		✓	N/A	N/A	0	3.00		0	12.00	✓	1915
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
C1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
	2	1	(untitled)		✓	N/A	N/A	0	3.00		0	15.00		2055
Cx	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
7	1	PDM	100	100	100		0.00		
8	1	PDM	100	100	100		0.00		
9	1	PDM	100	100	100		0.00		
A	1	Flare	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
B	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
Ax	1	NetworkDefault	100	100	100		0.00		
Bx	1	NetworkDefault	100	100	100		0.00		
C1	1	PDM	100	100	100		0.00		
	2	Flare	100	100	100		0.00		
Cx	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	120

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
7	1	987	987
8	1	316	316
9	1	230	230
A	1	197	197
	2	119	119
B	1	285	285
	2	702	702
Ax	1	841	841
Bx	1	288	288
C1	1	139	139
	2	91	91
Cx	1	404	404

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	D	
	2	1	C	
B	1	1	E	
	2	1	F	
C1	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
7	1	48.00	30.00
8	1	36.00	30.00
9	1	36.00	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	8/1	A/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	8/1	A/2	4.80	30.00	✓	Straight	Straight Movement
B	1	1	7/1	B/1	6.00	30.00	✓	Straight	Straight Movement
	2	1	7/1	B/2	6.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C1/1	Ax/1	12.00	30.00	✓	Straight	Straight Movement
Bx	1	1	A/1	Bx/1	12.00	30.00	✓	Nearside	41.96
C1	1	1	9/1	C1/1	4.80	30.00	✓	Straight	Straight Movement
	2	1	9/1	C1/2	4.80	30.00	✓	Straight	Straight Movement
Cx	1	1	B/1	Cx/1	12.00	30.00	✓	Nearside	34.36
Ax	1	2	B/2	Ax/1	12.00	30.00	✓	Offside	67.82
Bx	1	2	C1/2	Bx/1	12.00	30.00	✓	Offside	87.50
Cx	1	2	A/2	Cx/1	12.00	30.00	✓	Straight	Straight Movement

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	197	119
	2	702	0	285
	3	139	91	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	Ax/1	#FF0000
	2	(untitled)	7/1	Bx/1	#00FF00
	3	(untitled)	9/1	Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		2	3	7/1, B/1, Cx/1	Normal	285
	6		2	1	7/1, B/2, Ax/1	Normal	702
	7		1	3	8/1, A/2, Cx/1	Normal	119
	8		1	2	8/1, A/1, Bx/1	Normal	197
	9		3	1	9/1, C1/1, Ax/1	Normal	139
	10		3	2	9/1, C1/2, Bx/1	Normal	91

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		6	NetworkDefault	120

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1		✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C, D	1
	2	A, B, E	1
	3	E, F, D	1
	4	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 4, 3	62, 76, 2
	2	(untitled)	Single	1, 3, 4	0, 37, 76
	3	(untitled)	Single	1, 2, 3, 4	0, 24, 53, 84
	4	(untitled)	Single	1, 3, 2, 4	0, 28, 56, 86
	5	(untitled)	Single	1, 4, 3, 2	0, 32, 67, 90
	6	(untitled)	Single	1, 2, 3, 4	3, 15, 87, 101
	7	(untitled)	Single	1, 4, 2, 3	0, 30, 64, 92
	8	(untitled)	Single	1, 2, 4, 3	0, 28, 58, 92

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	7
	B						5	7
	C					5	5	7
	D							7
	E			5				7
	F	5	5	5				7
	G	11	11	11	11	11	11	

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	5	0	5	7
	3	5	5	0	7
	4	11	11	11	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,C,D	112	3	11	1	7
	2	✓	2	A,B,E	8	15	7	1	1
	3	✓	3	E,F,D	20	87	67	1	7
	4	✓	4	G	94	101	7	1	7

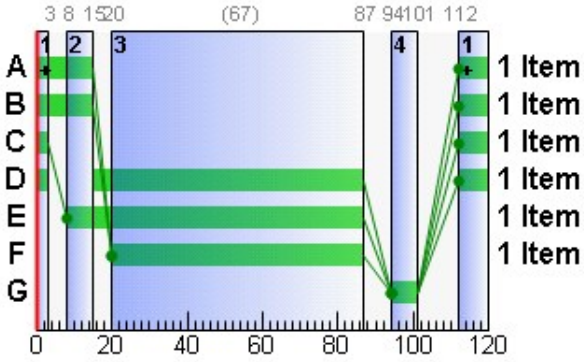
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	112	15	23
	B	1	✓	112	15	23
	C	1	✓	112	3	11
	D	1	✓	15	87	72
		2	✓	112	3	11
	E	1	✓	8	87	79
	F	1	✓	20	87	67
	G	1	✓	94	101	7

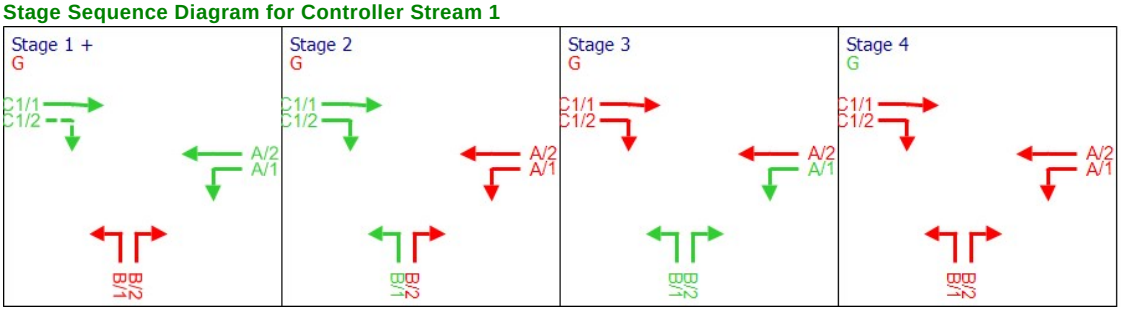
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	D	15	87	72	112	3	11
A	2	1	1	C	112	3	11			
B	1	1	1	E	8	87	79			
B	2	1	1	F	20	87	67			
C1	1	1	1	A	112	15	23			
C1	2	1	1	B	112	15	23			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	7	1	48	87	987	2055	120	0.81	0.22	0.32	3.15	0.00	3.15
	8	1	15	485	316	2055	120	0.16	0.01	0.03	0.20	0.00	0.20
	9	1	11	704	230	2055	120	0.11	0.01	0.01	0.10	0.00	0.10
	A	1	15	520	197	1915	83	3.48	1.47	21.18	2.70	0.73	3.44
		2	58	55	119	2055	11	63.39	4.16	59.77	29.75	1.55	31.30
	B	1	22	303	285	1915	79	8.24	3.67	42.25	9.26	1.35	10.61
		2	60	49	702	2055	67	19.45	15.67	180.15	53.85	5.77	59.62
	Ax	1	0	Unrestricted	841	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	288	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	36	148	139	1915	23	44.09	4.08	58.65	24.17	1.52	25.69
		2	36	153	91	1281	23	51.52	2.75	39.55	18.49	1.03	19.53
	Cx	1	0	Unrestricted	404	Unrestricted	120	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	7	1	987	987	0		2055	2055	48		87	0.00	120	12
	8	1	316	316	0		2055	2055	15		485	0.00	120	12
	9	1	230	230	0		2055	2055	11		704	0.00	120	12
	A	1	197	197	0		1915	1356	15		520	0.00	83	85
		2	119	119	0		2055	206	58		55	0.00	11	12
	B	1	285	285	0		1915	1277	22		303	0.00	79	80
		2	702	702	0		2055	1165	60		49	0.00	67	68
	Ax	1	841	841	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	120	12
	Bx	1	288	288	0		Unrestricted	Unrestricted	0		Unrestricted	0.70	120	12
	C1	1	139	139	0		1915	383	36		148	0.00	23	24
		2	91	91	0		1281	256	36		153	0.00	23	24
	Cx	1	404	404	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	120	12

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	7	1	48.00	0.81	0.00	0.22	3.15	3.15	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.16	0.00	0.01	0.20	0.20	0.00	0.00	0.00	0.00	0.00
	9	1	36.00	0.11	0.00	0.01	0.10	0.10	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	3.48	0.18	0.01	2.70	2.70	29.72	57.82	0.74	0.73	0.73
		2	4.80	63.39	1.71	0.39	29.75	29.75	103.60	111.88	11.41	1.55	1.55
	B	1	6.00	8.24	0.62	0.03	9.26	9.26	37.64	106.32	0.96	1.35	1.35
		2	6.00	19.45	3.34	0.46	53.85	53.85	65.54	446.48	13.60	5.77	5.77
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	C1	1	4.80	44.09	1.60	0.10	24.17	24.17	87.04	117.91	3.07	1.52	1.52
		2	4.80	51.52	1.21	0.10	18.49	18.49	90.68	79.62	2.89	1.03	1.03
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	7	1	0.00	0.22	69.57	0.32	0.00	0.00	0.00			0.00	36.00	36.00	
	8	1	0.00	0.01	52.17	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	9	1	0.00	0.01	52.17	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	1.47	6.96	21.18	0.00	0.00	0.00	0.01	1.33	0.00	0.00	0.00	
		2	0.00	4.16	6.96	59.77	0.00	0.00	0.00	0.39	3.96	0.00	0.00	0.00	
	B	1	0.00	3.67	8.70	42.25	0.00	0.00	0.00	0.03	3.20	0.00	0.00	0.00	
		2	0.00	15.67	8.70	180.15	1.07	0.00	0.00	0.46	10.60	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			16.00	0.00	16.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			20.00	0.00	20.00	
	C1	1	0.00	4.08	6.96	58.65	0.00	0.00	0.00	0.10	3.81	0.00	0.00	0.00	
		2	0.00	2.75	6.96	39.55	0.00	0.00	0.00	0.12	2.57	0.00	0.00	0.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			19.00	0.00	19.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
2	05/12/2018 10:46:24	05/12/2018 10:46:24	08:00	120	153.62	9.98	60.28	B/2	0	0	B/2	7/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	60	49	4599	1006	7.81	141.68	11.95	153.62

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4599	4599	0		60		49	1006	1013

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	20.43	7.81	8.64	1.33	141.68	141.68	20.72	920.03	32.67	11.95	11.95

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	180.15	0.00	55.00	36.00	91.00

TRANSYT 15

Version: 15.5.1.7048
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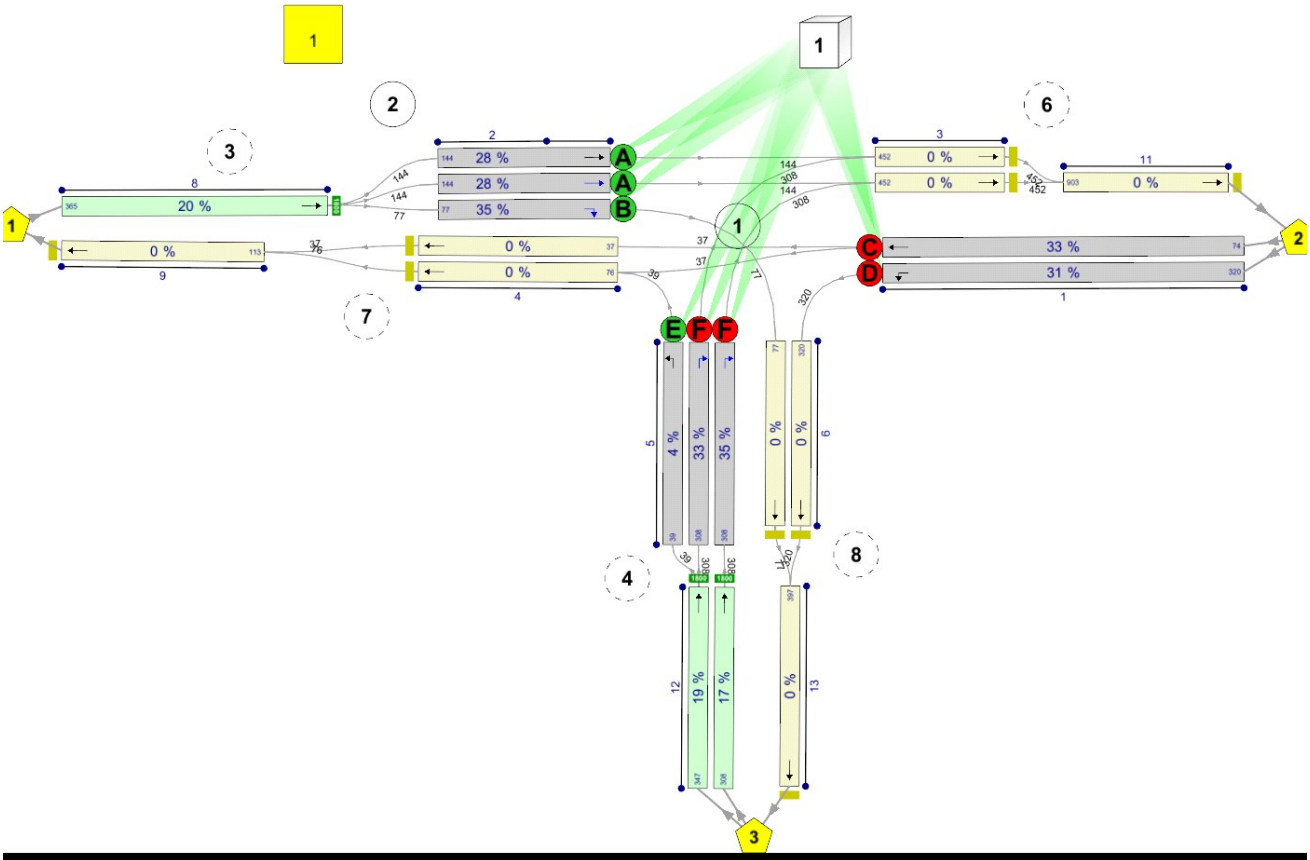
Filename: GDDR_GLDR Link Jnc - 3arm_RevC.t15
Path: G:\2017\p170172\calcs\transyt\GDDR_GLDR Link Junction
Report generation date: 05/12/2018 10:28:43

»A1 - DSCM35+BAN AM : D1 - AM Peak* :
»A2 - DSCM35+BAN PM : D2 - PM Peak* :
»A3 - DSCM35+NOBAN AM : D3 - AM Peak* :
»A4 - DSCM35+NOBAN PM : D4 - PM Peak* :
»A5 - 2035 DS AM : D5 - AM Peak 2035* :
»A6 - 2035 DS PM : D6 - PM Peak 2035* :
»A7 - 2020 DS AM : D7 - AM Peak 2020* :
»A8 - 2020 DS PM : D8 - PM Peak 2020* :

Network Diagrams



[redacted]

A1 - DSCM35+BAN AM
D1 - AM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	427	427
	2	80	80
2	1	410	410
	2	410	410
	3	15	15
3	1	968	968
	2	968	968
4	1	43	43
	2	40	40
5	1	3	3
	2	558	558
	3	558	558
6	1	427	427
	2	15	15
8	1	835	835
9	1	83	83
11	1	1935	1935
12	1	561	561
	2	558	558
13	1	442	442

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	820	15
	2	80	0	427
	3	3	1115	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	558
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	410
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	3
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	558
	11		2	1	1/2, 4/1, 9/1	Normal	40
	12		2	1	1/2, 4/2, 9/1	Normal	40
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	410
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	15
	15		2	3	1/1, 6/1, 13/1	Normal	427

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5, 6	4, 33, 105, 119, 144, 168, 205, 219
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	237	4	7	1	7
	2	✓	3	A,C,D	9	33	24	1	7
	3	✓	5	D,E,F	38	105	67	1	7
	4	✓	6	G	113	119	6	1	6
	5	✓	2	A,B,E	137	144	7	1	7
	6	✓	3	A,C,D	149	168	19	1	7
	7	✓	5	D,E,F	173	205	32	1	7
	8	✓	6	G	213	219	6	1	6

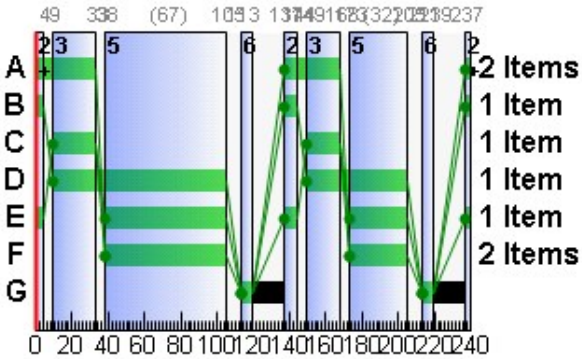
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	137	168	31
		2	✓	237	33	36
	B	1	✓	137	144	7
		2	✓	237	4	7
	C	1	✓	9	33	24
		2	✓	149	168	19
	D	1	✓	9	105	96
		2	✓	149	205	56
	E	1	✓	38	105	67
		2	✓	137	144	7
		3	✓	173	205	32
		4	✓	237	4	7
	F	1	✓	38	105	67
		2	✓	173	205	32
	G	1	✓	113	119	6
		2	✓	213	219	6

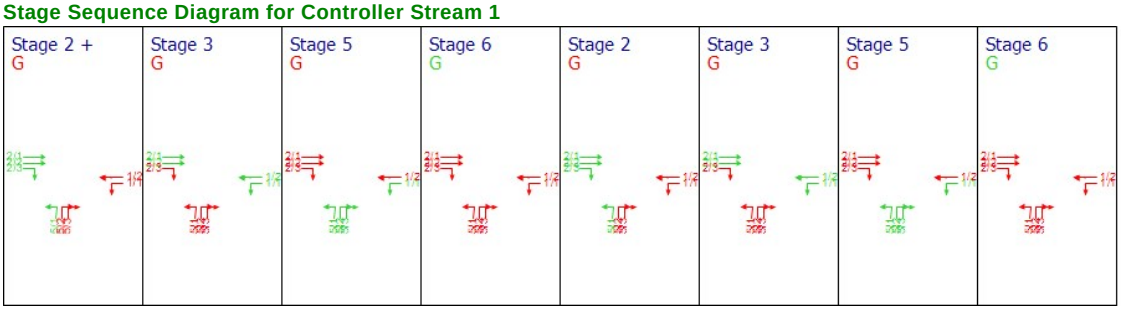
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	9	105	96	149	205	56						
1	2	1	1	C	9	33	24	149	168	19						
2	1	1	1	A	137	168	31	237	33	36						
2	2	1	1	A	137	168	31	237	33	36						
2	3	1	1	B	137	144	7	237	4	7						
5	1	1	1	E	38	105	67	137	144	7	173	205	32	237	4	7
5	2	1	1	F	38	105	67	173	205	32						
5	3	1	1	F	38	105	67	173	205	32						

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	39	130	427	1702	152	11.34	6.89	9.90	19.11	2.51	21.62
		2	21	333	80	2055	43	43.78	2.67	3.84	13.82	0.84	14.66
	2	1	69	30	410	2055	67	46.45	15.35	196.16	75.11	4.77	79.88
		2	69	30	410	2055	67	46.45	15.35	196.16	75.11	4.77	79.88
		3	11	722	15	2055	14	56.01	0.56	10.31	3.31	0.18	3.49
	3	1	0	Unrestricted	968	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	968	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	43	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	40	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	26225	3	1800	113	8.17	0.03	0.16	0.10	0.02	0.12
		2	65	39	558	2055	99	31.42	15.77	90.69	69.16	5.64	74.79
		3	69	30	558	1915	99	33.41	16.43	94.44	73.54	5.87	79.41
	6	1	0	Unrestricted	427	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	15	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	46	94	835	1800	240	0.86	0.20	0.38	2.85	0.00	2.85
	9	1	0	Unrestricted	83	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	1936	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	31	189	561	1800	240	0.45	0.07	0.20	1.00	0.00	1.00
		2	31	190	558	1800	240	0.45	0.07	0.20	0.99	0.00	0.99
	13	1	0	Unrestricted	442	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	427	427	0		1702	1092	39		130	0.00	152
		2	80	80	0		2055	385	21		333	0.00	43
	2	1	410	410	0		2055	591	69		30	0.00	67
		2	410	410	0		2055	591	69		30	0.00	67
		3	15	15	0		2055	137	11		722	0.00	14
	3	1	968	968	-1		Unrestricted	Unrestricted	0		Unrestricted	0.51	240
		2	968	968	-1		Unrestricted	Unrestricted	0		Unrestricted	0.51	240
	4	1	43	43	0		Unrestricted	Unrestricted	0		Unrestricted	1.47	240
		2	40	40	0		Unrestricted	Unrestricted	0		Unrestricted	1.60	240
	5	1	3	3	0		1800	878	0		26225	0.00	113
		2	558	558	-1		2055	865	65		39	0.00	99
		3	558	558	-1		1915	806	69		30	0.00	99
	6	1	427	427	0		Unrestricted	Unrestricted	0		Unrestricted	0.60	240
		2	15	15	0		Unrestricted	Unrestricted	0		Unrestricted	1.35	240
	8	1	835	835	0		1800	1800	46		94	0.00	240
	9	1	83	83	0		Unrestricted	Unrestricted	0		Unrestricted	1.26	240
	11	1	1936	1936	-1		Unrestricted	Unrestricted	0		Unrestricted	0.45	240
	12	1	561	561	-1		1800	1800	31		189	0.00	240
		2	558	558	-1		1800	1800	31		190	0.00	240
	13	1	442	442	0		Unrestricted	Unrestricted	0		Unrestricted	0.53	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	11.34	1.35	19.11	46.94	200.42	2.51
		2	48.00	43.78	0.97	13.82	84.18	67.34	0.84
	2	1	5.40	46.45	5.29	75.11	92.77	380.37	4.77
		2	5.40	46.45	5.29	75.11	92.77	380.37	4.77
		3	5.40	56.01	0.23	3.31	94.67	14.20	0.18
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	8.17	0.01	0.10	51.26	1.54	0.02
		2	12.00	31.42	4.87	69.16	80.60	449.76	5.64
		3	12.00	33.41	5.18	73.54	83.90	468.18	5.87
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.86	0.20	2.85	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.45	0.07	1.00	0.00	0.00	0.00
		2	24.00	0.45	0.07	0.99	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	6.89	69.57	9.90	0.00	0.00	
		2	0.00	2.67	69.57	3.84	0.00	0.00	
	2	1	0.00	15.35	7.83	196.16	0.00	0.00	
		2	0.00	15.35	7.83	196.16	0.00	0.00	
		3	0.00	0.56	5.40	10.31	0.00	14.00	
	3	1	0.00	0.00	55.16	0.00	0.00	6.00	
		2	0.00	0.00	52.31	0.00	0.00	7.00	
	4	1	0.00	0.00	8.70	0.00	0.00	217.00	
		2	0.00	0.00	8.70	0.00	0.00	217.00	
	5	1	0.00	0.03	17.39	0.16	0.00	113.00	
		2	0.00	15.77	17.39	90.69	0.00	0.00	
		3	0.00	16.43	17.39	94.44	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	54.00	
		2	0.00	0.00	57.94	0.00	0.00	218.00	
	8	1	0.00	0.20	52.17	0.38	0.00	90.00	
	9	1	0.00	0.00	48.14	0.00	0.00	169.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.07	34.78	0.20	0.00	0.00	
		2	0.00	0.07	34.78	0.20	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	32.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
1	05/12/2018 10:27:02	05/12/2018 10:27:04	08:00	240	358.69	23.53	69.40	2/1	0	0	2/1	8/1	2/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	69	30	9337	3534	9.07	334.09	24.60	358.69

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	9337	9337	-4		69		30	3534

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	25.56	9.07	23.53	334.09	21.02	1962.19	24.60

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	196.16	0.00	1137.00

A2 - DSCM35+BAN PM
D2 - PM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	1082	1082
	2	993	993
2	1	90	90
	2	90	90
	3	138	138
3	1	285	285
	2	285	285
4	1	555	555
	2	497	497
5	1	58	58
	2	196	196
	3	196	196
6	1	1082	1082
	2	138	138
8	1	317	317
9	1	1051	1051
11	1	570	570
12	1	254	254
	2	196	196
13	1	1220	1220

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	179	138
	2	993	0	1082
	3	58	391	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	196
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	90
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	58
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	196
	11		2	1	1/2, 4/1, 9/1	Normal	497
	12		2	1	1/2, 4/2, 9/1	Normal	497
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	90
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	138
	15		2	3	1/1, 6/1, 13/1	Normal	1082

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5	32, 91, 116, 130, 156, 239, 18
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	23	32	9	1	7
	2	✓	3	A,C,D	37	91	54	1	7
	3	✓	5	D,E,F	96	116	20	1	7
	4	✓	6	G	124	130	6	1	6
	5	✓	2	A,B,E	148	156	8	1	7
	6	✓	3	A,C,D	161	239	78	1	7
	7	✓	5	D,E,F	4	18	14	1	7

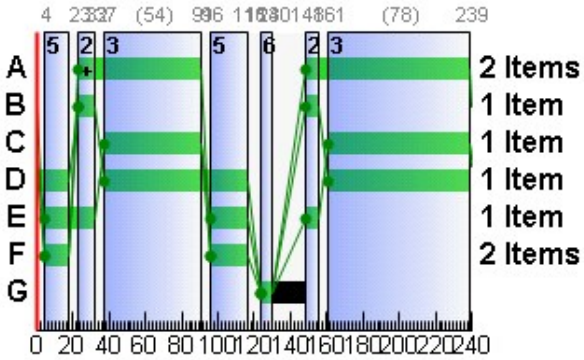
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	148	239	91
		2	✓	23	91	68
	B	1	✓	148	156	8
		2	✓	23	32	9
	C	1	✓	37	91	54
		2	✓	161	239	78
	D	1	✓	37	116	79
		2	✓	161	18	97
	E	1	✓	96	116	20
		2	✓	148	156	8
		3	✓	4	32	28
	F	1	✓	96	116	20
		2	✓	4	18	14
	G	1	✓	124	130	6

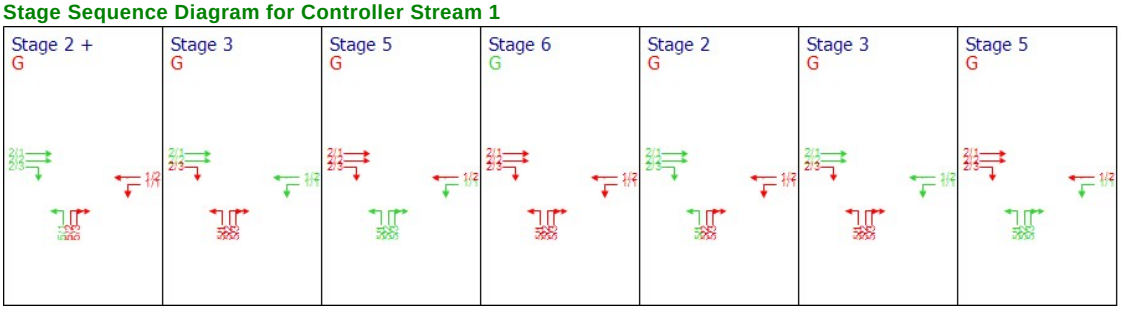
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3		
					Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	37	116	79	161	18	97			
1	2	1	1	C	37	91	54	161	239	78			
2	1	1	1	A	148	239	91	23	91	68			
2	2	1	1	A	148	239	91	23	91	68			
2	3	1	1	B	148	156	8	23	32	9			
5	1	1	1	E	96	116	20	148	156	8	4	32	28
5	2	1	1	F	96	116	20	4	18	14			
5	3	1	1	F	96	116	20	4	18	14			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	86	5	1082	1702	176	21.18	38.55	55.41	90.38	10.02	100.40
		2	87	4	994	2055	132	34.45	39.41	56.65	135.09	11.31	146.40
	2	1	7	1279	90	2055	159	8.09	1.45	18.56	2.87	0.37	3.25
		2	7	1279	90	2055	159	8.09	1.45	18.56	2.87	0.37	3.25
		3	85	6	138	2055	17	108.85	6.94	128.44	59.25	2.41	61.66
	3	1	0	Unrestricted	286	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	286	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	555	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	497	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	13	587	58	1800	56	27.53	1.46	8.39	6.30	0.55	6.85
		2	64	42	196	2055	34	60.79	8.17	46.95	47.00	2.47	49.47
		3	68	32	196	1915	34	64.26	8.39	48.23	49.68	2.55	52.23
	6	1	0	Unrestricted	1082	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	138	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	18	409	318	1800	240	0.21	0.02	0.04	0.27	0.00	0.27
	9	1	0	Unrestricted	1052	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	572	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	14	538	254	1800	240	0.16	0.01	0.03	0.16	0.00	0.16
		2	11	727	196	1800	240	0.12	0.01	0.02	0.09	0.00	0.09
	13	1	0	Unrestricted	1220	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	1082	1082	0		1702	1262	86		5	0.00	176
		2	994	994	-1	✓	2055	1147	87		4	0.00	132
	2	1	90	90	-1		2055	1379	7		1279	0.00	159
		2	90	90	-1		2055	1379	7		1279	0.00	159
		3	138	138	0		2055	163	85		6	0.00	17
	3	1	286	286	-1		Unrestricted	Unrestricted	0		Unrestricted	0.83	240
		2	286	286	-1		Unrestricted	Unrestricted	0		Unrestricted	0.84	240
	4	1	555	555	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.72	240
		2	497	497	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.86	240
	5	1	58	58	0		1800	443	13		587	0.00	56
		2	196	196	-1		2055	308	64		42	0.00	34
		3	196	196	-1		1915	287	68		32	0.00	34
	6	1	1082	1082	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	240
		2	138	138	0		Unrestricted	Unrestricted	0		Unrestricted	1.28	240
	8	1	318	318	-1		1800	1800	18		409	0.00	240
	9	1	1052	1052	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.64	240
	11	1	572	572	-2		Unrestricted	Unrestricted	0		Unrestricted	0.74	240
	12	1	254	254	-1		1800	1800	14		538	0.00	240
		2	196	196	-1		1800	1800	11		727	0.00	240
	13	1	1220	1220	0		Unrestricted	Unrestricted	0		Unrestricted	0.37	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	21.18	6.36	90.38	73.83	798.89	10.02
		2	48.00	34.45	9.51	135.09	90.78	902.31	11.31
	2	1	5.40	8.09	0.20	2.87	33.08	29.77	0.37
		2	5.40	8.09	0.20	2.87	33.08	29.77	0.37
		3	5.40	108.85	4.17	59.25	139.46	192.45	2.41
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	27.53	0.44	6.30	76.18	44.19	0.55
		2	12.00	60.79	3.31	47.00	100.68	197.33	2.47
		3	12.00	64.26	3.50	49.68	103.72	203.29	2.55
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.21	0.02	0.27	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.16	0.01	0.16	0.00	0.00	0.00
		2	24.00	0.12	0.01	0.09	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	38.55	69.57	55.41	0.00	0.00	
		2	0.00	39.41	69.57	56.65	0.00	0.00	
	2	1	0.00	1.45	7.83	18.56	0.00	0.00	
		2	0.00	1.45	7.83	18.56	0.00	0.00	
		3	0.00	6.94	5.40	128.44	0.00	0.00	
	3	1	0.00	0.00	55.16	0.00	0.00	8.00	
		2	0.00	0.00	52.31	0.00	0.00	9.00	
	4	1	0.00	0.00	8.70	0.00	0.00	58.00	
		2	0.00	0.00	8.70	0.00	0.00	98.00	
	5	1	0.00	1.46	17.39	8.39	0.00	51.00	
		2	0.00	8.17	17.39	46.95	0.00	0.00	
		3	0.00	8.39	17.39	48.23	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	20.00	
		2	0.00	0.00	57.94	0.00	0.00	157.00	
	8	1	0.00	0.02	52.17	0.04	0.00	0.00	
	9	1	0.00	0.00	48.14	0.00	0.00	18.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.01	34.78	0.03	0.00	0.00	
		2	0.00	0.01	34.78	0.02	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	5.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
2	05/12/2018 10:27:04	05/12/2018 10:27:05	08:00	240	424.04	27.74	86.63	1/2	0	0	1/2	8/1	1/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	87	4	9300	3647	10.74	393.97	30.07	424.04

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	9300	9300	-11	✓	87		4	3647

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	29.00	10.74	27.74	393.97	25.79	2398.01	30.07

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	128.44	0.00	424.00

A3 - DSCM35+NOBAN AM
D3 - AM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	428	428
	2	85	85
2	1	409	409
	2	409	409
	3	26	26
3	1	963	963
	2	963	963
4	1	46	46
	2	43	43
5	1	3	3
	2	554	554
	3	554	554
6	1	428	428
	2	26	26
8	1	843	843
9	1	88	88
11	1	1925	1925
12	1	557	557
	2	554	554
13	1	454	454

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	817	26
	2	85	0	428
	3	3	1108	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	554
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	409
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	3
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	554
	11		2	1	1/2, 4/1, 9/1	Normal	43
	12		2	1	1/2, 4/2, 9/1	Normal	43
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	409
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	26
	15		2	3	1/1, 6/1, 13/1	Normal	428

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5, 6	8, 32, 105, 119, 144, 173, 209, 223
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	1	8	7	1	7
	2	✓	3	A,C,D	13	32	19	1	7
	3	✓	5	D,E,F	37	105	68	1	7
	4	✓	6	G	113	119	6	1	6
	5	✓	2	A,B,E	137	144	7	1	7
	6	✓	3	A,C,D	149	173	24	1	7
	7	✓	5	D,E,F	178	209	31	1	7
	8	✓	6	G	217	223	6	1	6

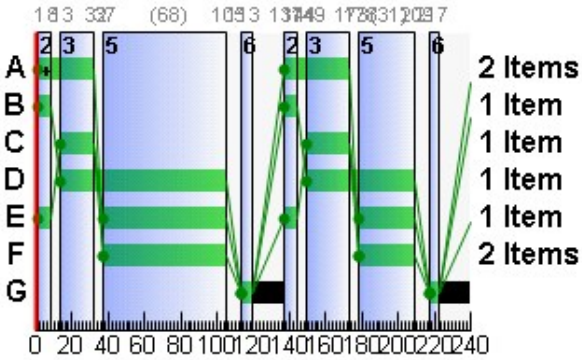
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	137	173	36
		2	✓	1	32	31
	B	1	✓	137	144	7
		2	✓	1	8	7
	C	1	✓	13	32	19
		2	✓	149	173	24
	D	1	✓	13	105	92
		2	✓	149	209	60
	E	1	✓	37	105	68
		2	✓	137	144	7
		3	✓	178	209	31
		4	✓	1	8	7
	F	1	✓	37	105	68
		2	✓	178	209	31
	G	1	✓	113	119	6
		2	✓	217	223	6

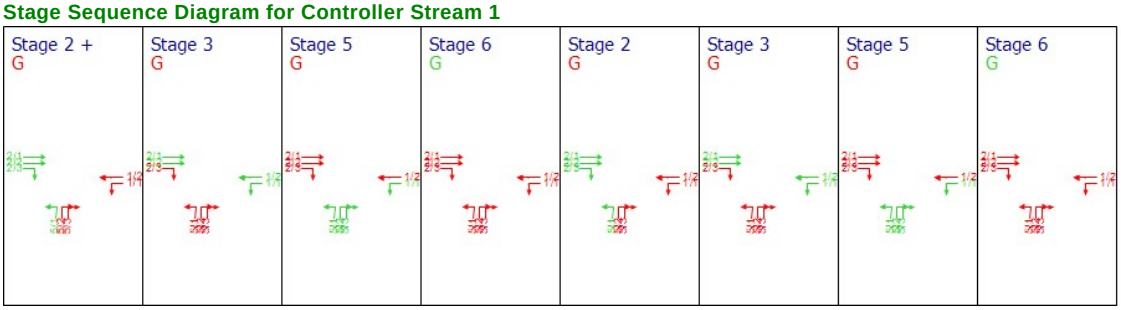
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	13	105	92	149	209	60						
1	2	1	1	C	13	32	19	149	173	24						
2	1	1	1	A	137	173	36	1	32	31						
2	2	1	1	A	137	173	36	1	32	31						
2	3	1	1	B	137	144	7	1	8	7						
5	1	1	1	E	37	105	68	137	144	7	178	209	31	1	8	7
5	2	1	1	F	37	105	68	178	209	31						
5	3	1	1	F	37	105	68	178	209	31						

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	39	130	428	1702	152	11.36	6.90	9.92	19.17	2.52	21.69
		2	22	303	86	2055	43	44.18	2.92	4.20	14.99	0.91	15.90
	2	1	69	30	409	2055	67	46.56	15.42	197.06	75.11	4.75	79.86
		2	69	30	409	2055	67	46.56	15.42	197.06	75.11	4.75	79.86
		3	19	374	26	2055	14	57.15	1.02	18.93	5.86	0.31	6.17
	3	1	0	Unrestricted	963	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	963	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	46	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	43	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	26225	3	1800	113	8.17	0.03	0.16	0.10	0.02	0.12
		2	64	40	554	2055	99	31.27	15.65	89.97	68.34	5.59	73.93
		3	69	31	554	1915	99	33.21	16.29	93.67	72.58	5.81	78.39
	6	1	0	Unrestricted	428	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	26	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	47	92	844	1800	240	0.88	0.21	0.40	2.93	0.00	2.93
	9	1	0	Unrestricted	89	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	1926	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	31	191	557	1800	240	0.45	0.07	0.20	0.98	0.00	0.98
		2	31	192	554	1800	240	0.44	0.07	0.20	0.97	0.00	0.97
	13	1	0	Unrestricted	454	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	428	428	0		1702	1092	39		130	0.00	152
		2	86	86	-1	✓	2055	385	22		303	0.00	43
	2	1	409	409	-1	✓	2055	591	69		30	0.00	67
		2	409	409	-1	✓	2055	591	69		30	0.00	67
		3	26	26	0		2055	137	19		374	0.00	14
	3	1	963	963	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.50	240
		2	963	963	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.50	240
	4	1	46	46	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.47	240
		2	43	43	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.60	240
	5	1	3	3	0		1800	878	0		26225	0.00	113
		2	554	554	0		2055	865	64		40	0.00	99
		3	554	554	0		1915	806	69		31	0.00	99
	6	1	428	428	0		Unrestricted	Unrestricted	0		Unrestricted	0.60	240
		2	26	26	0		Unrestricted	Unrestricted	0		Unrestricted	1.34	240
	8	1	844	844	-1	✓	1800	1800	47		92	0.00	240
	9	1	89	89	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.27	240
	11	1	1926	1926	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.43	240
	12	1	557	557	0		1800	1800	31		191	0.00	240
		2	554	554	0		1800	1800	31		192	0.00	240
	13	1	454	454	0		Unrestricted	Unrestricted	0		Unrestricted	0.53	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	11.36	1.35	19.17	46.96	201.01	2.52
		2	48.00	44.18	1.06	14.99	84.56	72.72	0.91
	2	1	5.40	46.56	5.29	75.11	92.71	379.20	4.75
		2	5.40	46.56	5.29	75.11	92.71	379.20	4.75
		3	5.40	57.15	0.41	5.86	95.87	24.93	0.31
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	8.17	0.01	0.10	51.26	1.54	0.02
		2	12.00	31.27	4.81	68.34	80.44	445.65	5.59
		3	12.00	33.21	5.11	72.58	83.57	462.97	5.81
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.88	0.21	2.93	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.45	0.07	0.98	0.00	0.00	0.00
		2	24.00	0.44	0.07	0.97	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	6.90	69.57	9.92	0.00	0.00	
		2	0.00	2.92	69.57	4.20	0.00	0.00	
	2	1	0.00	15.42	7.83	197.06	0.00	0.00	
		2	0.00	15.42	7.83	197.06	0.00	0.00	
		3	0.00	1.02	5.40	18.93	0.00	12.00	
	3	1	0.00	0.00	55.16	0.00	0.00	6.00	
		2	0.00	0.00	52.31	0.00	0.00	7.00	
	4	1	0.00	0.00	8.70	0.00	0.00	216.00	
		2	0.00	0.00	8.70	0.00	0.00	216.00	
	5	1	0.00	0.03	17.39	0.16	0.00	113.00	
		2	0.00	15.65	17.39	89.97	0.00	0.00	
		3	0.00	16.29	17.39	93.67	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	54.00	
		2	0.00	0.00	57.94	0.00	0.00	204.00	
	8	1	0.00	0.21	52.17	0.40	0.00	88.00	
	9	1	0.00	0.00	48.14	0.00	0.00	169.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.07	34.78	0.20	0.00	0.00	
		2	0.00	0.07	34.78	0.20	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	30.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
3	05/12/2018 10:27:06	05/12/2018 10:27:06	08:00	240	360.81	23.67	69.23	2/1	0	0	2/1	8/1	2/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	69	30	9362	3534	9.10	336.15	24.67	360.81

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	9362	9362	-7	✓	69		30	3534

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	25.58	9.10	23.67	336.15	21.01	1967.21	24.67

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	197.06	0.00	1115.00

A4 - DSCM35+NOBAN PM
D4 - PM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	1080	1080
	2	972	972
2	1	92	92
	2	92	92
	3	138	138
3	1	288	288
	2	288	288
4	1	507	507
	2	486	486
5	1	21	21
	2	196	196
	3	196	196
6	1	1080	1080
	2	138	138
8	1	321	321
9	1	993	993
11	1	575	575
12	1	217	217
	2	196	196
13	1	1218	1218

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	183	138
	2	972	0	1080
	3	21	392	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	196
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	92
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	21
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	196
	11		2	1	1/2, 4/1, 9/1	Normal	486
	12		2	1	1/2, 4/2, 9/1	Normal	486
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	92
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	138
	15		2	3	1/1, 6/1, 13/1	Normal	1080

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5	32, 90, 116, 130, 156, 239, 18
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	23	32	9	1	7
	2	✓	3	A,C,D	37	90	53	1	7
	3	✓	5	D,E,F	95	116	21	1	7
	4	✓	6	G	124	130	6	1	6
	5	✓	2	A,B,E	148	156	8	1	7
	6	✓	3	A,C,D	161	239	78	1	7
	7	✓	5	D,E,F	4	18	14	1	7

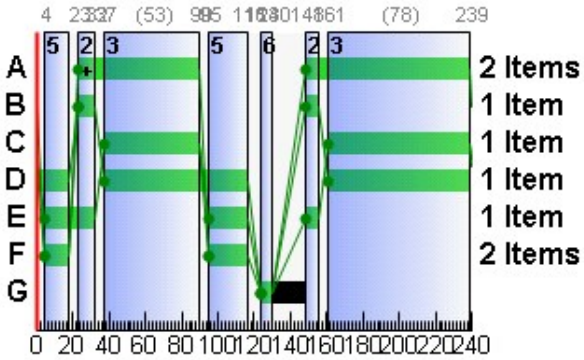
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	148	239	91
		2	✓	23	90	67
	B	1	✓	148	156	8
		2	✓	23	32	9
	C	1	✓	37	90	53
		2	✓	161	239	78
	D	1	✓	37	116	79
		2	✓	161	18	97
	E	1	✓	95	116	21
		2	✓	148	156	8
		3	✓	4	32	28
	F	1	✓	95	116	21
		2	✓	4	18	14
	G	1	✓	124	130	6

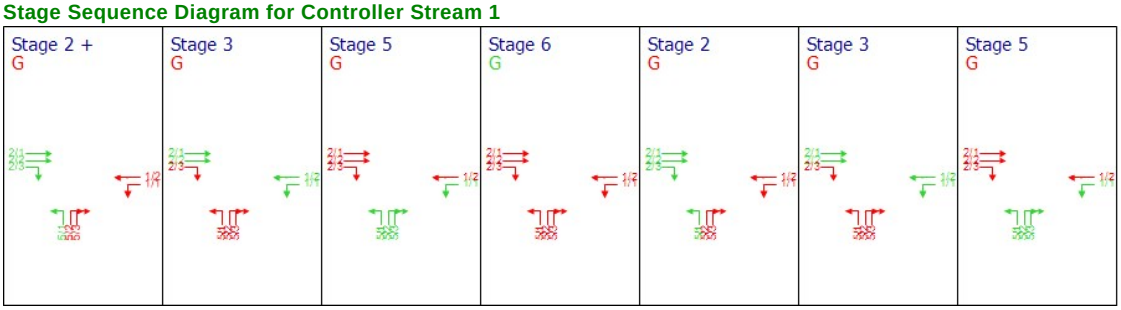
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3		
					Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	37	116	79	161	18	97			
1	2	1	1	C	37	90	53	161	239	78			
2	1	1	1	A	148	239	91	23	90	67			
2	2	1	1	A	148	239	91	23	90	67			
2	3	1	1	B	148	156	8	23	32	9			
5	1	1	1	E	95	116	21	148	156	8	4	32	28
5	2	1	1	F	95	116	21	4	18	14			
5	3	1	1	F	95	116	21	4	18	14			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	86	5	1080	1702	176	21.04	38.45	55.27	89.61	9.96	99.57
		2	85	5	972	2055	131	33.65	38.03	54.67	129.01	10.87	139.88
	2	1	7	1240	92	2055	158	8.35	1.51	19.30	3.03	0.39	3.42
		2	7	1240	92	2055	158	8.35	1.51	19.30	3.03	0.39	3.42
		3	85	6	138	2055	17	108.85	6.94	128.44	59.25	2.41	61.66
	3	1	0	Unrestricted	288	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	288	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	507	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	486	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	5	1829	21	1800	57	26.36	1.45	8.34	2.18	0.20	2.38
		2	62	45	196	2055	35	59.50	8.12	46.66	46.00	2.44	48.44
		3	66	36	196	1915	35	62.58	8.32	47.81	48.38	2.51	50.90
	6	1	0	Unrestricted	1080	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	138	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	18	403	322	1800	240	0.22	0.02	0.04	0.28	0.00	0.28
	9	1	0	Unrestricted	993	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	576	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	12	647	217	1800	240	0.14	0.01	0.02	0.12	0.00	0.12
		2	11	727	196	1800	240	0.12	0.01	0.02	0.09	0.00	0.09
	13	1	0	Unrestricted	1218	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	1080	1080	0		1702	1262	86		5	0.00	176
		2	972	972	0		2055	1139	85		5	0.00	131
	2	1	92	92	-1		2055	1370	7		1240	0.00	158
		2	92	92	-1		2055	1370	7		1240	0.00	158
		3	138	138	0		2055	163	85		6	0.00	17
	3	1	288	288	-1		Unrestricted	Unrestricted	0		Unrestricted	0.82	240
		2	288	288	-1		Unrestricted	Unrestricted	0		Unrestricted	0.83	240
	4	1	507	507	0		Unrestricted	Unrestricted	0		Unrestricted	0.80	240
		2	486	486	0		Unrestricted	Unrestricted	0		Unrestricted	0.87	240
	5	1	21	21	0		1800	450	5		1829	0.00	57
		2	196	196	0		2055	317	62		45	0.00	35
		3	196	196	0		1915	295	66		36	0.00	35
	6	1	1080	1080	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	240
		2	138	138	0		Unrestricted	Unrestricted	0		Unrestricted	1.28	240
	8	1	322	322	-1		1800	1800	18		403	0.00	240
	9	1	993	993	0		Unrestricted	Unrestricted	0		Unrestricted	0.71	240
	11	1	576	576	-1		Unrestricted	Unrestricted	0		Unrestricted	0.73	240
	12	1	217	217	0		1800	1800	12		647	0.00	240
		2	196	196	0		1800	1800	11		727	0.00	240
	13	1	1218	1218	0		Unrestricted	Unrestricted	0		Unrestricted	0.37	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	21.04	6.31	89.61	73.53	794.14	9.96
		2	48.00	33.65	9.08	129.01	89.19	866.93	10.87
	2	1	5.40	8.35	0.21	3.03	33.53	30.85	0.39
		2	5.40	8.35	0.21	3.03	33.53	30.85	0.39
		3	5.40	108.85	4.17	59.25	139.46	192.45	2.41
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	26.36	0.15	2.18	75.24	15.80	0.20
		2	12.00	59.50	3.24	46.00	99.30	194.63	2.44
		3	12.00	62.58	3.41	48.38	102.24	200.40	2.51
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.22	0.02	0.28	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.14	0.01	0.12	0.00	0.00	0.00
		2	24.00	0.12	0.01	0.09	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	38.45	69.57	55.27	0.00	0.00	
		2	0.00	38.03	69.57	54.67	0.00	0.00	
	2	1	0.00	1.51	7.83	19.30	0.00	0.00	
		2	0.00	1.51	7.83	19.30	0.00	0.00	
		3	0.00	6.94	5.40	128.44	0.00	0.00	
	3	1	0.00	0.00	55.16	0.00	0.00	9.00	
		2	0.00	0.00	52.31	0.00	0.00	10.00	
	4	1	0.00	0.00	8.70	0.00	0.00	82.00	
		2	0.00	0.00	8.70	0.00	0.00	99.00	
	5	1	0.00	1.45	17.39	8.34	0.00	56.00	
		2	0.00	8.12	17.39	46.66	0.00	0.00	
		3	0.00	8.32	17.39	47.81	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	20.00	
		2	0.00	0.00	57.94	0.00	0.00	157.00	
	8	1	0.00	0.02	52.17	0.04	0.00	0.00	
	9	1	0.00	0.00	48.14	0.00	0.00	38.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.01	34.78	0.02	0.00	0.00	
		2	0.00	0.01	34.78	0.02	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	5.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
4	05/12/2018 10:27:07	05/12/2018 10:27:07	08:00	240	410.15	26.83	85.56	1/1	0	0	1/1	8/1	1/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	86	5	9096	3647	10.62	380.99	29.17	410.15

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	9096	9096	-4		86		5	3647

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	29.15	10.62	26.83	380.99	25.57	2326.06	29.17

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	128.44	0.00	476.00

A5 - 2035 DS AM
D5 - AM Peak 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	268	268
	2	35	35
2	1	425	425
	2	425	425
	3	96	96
3	1	993	993
	2	993	993
4	1	21	21
	2	18	18
5	1	3	3
	2	568	568
	3	568	568
6	1	268	268
	2	96	96
8	1	946	946
9	1	38	38
11	1	1986	1986
12	1	571	571
	2	568	568
13	1	364	364

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	850	96
	2	35	0	268
	3	3	1136	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	568
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	425
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	3
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	568
	11		2	1	1/2, 4/1, 9/1	Normal	18
	12		2	1	1/2, 4/2, 9/1	Normal	18
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	425
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	96
	15		2	3	1/1, 6/1, 13/1	Normal	268

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5, 6	10, 33, 105, 119, 152, 172, 208, 222
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	0	10	10	1	7
	2	✓	3	A,C,D	15	33	18	1	7
	3	✓	5	D,E,F	38	105	67	1	7
	4	✓	6	G	113	119	6	1	6
	5	✓	2	A,B,E	137	152	15	1	7
	6	✓	3	A,C,D	157	172	15	1	7
	7	✓	5	D,E,F	177	208	31	1	7
	8	✓	6	G	216	222	6	1	6

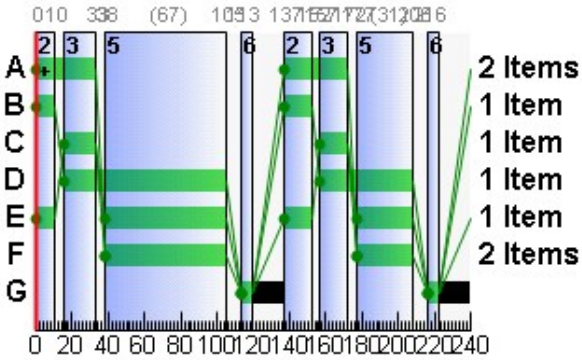
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	137	172	35
		2	✓	0	33	33
	B	1	✓	137	152	15
		2	✓	0	10	10
	C	1	✓	15	33	18
		2	✓	157	172	15
	D	1	✓	15	105	90
		2	✓	157	208	51
	E	1	✓	38	105	67
		2	✓	137	152	15
		3	✓	177	208	31
		4	✓	0	10	10
	F	1	✓	38	105	67
		2	✓	177	208	31
	G	1	✓	113	119	6
		2	✓	216	222	6

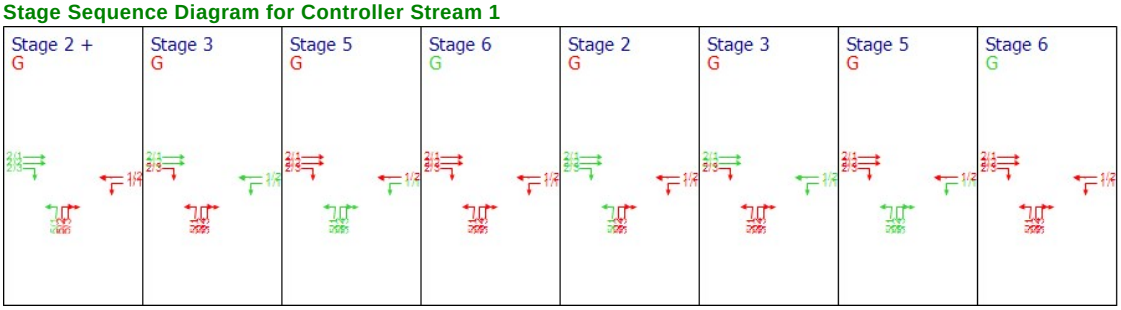
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	15	105	90	157	208	51						
1	2	1	1	C	15	33	18	157	172	15						
2	1	1	1	A	137	172	35	0	33	33						
2	2	1	1	A	137	172	35	0	33	33						
2	3	1	1	B	137	152	15	0	10	10						
5	1	1	1	E	38	105	67	137	152	15	177	208	31	0	10	10
5	2	1	1	F	38	105	67	177	208	31						
5	3	1	1	F	38	105	67	177	208	31						

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	26	241	268	1702	141	12.31	4.51	6.49	13.01	1.58	14.58
		2	12	649	36	2055	33	47.21	1.26	1.81	6.70	0.39	7.09
	2	1	71	27	425	2055	68	46.85	16.08	205.44	78.54	4.98	83.52
		2	71	27	425	2055	68	46.85	16.08	205.44	78.54	4.98	83.52
		3	42	117	96	2055	25	57.06	4.15	76.78	21.61	1.17	22.78
	3	1	0	Unrestricted	993	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	993	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	21	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	18	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	28475	3	1800	123	6.96	0.03	0.15	0.08	0.02	0.10
		2	66	36	568	2055	98	32.33	16.11	92.63	72.43	5.85	78.28
		3	71	26	568	1915	98	34.53	16.65	95.71	77.36	6.08	83.44
	6	1	0	Unrestricted	268	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	96	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	53	71	946	1800	240	1.11	0.29	0.56	4.13	0.00	4.13
	9	1	0	Unrestricted	39	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	1986	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	32	184	571	1800	240	0.46	0.07	0.21	1.05	0.00	1.05
		2	32	185	568	1800	240	0.46	0.07	0.21	1.03	0.00	1.03
	13	1	0	Unrestricted	364	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	268	268	0		1702	1014	26		241	0.00	141
		2	36	36	-1		2055	300	12		649	0.00	33
	2	1	425	425	0		2055	599	71		27	0.00	68
		2	425	425	0		2055	599	71		27	0.00	68
		3	96	96	0		2055	231	42		117	0.00	25
	3	1	993	993	0		Unrestricted	Unrestricted	0		Unrestricted	0.50	240
		2	993	993	0		Unrestricted	Unrestricted	0		Unrestricted	0.50	240
	4	1	21	21	-1		Unrestricted	Unrestricted	0		Unrestricted	1.43	240
		2	18	18	-1		Unrestricted	Unrestricted	0		Unrestricted	1.68	240
	5	1	3	3	0		1800	953	0		28475	0.00	123
		2	568	568	0		2055	856	66		36	0.00	98
		3	568	568	0		1915	798	71		26	0.00	98
	6	1	268	268	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	240
		2	96	96	0		Unrestricted	Unrestricted	0		Unrestricted	1.30	240
	8	1	946	946	0		1800	1800	53		71	0.00	240
	9	1	39	39	-1		Unrestricted	Unrestricted	0		Unrestricted	1.24	240
	11	1	1986	1986	0		Unrestricted	Unrestricted	0		Unrestricted	0.43	240
	12	1	571	571	0		1800	1800	32		184	0.00	240
		2	568	568	0		1800	1800	32		185	0.00	240
	13	1	364	364	0		Unrestricted	Unrestricted	0		Unrestricted	0.63	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	12.31	0.92	13.01	46.88	125.65	1.58
		2	48.00	47.21	0.47	6.70	86.36	31.09	0.39
	2	1	5.40	46.85	5.53	78.54	93.44	397.10	4.98
		2	5.40	46.85	5.53	78.54	93.44	397.10	4.98
		3	5.40	57.06	1.52	21.61	97.43	93.54	1.17
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	6.96	0.01	0.08	47.09	1.41	0.02
		2	12.00	32.33	5.10	72.43	82.09	466.28	5.85
		3	12.00	34.53	5.45	77.36	85.39	485.02	6.08
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	1.11	0.29	4.13	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.46	0.07	1.05	0.00	0.00	0.00
		2	24.00	0.46	0.07	1.03	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	4.51	69.57	6.49	0.00	0.00	
		2	0.00	1.26	69.57	1.81	0.00	30.00	
	2	1	0.00	16.08	7.83	205.44	0.00	0.00	
		2	0.00	16.08	7.83	205.44	0.00	0.00	
		3	0.00	4.15	5.40	76.78	0.00	0.00	
	3	1	0.00	0.00	55.16	0.00	0.00	6.00	
		2	0.00	0.00	52.31	0.00	0.00	7.00	
	4	1	0.00	0.00	8.70	0.00	0.00	226.00	
		2	0.00	0.00	8.70	0.00	0.00	226.00	
	5	1	0.00	0.03	17.39	0.15	0.00	123.00	
		2	0.00	16.11	17.39	92.63	0.00	0.00	
		3	0.00	16.65	17.39	95.71	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	73.00	
		2	0.00	0.00	57.94	0.00	0.00	168.00	
	8	1	0.00	0.29	52.17	0.56	0.00	95.00	
	9	1	0.00	0.00	48.14	0.00	0.00	191.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.07	34.78	0.21	0.00	0.00	
		2	0.00	0.07	34.78	0.21	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	39.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
5	05/12/2018 10:27:07	05/12/2018 10:27:08	08:00	240	379.52	24.96	71.19	5/3	0	0	5/3	8/1	5/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	71	26	9252	3534	9.71	354.47	25.04	379.52

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	9252	9252	-3		71		26	3534

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	25.10	9.71	24.96	354.47	21.59	1997.19	25.04

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	205.44	0.00	1184.00

A6 - 2035 DS PM
D6 - PM Peak 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	812	812
	2	624	624
2	1	65	65
	2	65	65
	3	163	163
3	1	248	248
	2	248	248
4	1	934	934
	2	312	312
5	1	622	622
	2	183	183
	3	183	183
6	1	812	812
	2	163	163
8	1	293	293
9	1	1246	1246
11	1	495	495
12	1	805	805
	2	183	183
13	1	975	975

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	130	163
	2	624	0	812
	3	622	365	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	183
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	65
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	622
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	183
	11		2	1	1/2, 4/1, 9/1	Normal	312
	12		2	1	1/2, 4/2, 9/1	Normal	312
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	65
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	163
	15		2	3	1/1, 6/1, 13/1	Normal	812

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5	29, 80, 116, 130, 163, 211, 15
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	20	29	9	1	7
	2	✓	3	A,C,D	34	80	46	1	7
	3	✓	5	D,E,F	85	116	31	1	7
	4	✓	6	G	124	130	6	1	6
	5	✓	2	A,B,E	148	163	15	1	7
	6	✓	3	A,C,D	168	211	43	1	7
	7	✓	5	D,E,F	216	15	39	1	7

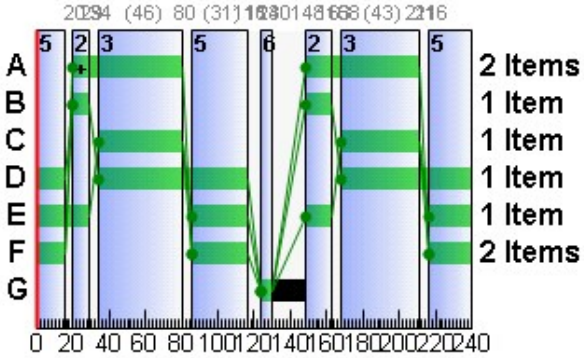
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	148	211	63
		2	✓	20	80	60
	B	1	✓	148	163	15
		2	✓	20	29	9
	C	1	✓	34	80	46
		2	✓	168	211	43
	D	1	✓	34	116	82
		2	✓	168	15	87
	E	1	✓	85	116	31
		2	✓	148	163	15
		3	✓	216	29	53
	F	1	✓	85	116	31
		2	✓	216	15	39
	G	1	✓	124	130	6

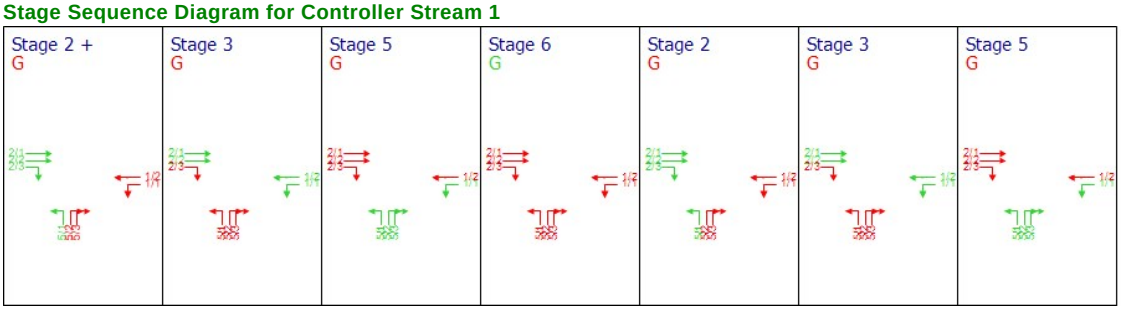
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3		
					Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	34	116	82	168	15	87			
1	2	1	1	C	34	80	46	168	211	43			
2	1	1	1	A	148	211	63	20	80	60			
2	2	1	1	A	148	211	63	20	80	60			
2	3	1	1	B	148	163	15	20	29	9			
5	1	1	1	E	85	116	31	148	163	15	216	29	53
5	2	1	1	F	85	116	31	216	15	39			
5	3	1	1	F	85	116	31	216	15	39			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	67	34	812	1702	169	14.64	22.55	32.42	46.90	5.58	52.48
		2	80	12	624	2055	89	43.16	23.06	33.14	106.23	7.39	113.62
	2	1	6	1382	65	2055	123	14.56	1.08	13.85	3.73	0.37	4.10
		2	6	1382	65	2055	123	14.56	1.08	13.85	3.73	0.37	4.10
		3	73	23	163	2055	24	73.22	5.95	110.14	47.08	2.17	49.24
	3	1	0	Unrestricted	248	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	248	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	934	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	312	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	81	11	622	1800	99	31.41	15.05	86.55	77.07	6.76	83.83
		2	30	203	183	2055	70	34.54	5.55	31.93	24.93	1.75	26.68
		3	32	183	183	1915	70	35.01	5.62	32.29	25.27	1.77	27.04
	6	1	0	Unrestricted	812	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	163	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	18	412	293	1800	240	1.00	1.73	3.31	1.16	0.30	1.45
	9	1	0	Unrestricted	1246	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	496	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	45	101	805	1800	240	0.81	0.18	0.52	2.57	0.00	2.57
		2	10	785	183	1800	240	0.11	0.01	0.02	0.08	0.00	0.08
	13	1	0	Unrestricted	975	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	812	812	0		1702	1213	67		34	0.00	169
		2	624	624	0		2055	779	80		12	0.00	89
	2	1	65	65	0		2055	1070	6		1382	0.13	123
		2	65	65	0		2055	1070	6		1382	0.13	123
		3	163	163	0		2055	223	73		23	0.15	24
	3	1	248	248	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.76	240
		2	248	248	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.77	240
	4	1	934	934	0		Unrestricted	Unrestricted	0		Unrestricted	0.55	240
		2	312	312	0		Unrestricted	Unrestricted	0		Unrestricted	1.21	240
	5	1	622	622	0		1800	765	81		11	0.00	99
		2	183	183	-1	✓	2055	617	30		203	0.00	70
		3	183	183	-1	✓	1915	575	32		183	0.00	70
	6	1	812	812	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	240
		2	163	163	0		Unrestricted	Unrestricted	0		Unrestricted	1.26	240
	8	1	293	293	0		1800	1666	18		412	0.00	240
	9	1	1246	1246	0		Unrestricted	Unrestricted	0		Unrestricted	0.34	240
	11	1	496	496	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.68	240
	12	1	805	805	-1	✓	1800	1800	45		101	0.00	240
		2	183	183	-1	✓	1800	1800	10		785	0.00	240
	13	1	975	975	0		Unrestricted	Unrestricted	0		Unrestricted	0.43	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	14.64	3.30	46.90	54.78	444.81	5.58
		2	48.00	43.16	7.48	106.23	94.43	589.21	7.39
	2	1	5.40	14.56	0.26	3.73	44.97	29.23	0.37
		2	5.40	14.56	0.26	3.73	44.97	29.23	0.37
		3	5.40	73.22	3.32	47.08	106.05	172.86	2.17
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	31.41	5.43	77.07	86.64	538.92	6.76
		2	12.00	34.54	1.76	24.93	76.27	139.58	1.75
		3	12.00	35.01	1.78	25.27	77.18	141.24	1.77
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	1.00	0.08	1.16	8.05	23.60	0.30
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.81	0.18	2.57	0.00	0.00	0.00
		2	24.00	0.11	0.01	0.08	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	22.55	69.57	32.42	0.00	0.00	
		2	0.00	23.06	69.57	33.14	0.00	0.00	
	2	1	0.00	1.08	7.83	13.85	0.00	7.00	
		2	0.00	1.08	7.83	13.85	0.00	7.00	
		3	0.00	5.95	5.40	110.14	0.00	0.00	
	3	1	0.00	0.00	55.16	0.00	0.00	21.00	
		2	0.00	0.00	52.31	0.00	0.00	22.00	
	4	1	0.00	0.00	8.70	0.00	0.00	28.00	
		2	0.00	0.00	8.70	0.00	0.00	143.00	
	5	1	0.00	15.05	17.39	86.55	0.00	0.00	
		2	0.00	5.55	17.39	31.93	0.00	0.00	
		3	0.00	5.62	17.39	32.29	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	29.00	
		2	0.00	0.00	57.94	0.00	0.00	151.00	
	8	1	0.00	1.73	52.17	3.31	0.00	17.93	
	9	1	0.00	0.00	48.14	0.00	0.00	0.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.18	34.78	0.52	0.00	0.00	
		2	0.00	0.01	34.78	0.02	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	8.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
6	05/12/2018 10:27:08	05/12/2018 10:27:09	08:00	240	365.20	23.86	81.31	5/1	0	0	5/1	12/1	5/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	81	11	9432	3647	9.11	338.76	26.44	365.20

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	9432	9432	-4	✓	81		11	3647

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	26.27	9.11	23.86	338.76	22.36	2108.69	26.44

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	110.14	0.00	433.93

A7 - 2020 DS AM
D7 - AM Peak 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	320	320
	2	74	74
2	1	144	144
	2	144	144
	3	77	77
3	1	452	452
	2	452	452
4	1	76	76
	2	37	37
5	1	39	39
	2	308	308
	3	308	308
6	1	320	320
	2	77	77
8	1	365	365
9	1	113	113
11	1	903	903
12	1	347	347
	2	308	308
13	1	397	397

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	288	77
	2	74	0	320
	3	39	615	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	308
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	144
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	39
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	308
	11		2	1	1/2, 4/1, 9/1	Normal	37
	12		2	1	1/2, 4/2, 9/1	Normal	37
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	144
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	77
	15		2	3	1/1, 6/1, 13/1	Normal	320

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5, 6	14, 35, 104, 118, 144, 157, 206, 220
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	238	14	16	1	7
	2	✓	3	A,C,D	19	35	16	1	7
	3	✓	5	D,E,F	40	104	64	1	7
	4	✓	6	G	112	118	6	1	6
	5	✓	2	A,B,E	136	144	8	1	7
	6	✓	3	A,C,D	149	157	8	1	7
	7	✓	5	D,E,F	162	206	44	1	7
	8	✓	6	G	214	220	6	1	6

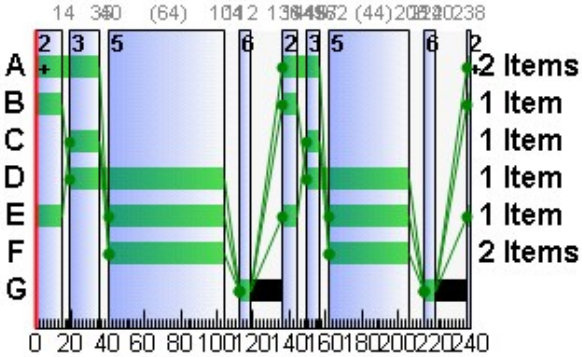
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	136	157	21
		2	✓	238	35	37
	B	1	✓	136	144	8
		2	✓	238	14	16
	C	1	✓	19	35	16
		2	✓	149	157	8
	D	1	✓	19	104	85
		2	✓	149	206	57
	E	1	✓	40	104	64
		2	✓	136	144	8
		3	✓	162	206	44
		4	✓	238	14	16
	F	1	✓	40	104	64
		2	✓	162	206	44
	G	1	✓	112	118	6
		2	✓	214	220	6

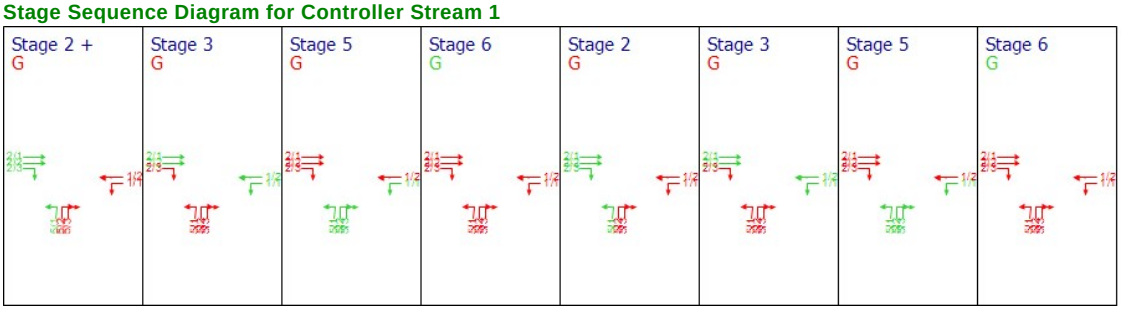
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	19	104	85	149	206	57						
1	2	1	1	C	19	35	16	149	157	8						
2	1	1	1	A	136	157	21	238	35	37						
2	2	1	1	A	136	157	21	238	35	37						
2	3	1	1	B	136	144	8	238	14	16						
5	1	1	1	E	40	104	64	136	144	8	162	206	44	238	14	16
5	2	1	1	F	40	104	64	162	206	44						
5	3	1	1	F	40	104	64	162	206	44						

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	31	187	320	1702	142	12.71	5.76	8.28	16.04	1.93	17.98
		2	33	171	74	2055	24	53.66	2.49	3.58	15.66	0.88	16.54
	2	1	28	221	144	2055	58	38.11	4.33	55.39	21.65	1.45	23.10
		2	28	221	144	2055	58	38.11	4.33	55.39	21.65	1.45	23.10
		3	35	160	77	2055	24	54.93	3.09	57.24	16.68	0.93	17.61
	3	1	0	Unrestricted	452	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	452	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	76	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	37	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	4	2254	39	1800	132	6.20	0.34	1.94	0.95	0.21	1.17
		2	33	175	308	2055	108	21.95	7.35	42.27	26.67	2.42	29.09
		3	35	156	308	1915	108	22.40	7.45	42.85	27.22	2.46	29.68
	6	1	0	Unrestricted	320	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	77	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	20	344	365	1800	240	0.25	0.03	0.05	0.37	0.00	0.37
	9	1	0	Unrestricted	113	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	904	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	19	367	347	1800	240	0.24	0.02	0.07	0.33	0.00	0.33
		2	17	426	308	1800	240	0.21	0.02	0.05	0.25	0.00	0.25
	13	1	0	Unrestricted	397	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	320	320	0		1702	1021	31		187	0.00	142
		2	74	74	0		2055	223	33		171	0.00	24
	2	1	144	144	0		2055	514	28		221	0.00	58
		2	144	144	0		2055	514	28		221	0.00	58
		3	77	77	0		2055	223	35		160	0.00	24
	3	1	452	452	-1		Unrestricted	Unrestricted	0		Unrestricted	0.59	240
		2	452	452	-1		Unrestricted	Unrestricted	0		Unrestricted	0.60	240
	4	1	76	76	0		Unrestricted	Unrestricted	0		Unrestricted	1.05	240
		2	37	37	0		Unrestricted	Unrestricted	0		Unrestricted	1.73	240
	5	1	39	39	0		1800	1020	4		2254	0.00	132
		2	308	308	-1		2055	942	33		175	0.00	108
		3	308	308	-1		1915	878	35		156	0.00	108
	6	1	320	320	0		Unrestricted	Unrestricted	0		Unrestricted	0.67	240
		2	77	77	0		Unrestricted	Unrestricted	0		Unrestricted	1.31	240
	8	1	365	365	0		1800	1800	20		344	0.00	240
	9	1	113	113	0		Unrestricted	Unrestricted	0		Unrestricted	0.89	240
	11	1	904	904	-1		Unrestricted	Unrestricted	0		Unrestricted	0.49	240
	12	1	347	347	-1		1800	1800	19		367	0.00	240
		2	308	308	-1		1800	1800	17		426	0.00	240
	13	1	397	397	0		Unrestricted	Unrestricted	0		Unrestricted	0.60	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	12.71	1.13	16.04	48.17	154.15	1.93
		2	48.00	53.66	1.10	15.66	94.39	69.85	0.88
	2	1	5.40	38.11	1.52	21.65	80.22	115.52	1.45
		2	5.40	38.11	1.52	21.65	80.22	115.52	1.45
		3	5.40	54.93	1.17	16.68	96.01	73.93	0.93
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	6.20	0.07	0.95	43.45	16.95	0.21
		2	12.00	21.95	1.88	26.67	62.72	193.17	2.42
		3	12.00	22.40	1.92	27.22	63.62	195.96	2.46
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.25	0.03	0.37	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.24	0.02	0.33	0.00	0.00	0.00
		2	24.00	0.21	0.02	0.25	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	5.76	69.57	8.28	0.00	0.00	
		2	0.00	2.49	69.57	3.58	0.00	0.00	
	2	1	0.00	4.33	7.83	55.39	0.00	0.00	
		2	0.00	4.33	7.83	55.39	0.00	0.00	
		3	0.00	3.09	5.40	57.24	0.00	0.00	
	3	1	0.00	0.00	55.16	0.00	0.00	25.00	
		2	0.00	0.00	52.31	0.00	0.00	27.00	
	4	1	0.00	0.00	8.70	0.00	0.00	193.00	
		2	0.00	0.00	8.70	0.00	0.00	219.00	
	5	1	0.00	0.34	17.39	1.94	0.00	132.00	
		2	0.00	7.35	17.39	42.27	0.00	0.00	
		3	0.00	7.45	17.39	42.85	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	68.00	
		2	0.00	0.00	57.94	0.00	0.00	174.00	
	8	1	0.00	0.03	52.17	0.05	0.00	0.00	
	9	1	0.00	0.00	48.14	0.00	0.00	127.00	
	11	1	0.00	0.00	30.63	0.00	0.00	0.00	
	12	1	0.00	0.02	34.78	0.07	0.00	0.00	
		2	0.00	0.02	34.78	0.05	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	35.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
7	05/12/2018 10:27:09	05/12/2018 10:27:11	08:00	240	159.19	10.38	35.09	5/3	0	0	5/3	8/1	5/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	35	156	5262	3534	7.10	147.47	11.72	159.19

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	5262	5262	-4		35		156	3534

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	25.95	7.10	10.38	147.47	17.77	935.05	11.72

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	57.24	0.00	1000.00

A8 - 2020 DS PM
D8 - PM Peak 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	GDDR WB		1
2	(untitled)		1
3	(untitled)		6
4	(untitled)		7
5	GLDR		1
6	(untitled)		8
8	(untitled)		3
9	(untitled)		
11	(untitled)		
12	(untitled)		4
13	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	GDDR WB			400.00	✓	Sum of lanes	1702			✓		Normal	
	2	(untitled)			400.00	✓	Sum of lanes	2055			✓		Normal	
2	1	GDDR EB			45.00	✓	Sum of lanes	2055			✓		Normal	
	2	(untitled)			45.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			45.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
3	1	(untitled)		✓	317.16								Normal	
	2	(untitled)		✓	300.81								Normal	
4	1	(untitled)			50.00								Normal	
	2	(untitled)			50.00								Normal	
5	1	GLDR			100.00	✓	Directly entered	1800	✓	1800	✓		Normal	
	2	(untitled)			100.00	✓	Sum of lanes	2055			✓		Normal	
	3	(untitled)			100.00	✓	Sum of lanes	1915			✓		Normal	
6	1	(untitled)		✓	237.70								Normal	
	2	(untitled)		✓	333.13								Normal	
8	1	(untitled)			300.00	✓	Sum of lanes	1800					Normal	
9	1	(untitled)		✓	276.83								Normal	
11	1	(untitled)		✓	176.10								Normal	
12	1	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
	2	(untitled)			200.00	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	202.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	12.00	✓	1702
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
3	1	2	(untitled)											
	2	1	(untitled)											
4	1	2	(untitled)											
	2	1	(untitled)											
5	1	1	(untitled)											
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
6	1	2	(untitled)											
	2	1	(untitled)											
8	1	1	(untitled)											1800
9	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800
	2	2	(untitled)											1800
13	1	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
2	1	PDM	100	100	100		0.00		
	2	PDM	100	100	100		0.00		
	3	Flare	100	100	100		1.00		
3	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
4	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
5	1	Flare	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
	3	NetworkDefault	100	100	100		0.00		
6	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
8	1	NetworkDefault	100	100	100		0.00		
9	1	NetworkDefault	100	100	100		0.00		
11	1	NetworkDefault	100	100	100		0.00		
12	1	NetworkDefault	100	100	100		0.00		
	2	NetworkDefault	100	100	100		0.00		
13	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	378	378
	2	211	211
2	1	60	60
	2	60	60
	3	137	137
3	1	173	173
	2	173	173
4	1	315	315
	2	106	106
5	1	209	209
	2	113	113
	3	113	113
6	1	378	378
	2	137	137
8	1	257	257
9	1	420	420
11	1	346	346
12	1	322	322
	2	113	113
13	1	515	515

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	D	
	2	1	C	
2	1	1	A	
	2	1	A	
	3	1	B	
5	1	1	E	
	2	1	F	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	120	137
	2	211	0	378
	3	209	226	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	8/1	9/1	#0000FF
	2	(untitled)	1/1, 1/2	11/1	#FF0000
	3	(untitled)	12/2, 12/1	13/1	#00FF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	5		3	2	12/2, 5/3, 3/2, 11/1	Normal	113
	8		1	2	8/1, 2/2, 3/2, 11/1	Normal	60
	9		3	1	12/1, 5/1, 4/1, 9/1	Normal	209
	10		3	2	12/1, 5/2, 3/1, 11/1	Normal	113
	11		2	1	1/2, 4/1, 9/1	Normal	106
	12		2	1	1/2, 4/2, 9/1	Normal	106
	13		1	2	8/1, 2/1, 3/1, 11/1	Normal	60
	14		1	3	8/1, 2/3, 6/2, 13/1	Normal	137
	15		2	3	1/1, 6/1, 13/1	Normal	378

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		3	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	D	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	6	300	0	0	Pedestrian	18

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B, C	1
	2	A, B, E	1
	3	A, C, D	1
	4	A, D, E	1
	5	D, E, F	1
	6	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 5, 6	0, 30, 62
	2	(untitled)	Single	1, 6, 5	0, 32, 70
	3	(untitled)	Single	2, 3, 5, 6, 2, 3, 5	42, 83, 116, 130, 173, 217, 10
	4	(untitled)	Single	1, 5, 6, 2	0, 23, 47, 77
	5	(untitled)	Single	1, 6, 5, 2	0, 26, 58, 76
	6	(untitled)	Single	1, 6, 2, 5	0, 25, 55, 77
	7	(untitled)	Single	2, 5, 6, 3	0, 23, 47, 77
	8	(untitled)	Single	1, 5, 6, 4	0, 23, 47, 77
	9	(untitled)	Single	1, 5, 6, 3	0, 23, 47, 77
	10	(untitled)	Single	2, 3, 6, 5	0, 23, 47, 77

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A						5	8
	B				5		5	8
	C					5	5	8
	D		5					8
	E			5				8
	F	5	5	5				8
	G	18	18	18	18	18	18	

Interstage Matrix for Controller Stream 1

		To					
		1	2	3	4	5	6
From	1	0	5	5	5	5	8
	2	5	0	5	5	5	8
	3	5	5	0	5	5	8
	4	5	5	5	0	5	8
	5	5	5	5	5	0	8
	6	18	18	18	18	18	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	2	A,B,E	15	42	27	1	7
	2	✓	3	A,C,D	47	83	36	1	7
	3	✓	5	D,E,F	88	116	28	1	7
	4	✓	6	G	124	130	6	1	6
	5	✓	2	A,B,E	148	173	25	1	7
	6	✓	3	A,C,D	178	217	39	1	7
	7	✓	5	D,E,F	222	10	28	1	7

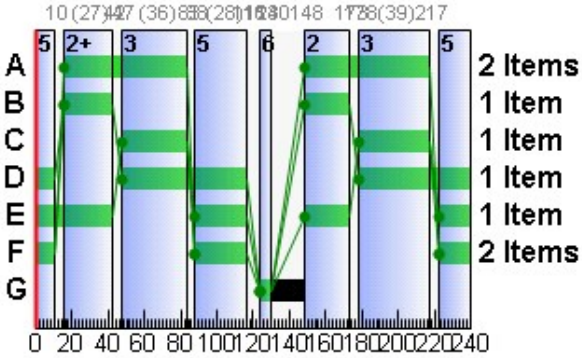
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	148	217	69
		2	✓	15	83	68
	B	1	✓	148	173	25
		2	✓	15	42	27
	C	1	✓	47	83	36
		2	✓	178	217	39
	D	1	✓	47	116	69
		2	✓	178	10	72
	E	1	✓	88	116	28
		2	✓	148	173	25
		3	✓	222	42	60
	F	1	✓	88	116	28
		2	✓	222	10	28
	G	1	✓	124	130	6

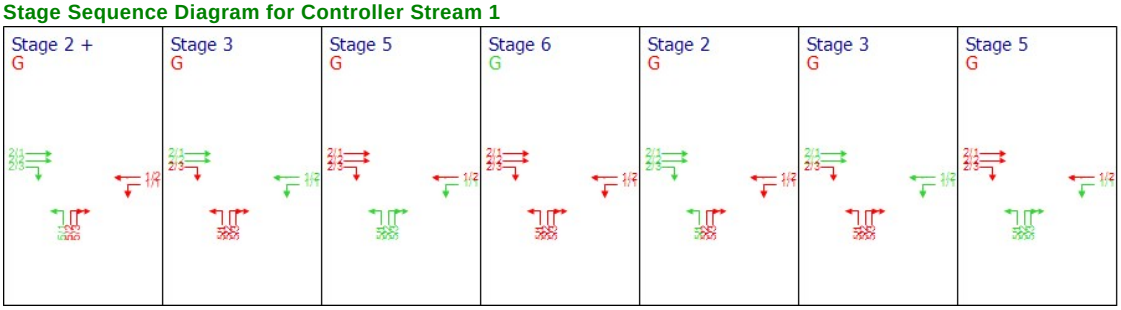
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2			Green Period 3		
					Start	End	Duration	Start	End	Duration	Start	End	Duration
1	1	1	1	D	47	116	69	178	10	72			
1	2	1	1	C	47	83	36	178	217	39			
2	1	1	1	A	148	217	69	15	83	68			
2	2	1	1	A	148	217	69	15	83	68			
2	3	1	1	B	148	173	25	15	42	27			
5	1	1	1	E	88	116	28	148	173	25	222	42	60
5	2	1	1	F	88	116	28	222	10	28			
5	3	1	1	F	88	116	28	222	10	28			

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	37	141	378	1702	141	14.49	8.30	11.93	21.61	2.42	24.03
		2	32	180	212	2055	75	32.88	6.20	8.91	27.50	2.00	29.49
	2	1	5	1685	60	2055	137	11.82	1.08	13.86	2.80	0.32	3.11
		2	5	1685	60	2055	137	11.82	1.08	13.86	2.80	0.32	3.11
		3	30	204	137	2055	52	41.29	4.32	80.08	22.31	1.45	23.77
	3	1	0	Unrestricted	173	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	173	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	315	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	106	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	24	275	209	1800	113	13.13	3.06	17.61	10.82	1.46	12.28
		2	23	296	113	2055	56	38.45	3.52	20.23	17.14	1.13	18.27
		3	24	269	113	1915	56	38.80	3.52	20.26	17.30	1.13	18.43
	6	1	0	Unrestricted	378	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	137	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	14	530	257	1800	240	0.17	0.01	0.02	0.17	0.00	0.17
	9	1	0	Unrestricted	421	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	346	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	18	403	322	1800	240	0.22	0.02	0.06	0.28	0.00	0.28
		2	6	1334	113	1800	240	0.07	0.00	0.01	0.03	0.00	0.03
	13	1	0	Unrestricted	515	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	378	378	0		1702	1014	37		141	0.00	141
		2	212	212	-1		2055	659	32		180	0.00	75
	2	1	60	60	0		2055	1190	5		1685	0.00	137
		2	60	60	0		2055	1190	5		1685	0.00	137
		3	137	137	0		2055	462	30		204	0.00	52
	3	1	173	173	0		Unrestricted	Unrestricted	0		Unrestricted	0.74	240
		2	173	173	0		Unrestricted	Unrestricted	0		Unrestricted	0.75	240
	4	1	315	315	-1		Unrestricted	Unrestricted	0		Unrestricted	0.85	240
		2	106	106	-1		Unrestricted	Unrestricted	0		Unrestricted	1.33	240
	5	1	209	209	0		1800	870	24		275	0.00	113
		2	113	113	0		2055	497	23		296	0.00	56
		3	113	113	0		1915	463	24		269	0.00	56
	6	1	378	378	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	240
		2	137	137	0		Unrestricted	Unrestricted	0		Unrestricted	1.23	240
	8	1	257	257	0		1800	1800	14		530	0.00	240
	9	1	421	421	-1		Unrestricted	Unrestricted	0		Unrestricted	0.51	240
	11	1	346	346	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	240
	12	1	322	322	0		1800	1800	18		403	0.00	240
		2	113	113	0		1800	1800	6		1334	0.00	240
	13	1	515	515	0		Unrestricted	Unrestricted	0		Unrestricted	0.46	240

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	48.00	14.49	1.52	21.61	51.13	193.27	2.42
		2	48.00	32.88	1.94	27.50	75.08	159.17	2.00
	2	1	5.40	11.82	0.20	2.80	41.94	25.16	0.32
		2	5.40	11.82	0.20	2.80	41.94	25.16	0.32
		3	5.40	41.29	1.57	22.31	84.69	116.03	1.45
	3	1	38.06	0.00	0.00	0.00	0.00	0.00	0.00
		2	36.10	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	6.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	6.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	12.00	13.13	0.76	10.82	55.67	116.35	1.46
		2	12.00	38.45	1.21	17.14	79.77	90.14	1.13
		3	12.00	38.80	1.22	17.30	80.06	90.46	1.13
	6	1	28.52	0.00	0.00	0.00	0.00	0.00	0.00
		2	39.98	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	36.00	0.17	0.01	0.17	0.00	0.00	0.00
	9	1	33.22	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	21.13	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	24.00	0.22	0.02	0.28	0.00	0.00	0.00
		2	24.00	0.07	0.00	0.03	0.00	0.00	0.00
	13	1	24.35	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	8.30	69.57	11.93	0.00	0.00	
		2	0.00	6.20	69.57	8.91	0.00	0.00	
	2	1	0.00	1.08	7.83	13.86	0.00	135.00	
		2	0.00	1.08	7.83	13.86	0.00	135.00	
		3	0.00	4.32	5.40	80.08	0.00	0.00	
	3	1	0.00	0.00	55.16	0.00	0.00	27.00	
		2	0.00	0.00	52.31	0.00	0.00	28.00	
	4	1	0.00	0.00	8.70	0.00	0.00	39.00	
		2	0.00	0.00	8.70	0.00	0.00	161.00	
	5	1	0.00	3.06	17.39	17.61	0.00	0.00	
		2	0.00	3.52	17.39	20.23	0.00	0.00	
		3	0.00	3.52	17.39	20.26	0.00	0.00	
	6	1	0.00	0.00	41.34	0.00	0.00	67.00	
		2	0.00	0.00	57.94	0.00	0.00	151.00	
	8	1	0.00	0.01	52.17	0.02	0.00	0.00	
	9	1	0.00	0.00	48.14	0.00	0.00	15.00	
	11	1	0.00	0.00	30.63	0.00	0.00	3.00	
	12	1	0.00	0.02	34.78	0.06	0.00	0.00	
		2	0.00	0.00	34.78	0.01	0.00	0.00	
	13	1	0.00	0.00	35.29	0.00	0.00	16.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
8	05/12/2018 10:27:11	05/12/2018 10:27:12	08:00	240	132.97	8.64	37.27	1/1	0	0	1/1	12/1	1/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	37	141	4538	3647	6.86	122.74	10.23	132.97

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	4538	4538	-3		37		141	3647

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	26.46	6.86	8.64	122.74	17.98	815.76	10.23

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	80.08	0.00	777.00

TRANSYT 15

Version: 15.5.1.7048
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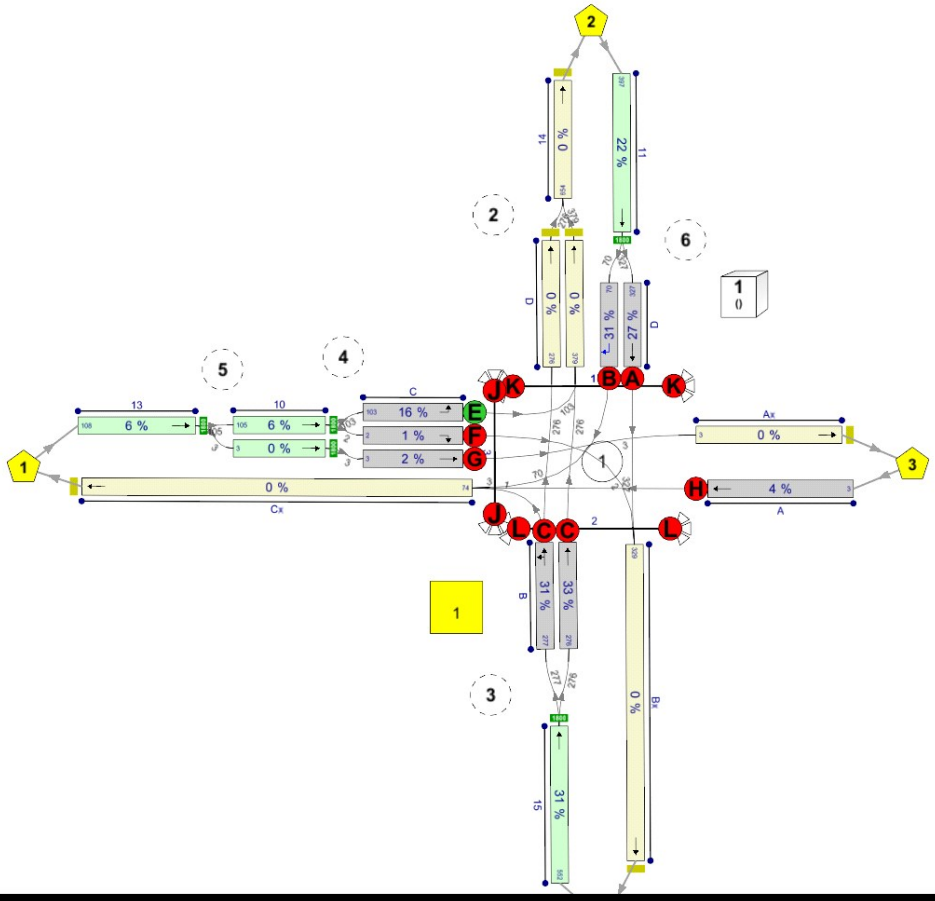
Filename: Bus Gate Revised Junction Layout_RevC.t15
Path: G:\2017\p170172\calcs\transyt\Bus Gate_Glenamuck Rd
Report generation date: 05/12/2018 10:06:33

»A1 - DSCM2035+BAN_AM : D1 - AM Peak* :
»A2 - DSCM2035+BAN_PM : D2 - PM Peak* :
»A3 - DSCM2035+NOBAN_AM : D3 - AM Peak* :
»A4 - DSCM2035+NOBAN_PM : D4 - PM Peak* :
»A5 - DS 2035 AM : D5 - AM Peak 2035* :
»A6 - DS 2035 PM : D6 - PM Peak 2035* :
»A7 - DS 2020 AM : D7 - AM Peak 2020* :
»A8 - DS 2020 PM : D8 - PM Peak 2020* :

Network Diagrams



[redacted]

A1 - DSCM2035+BAN_AM
D1 - AM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2038	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2023	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	27	47.43		2038
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	93.94		2023
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	332	332		
	2	3	3	0	0
11	1	442	442		
13	1	335	335	0	0
14	1	1115	1115		
15	1	1082	1082		
A	1	3	3	0	0
B	2	627	627		
	3	456	456		
C	1	204	204		
	2	128	128	0	0
	3	3	3		
D	1	309	309		
	2	133	133		
Ax	1	3	3		
Bx	1	437	437		
Cx	1	307	307		
Dx	1	456	456		
	2	660	660		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	204	3	128
	2	133	0	0	309
	3	3	0	0	0
	4	171	911	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	133
	9		4	1	15/1, B/2, Cx/1	Normal	171
	13		2	4	11/1, D/1, Bx/1	Normal	309
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	128
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	204
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	456
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	456

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	214, 230, 12, 25, 38, 97, 112, 126, 139, 146

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	154	214	60	1	7
	2	✓	2	A,B,E	219	230	11	1	7
	3	✓	4	E,F	237	12	15	1	7
	4	✓	5	G,E	18	25	7	1	7
	5	✓	6	K,L,J	31	38	7	1	7
	6	✓	1	A,C	53	97	44	1	7
	7	✓	2	A,B,E	102	112	10	1	7
	8	✓	4	E,F	119	126	7	1	7
	9	✓	5	G,E	132	139	7	1	7
	10	✓	7	H,E	139	146	7	1	7

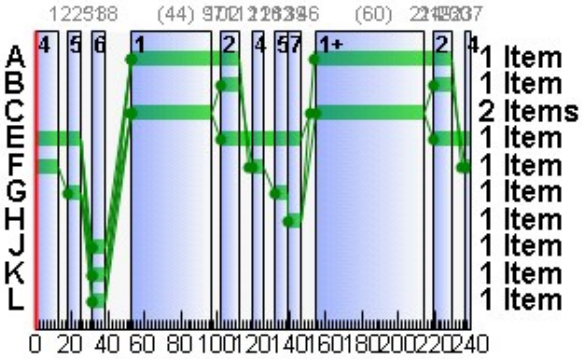
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	53	112	59
		2	✓	153	230	77
	B	1	✓	219	230	11
		2	✓	102	112	10
	C	1	✓	53	97	44
		2	✓	154	214	60
	E	1	✓	219	25	46
		2	✓	102	146	44
	F	1	✓	237	12	15
		2	✓	119	126	7
	G	1	✓	18	25	7
		2	✓	132	139	7
	H	1	✓	139	146	7
	J	1	✓	31	38	7
	K	1	✓	31	38	7
	L	1	✓	31	38	7

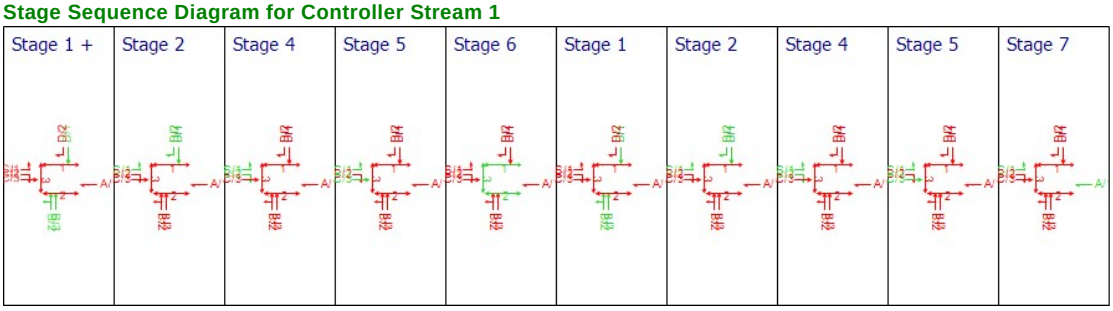
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	139	146	7			
B	2	1	1	C	53	97	44	154	214	60
B	3	1	1	C	53	97	44	154	214	60
C	1	1	1	E	219	25	46	102	146	44
C	2	1	1	F	237	12	15	119	126	7
C	3	1	1	G	18	25	7	132	139	7
D	1	1	1	A	53	112	59	153	230	77
D	2	1	1	B	219	230	11	102	112	10

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	146	8	15
	2	✓	2	A,B,E	214	5	12
	3	✓	4	E,F	230	7	14
	4	✓	5	G,E	12	6	13
	5	✓	6	K,L,J	25	6	13
	6	✓	1	A,C	38	15	22
	7	✓	2	A,B,E	97	5	12
	8	✓	4	E,F	112	7	14
	9	✓	5	G,E	126	6	13
	10	✓	7	H,E	139	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	146	214	230	12	25	38	97	112	126	139

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	18	388	332	1800	240	0.23	0.02	0.30	0.30	0.00	0.30
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	25	267	442	1800	240	0.33	0.04	0.06	0.57	0.00	0.57
	13	1	19	384	335	1800	240	0.23	0.02	0.03	0.30	0.00	0.30
	14	1	0	Unrestricted	1114	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	60	50	1081	1800	240	1.50	0.45	1.92	6.39	0.00	6.39
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	70	29	626	2038	104	32.24	20.26	529.55	79.62	6.46	86.08
		3	54	67	455	1915	104	27.66	13.20	345.09	49.65	4.20	53.85
	C	1	32	182	204	1665	90	27.35	4.95	142.26	22.01	1.78	23.79
		2	63	42	128	2023	22	66.78	4.69	134.80	33.72	1.71	35.43
		3	2	3730	3	1915	14	53.22	0.10	2.84	0.63	0.03	0.66
	D	1	26	244	309	2055	136	13.89	6.23	83.26	16.93	1.89	18.82
		2	68	33	133	2055	21	70.73	5.03	67.31	37.11	1.83	38.94
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	437	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	307	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	455	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	659	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	332	332	0		1800	1800	18		388	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	442	442	0		1800	1800	25		267	0.00	240	24
	13	1	335	335	0		1800	1800	19		384	0.00	240	24
	14	1	1114	1114	1		Unrestricted	Unrestricted	0		Unrestricted	0.70	240	24
	15	1	1081	1081	1		1800	1800	60		50	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	626	626	1		2038	900	70		29	0.00	104	10
		3	455	455	1		1915	846	54		67	0.00	104	10
	C	1	204	204	0		1665	638	32		182	0.00	90	92
		2	128	128	0		2023	202	63		42	0.00	22	24
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	309	309	0		2055	1182	26		244	0.00	136	13
		2	133	133	0		2055	197	68		33	0.00	21	23
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	437	437	0		Unrestricted	Unrestricted	0		Unrestricted	0.77	240	24
	Cx	1	307	307	0		Unrestricted	Unrestricted	0		Unrestricted	0.91	240	24
	Dx	1	455	455	1		Unrestricted	Unrestricted	0		Unrestricted	1.06	240	24
		2	659	659	1		Unrestricted	Unrestricted	0		Unrestricted	0.75	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.23	0.00	0.02	0.30	0.30	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	0.33	0.00	0.04	0.57	0.57	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.23	0.00	0.02	0.30	0.30	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	1.50	0.00	0.45	6.39	6.39	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	32.24	4.82	0.79	79.62	79.62	82.30	491.87	23.35	6.46	6.46
		3	2.64	27.66	3.18	0.31	49.65	49.65	73.54	325.29	9.31	4.20	4.20
	C	1	2.40	27.35	1.47	0.07	22.01	22.01	69.74	140.02	2.24	1.78	1.78
		2	2.40	66.78	1.85	0.53	33.72	33.72	106.74	121.25	15.37	1.71	1.71
		3	2.40	53.22	0.04	0.00	0.63	0.63	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	13.89	1.15	0.05	16.93	16.93	48.69	149.07	1.39	1.89	1.89
		2	5.16	70.73	1.94	0.67	37.11	37.11	109.87	126.66	19.47	1.83	1.83
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.02	6.96	0.30	0.00	0.00	0.00			0.00	77.00	77.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.04	69.57	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	13	1	0.00	0.02	78.26	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			17.00	0.00	17.00	
	15	1	0.00	0.45	23.42	1.92	0.00	0.00	0.00			0.00	158.00	158.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	20.26	3.83	529.55	4.71	0.00	0.00	0.79	14.35	0.00	0.00	0.00	
		3	0.00	13.20	3.83	345.09	2.02	0.00	0.00	0.31	10.17	0.00	0.00	0.00	
	C	1	0.00	4.95	3.48	142.26	0.14	0.00	0.00	0.07	4.38	0.00	0.00	0.00	
		2	0.00	4.69	3.48	134.80	0.16	0.00	0.00	0.53	4.44	0.00	0.00	0.00	
		3	0.00	0.10	3.48	2.84	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	D	1	0.00	6.23	7.48	83.26	0.00	0.00	0.00	0.05	5.37	0.00	0.00	0.00	
		2	0.00	5.03	7.48	67.31	0.00	0.00	0.00	0.67	4.77	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			48.00	0.00	48.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			81.00	0.00	81.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			119.00	0.00	119.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			26.00	0.00	26.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
1	05/12/2018 10:05:53	05/12/2018 10:05:53	08:00	240	266.50	17.50	69.55	B/2	0	0	B/2	15/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	70	0	7029	3138	8.96	248.56	17.94	266.50

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	7029	7029	4		70		29	3180	3195

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	14.99	8.96	14.55	2.95	248.56	248.56	20.36	1359.82	71.15	17.94	17.94

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	529.55	0.00	789.00	235.00	1024.00

A2 - DSCM2035+BAN_PM
D2 - PM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2019	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	56	47.43		2019
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	93.94		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	17	17		
	2	3	3	0	0
11	1	1220	1220		
13	1	20	20	0	0
14	1	449	449		
15	1	706	706		
A	1	3	3	0	0
B	2	490	490		
	3	216	216		
C	1	17	17		
	2	0	0	0	0
	3	3	3		
D	1	1022	1022		
	2	198	198		
Ax	1	3	3		
Bx	1	1022	1022		
Cx	1	475	475		
Dx	1	216	216		
	2	233	233		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	17	3	0
	2	198	0	0	1022
	3	3	0	0	0
	4	274	432	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	198
	9		4	1	15/1, B/2, Cx/1	Normal	274
	13		2	4	11/1, D/1, Bx/1	Normal	1022
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	0
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	17
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	216
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	216

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	221, 17, 31, 44, 57, 99, 122, 136, 149, 156

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	164	221	57	1	7
	2	✓	2	A,B,E	226	17	31	1	7
	3	✓	4	E,F	24	31	7	1	7
	4	✓	5	G,E	37	44	7	1	7
	5	✓	6	K,L,J	50	57	7	1	7
	6	✓	1	A,C	72	99	27	1	7
	7	✓	2	A,B,E	104	122	18	1	7
	8	✓	4	E,F	129	136	7	1	7
	9	✓	5	G,E	142	149	7	1	7
	10	✓	7	H,E	149	156	7	1	7

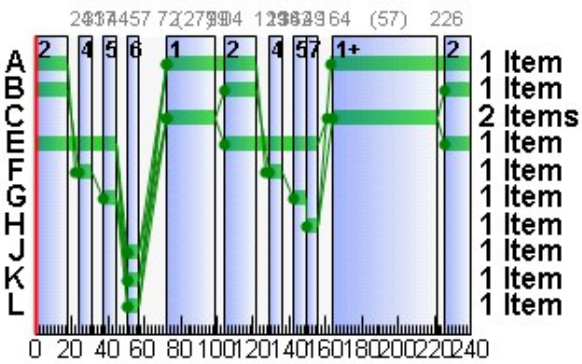
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	72	122	50
		2	✓	163	17	94
	B	1	✓	226	17	31
		2	✓	104	122	18
	C	1	✓	72	99	27
		2	✓	164	221	57
	E	1	✓	226	44	58
		2	✓	104	156	52
	F	1	✓	24	31	7
		2	✓	129	136	7
	G	1	✓	37	44	7
		2	✓	142	149	7
	H	1	✓	149	156	7
	J	1	✓	50	57	7
	K	1	✓	50	57	7
	L	1	✓	50	57	7

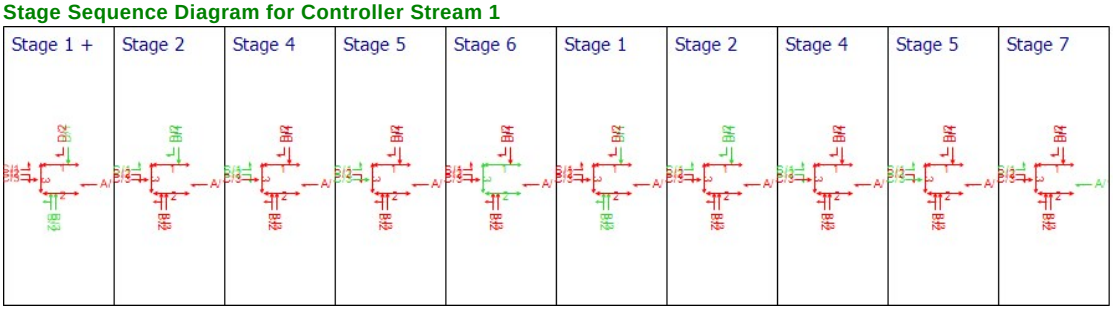
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	149	156	7			
B	2	1	1	C	72	99	27	164	221	57
B	3	1	1	C	72	99	27	164	221	57
C	1	1	1	E	226	44	58	104	156	52
C	2	1	1	F	24	31	7	129	136	7
C	3	1	1	G	37	44	7	142	149	7
D	1	1	1	A	72	122	50	163	17	94
D	2	1	1	B	226	17	31	104	122	18

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	156	8	15
	2	✓	2	A,B,E	221	5	12
	3	✓	4	E,F	17	7	14
	4	✓	5	G,E	31	6	13
	5	✓	6	K,L,J	44	6	13
	6	✓	1	A,C	57	15	22
	7	✓	2	A,B,E	99	5	12
	8	✓	4	E,F	122	7	14
	9	✓	5	G,E	136	6	13
	10	✓	7	H,E	149	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	156	221	17	31	44	57	99	122	136	149

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	1	9429	17	1800	240	0.01	0.00	0.00	0.00	0.00	0.00
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	68	33	1220	1800	240	2.09	0.71	1.02	10.07	0.00	10.07
	13	1	1	8000	20	1800	240	0.01	0.00	0.00	0.00	0.00	0.00
	14	1	0	Unrestricted	449	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	39	129	706	1800	240	0.64	0.13	0.54	1.80	0.00	1.80
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	68	33	490	2019	84	39.64	16.76	438.14	76.61	5.27	81.88
		3	31	186	216	1915	84	29.85	6.13	160.27	25.43	1.95	27.38
	C	1	2	4014	17	1665	110	17.49	0.33	9.37	1.17	0.11	1.28
		2	0	Unrestricted	0	2055	14	0.00	0.00	0.00	0.00	0.00	0.00
		3	2	3730	3	1915	14	54.01	0.11	3.05	0.64	0.03	0.67
	D	1	82	10	1022	2055	144	25.84	31.88	426.34	104.15	10.09	114.24
		2	45	98	198	2055	49	44.91	6.40	85.61	35.08	2.19	37.27
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	1022	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	475	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	216	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	233	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	17	17	0		1800	1800	1		9429	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	1220	1220	0		1800	1800	68		33	0.00	240	24
	13	1	20	20	0		1800	1800	1		8000	0.00	240	24
	14	1	449	449	0		Unrestricted	Unrestricted	0		Unrestricted	1.05	240	24
	15	1	706	706	0		1800	1800	39		129	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	490	490	0		2019	723	68		33	0.00	84	86
		3	216	216	0		1915	686	31		186	0.00	84	86
	C	1	17	17	0		1665	777	2		4014	0.00	110	11
		2	0	0	0		2055	137	0		Unrestricted	0.00	14	16
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	1022	1022	0		2055	1250	82		10	0.00	144	14
		2	198	198	0		2055	437	45		98	0.00	49	51
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	1022	1022	0		Unrestricted	Unrestricted	0		Unrestricted	0.72	240	24
	Cx	1	475	475	0		Unrestricted	Unrestricted	0		Unrestricted	0.94	240	24
	Dx	1	216	216	0		Unrestricted	Unrestricted	0		Unrestricted	1.18	240	24
		2	233	233	0		Unrestricted	Unrestricted	0		Unrestricted	1.11	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	2.09	0.00	0.71	10.07	10.07	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	0.64	0.00	0.13	1.80	1.80	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	39.64	4.69	0.70	76.61	76.61	85.75	409.68	10.48	5.27	5.27
		3	2.64	29.85	1.72	0.07	25.43	25.43	71.85	153.03	2.16	1.95	1.95
	C	1	2.40	17.49	0.08	0.00	1.17	1.17	52.37	8.90	0.00	0.11	0.11
		2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		3	2.40	54.01	0.04	0.00	0.64	0.64	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	25.84	5.54	1.79	104.15	104.15	78.73	777.97	26.68	10.09	10.09
		2	5.16	44.91	2.28	0.19	35.08	35.08	88.35	169.36	5.57	2.19	2.19
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.71	69.57	1.02	0.00	0.00	0.00			0.00	150.00	150.00	
	13	1	0.00	0.00	78.26	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			110.00	0.00	110.00	
	15	1	0.00	0.13	23.42	0.54	0.00	0.00	0.00			0.00	161.00	161.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	16.76	3.83	438.14	3.79	0.00	0.00	1.06	12.95	0.00	0.00	0.00	
		3	0.00	6.13	3.83	160.27	0.20	0.00	0.00	0.07	5.47	0.00	0.00	0.00	
	C	1	0.00	0.33	3.48	9.37	0.00	0.00	0.00	0.00	0.33	110.00	0.00	110.00	
		2	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	16.00	
		3	0.00	0.11	3.48	3.05	0.00	0.00	0.00	0.00	0.11	14.00	0.00	14.00	
	D	1	0.00	31.88	7.48	426.34	6.84	0.00	0.00	2.49	17.12	0.00	0.00	0.00	
		2	0.00	6.40	7.48	85.61	0.00	0.00	0.00	0.19	5.85	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			71.00	0.00	71.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			81.00	0.00	81.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			140.00	0.00	140.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			130.00	0.00	130.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
2	05/12/2018 10:05:52	05/12/2018 10:05:53	08:00	240	275.98	18.05	81.75	D/1	0	0	D/1	11/1	D/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	82	0	6313	3146	10.29	256.30	19.68	275.98

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	6313	6313	0		82		10	3188	3203

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	17.48	10.29	14.46	3.59	256.30	256.30	24.86	1524.60	44.91	19.68	19.68

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	438.14	0.00	1636.00	311.00	1947.00

A3 - DSCM2035+NOBAN_AM
D3 - AM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2037	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2023	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	28	47.43		2037
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	93.94		2023
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	334	334		
	2	3	3	0	0
11	1	454	454		
13	1	337	337	0	0
14	1	1108	1108		
15	1	1073	1073		
A	1	3	3	0	0
B	2	623	623		
	3	451	451		
C	1	207	207		
	2	127	127	0	0
	3	3	3		
D	1	320	320		
	2	134	134		
Ax	1	3	3		
Bx	1	447	447		
Cx	1	309	309		
Dx	1	451	451		
	2	658	658		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	207	3	127
	2	134	0	0	320
	3	3	0	0	0
	4	172	901	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	134
	9		4	1	15/1, B/2, Cx/1	Normal	172
	13		2	4	11/1, D/1, Bx/1	Normal	320
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	127
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	207
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	451
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	451

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	15, 27, 51, 64, 77, 132, 151, 165, 178, 185

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	193	15	62	1	7
	2	✓	2	A,B,E	20	27	7	1	7
	3	✓	4	E,F	34	51	17	1	7
	4	✓	5	G,E	57	64	7	1	7
	5	✓	6	K,L,J	70	77	7	1	7
	6	✓	1	A,C	92	132	40	1	7
	7	✓	2	A,B,E	137	151	14	1	7
	8	✓	4	E,F	158	165	7	1	7
	9	✓	5	G,E	171	178	7	1	7
	10	✓	7	H,E	178	185	7	1	7

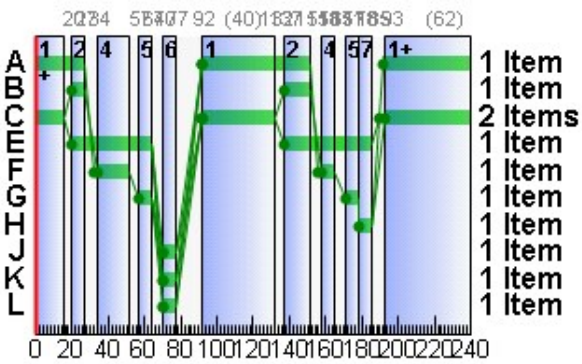
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	92	151	59
		2	✓	192	27	75
	B	1	✓	20	27	7
		2	✓	137	151	14
	C	1	✓	92	132	40
		2	✓	193	15	62
	E	1	✓	20	64	44
		2	✓	137	185	48
	F	1	✓	34	51	17
		2	✓	158	165	7
	G	1	✓	57	64	7
		2	✓	171	178	7
	H	1	✓	178	185	7
	J	1	✓	70	77	7
	K	1	✓	70	77	7
	L	1	✓	70	77	7

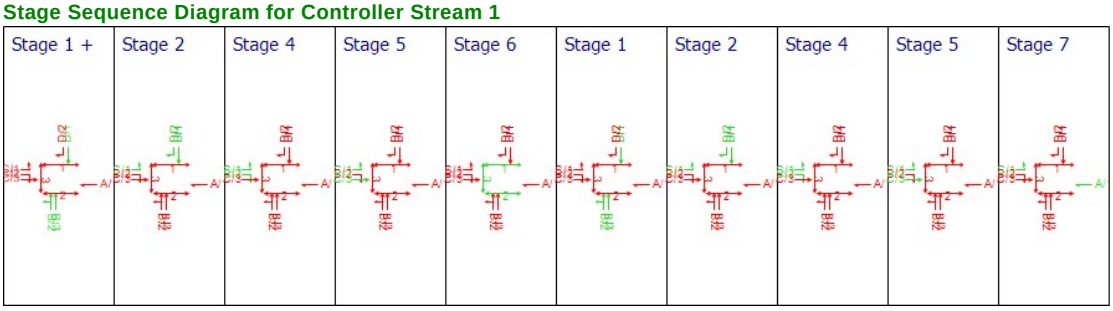
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	178	185	7			
B	2	1	1	C	92	132	40	193	15	62
B	3	1	1	C	92	132	40	193	15	62
C	1	1	1	E	20	64	44	137	185	48
C	2	1	1	F	34	51	17	158	165	7
C	3	1	1	G	57	64	7	171	178	7
D	1	1	1	A	92	151	59	192	27	75
D	2	1	1	B	20	27	7	137	151	14

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	185	8	15
	2	✓	2	A,B,E	15	5	12
	3	✓	4	E,F	27	7	14
	4	✓	5	G,E	51	6	13
	5	✓	6	K,L,J	64	6	13
	6	✓	1	A,C	77	15	22
	7	✓	2	A,B,E	132	5	12
	8	✓	4	E,F	151	7	14
	9	✓	5	G,E	165	6	13
	10	✓	7	H,E	178	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	185	15	27	51	64	77	132	151	165	178

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	19	385	334	1800	240	0.23	0.02	0.30	0.30	0.00	0.30
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	25	257	454	1800	240	0.34	0.04	0.06	0.60	0.00	0.60
	13	1	19	381	337	1800	240	0.23	0.02	0.03	0.31	0.00	0.31
	14	1	0	Unrestricted	1109	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	60	51	1074	1800	240	1.48	0.44	1.88	6.25	0.00	6.25
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	71	28	623	2037	102	32.98	19.70	514.88	81.04	6.54	87.57
		3	54	66	451	1915	102	28.12	12.72	332.57	50.03	4.21	54.25
	C	1	32	184	207	1665	92	26.65	4.90	140.98	21.76	1.79	23.55
		2	58	55	127	2023	24	62.00	4.45	127.88	31.06	1.64	32.69
		3	2	3730	3	1915	14	53.22	0.10	2.84	0.63	0.03	0.66
	D	1	27	228	320	2055	134	14.65	6.72	89.84	18.49	2.01	20.50
		2	68	32	134	2055	21	71.14	5.01	67.02	37.60	1.85	39.45
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	447	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	309	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	451	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	658	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	334	334	0		1800	1800	19		385	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	454	454	0		1800	1800	25		257	0.00	240	24
	13	1	337	337	0		1800	1800	19		381	0.00	240	24
	14	1	1109	1109	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.71	240	24
	15	1	1074	1074	-1	✓	1800	1800	60		51	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	623	623	-1	✓	2037	883	71		28	0.00	102	10
		3	451	451	-1	✓	1915	830	54		66	0.00	102	10
	C	1	207	207	0		1665	652	32		184	0.00	92	94
		2	127	127	0		2023	219	58		55	0.00	24	26
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	320	320	0		2055	1165	27		228	0.00	134	13
		2	134	134	0		2055	197	68		32	0.00	21	23
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	447	447	0		Unrestricted	Unrestricted	0		Unrestricted	0.77	240	24
	Cx	1	309	309	0		Unrestricted	Unrestricted	0		Unrestricted	0.91	240	24
	Dx	1	451	451	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.07	240	24
		2	658	658	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.76	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.23	0.00	0.02	0.30	0.30	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	0.34	0.00	0.04	0.60	0.60	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.23	0.00	0.02	0.31	0.31	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	1.48	0.00	0.44	6.25	6.25	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	32.98	4.87	0.84	81.04	81.04	83.69	496.55	24.85	6.54	6.54
		3	2.64	28.12	3.20	0.32	50.03	50.03	74.50	326.40	9.61	4.21	4.21
	C	1	2.40	26.65	1.46	0.07	21.76	21.76	69.03	140.69	2.20	1.79	1.79
		2	2.40	62.00	1.80	0.39	31.06	31.06	102.82	119.12	11.47	1.64	1.64
		3	2.40	53.22	0.04	0.00	0.63	0.63	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	14.65	1.25	0.05	18.49	18.49	50.17	158.98	1.56	2.01	2.01
		2	5.16	71.14	1.95	0.69	37.60	37.60	110.21	127.65	20.03	1.85	1.85
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.02	6.96	0.30	0.00	0.00	0.00			0.00	77.00	77.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.04	69.57	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	13	1	0.00	0.02	78.26	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			17.00	0.00	17.00	
	15	1	0.00	0.44	23.42	1.88	0.00	0.00	0.00			0.00	161.00	161.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	19.70	3.83	514.88	4.79	0.00	0.00	0.84	13.99	0.00	0.00	0.00	
		3	0.00	12.72	3.83	332.57	2.00	0.00	0.00	0.32	9.84	0.00	0.00	0.00	
	C	1	0.00	4.90	3.48	140.98	0.14	0.00	0.00	0.07	4.33	0.00	0.00	0.00	
		2	0.00	4.45	3.48	127.88	0.11	0.00	0.00	0.39	4.20	0.00	0.00	0.00	
		3	0.00	0.10	3.48	2.84	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	D	1	0.00	6.72	7.48	89.84	0.00	0.00	0.00	0.05	5.74	0.00	0.00	0.00	
		2	0.00	5.01	7.48	67.02	0.00	0.00	0.00	0.69	4.75	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			49.00	0.00	49.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			82.00	0.00	82.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			121.00	0.00	121.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			26.00	0.00	26.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
3	05/12/2018 10:05:54	05/12/2018 10:05:54	08:00	240	267.52	17.56	70.58	B/2	0	0	B/2	15/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	71	0	7047	3136	8.97	249.40	18.12	267.52

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	7047	7047	-4	✓	71		28	3178	3193

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.04	8.97	14.67	2.90	249.40	249.40	20.50	1375.05	69.74	18.12	18.12

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	514.88	0.00	793.00	238.00	1031.00

A4 - DSCM2035+NOBAN_PM
D4 - PM Peak*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2026	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2023	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	46	47.43		2026
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	93.94		2023
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	139	139		
	2	3	3	0	0
11	1	1280	1280		
13	1	142	142	0	0
14	1	412	412		
15	1	572	572		
A	1	3	3	0	0
B	2	372	372		
	3	200	200		
C	1	12	12		
	2	127	127	0	0
	3	3	3		
D	1	1080	1080		
	2	200	200		
Ax	1	3	3		
Bx	1	1207	1207		
Cx	1	375	375		
Dx	1	200	200		
	2	212	212		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	12	3	127
	2	200	0	0	1080
	3	3	0	0	0
	4	172	400	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	200
	9		4	1	15/1, B/2, Cx/1	Normal	172
	13		2	4	11/1, D/1, Bx/1	Normal	1080
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	127
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	12
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	200
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	200

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	192, 9, 25, 38, 51, 92, 125, 139, 152, 159

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	167	192	25	1	7
	2	✓	2	A,B,E	197	9	52	1	7
	3	✓	4	E,F	16	25	9	1	7
	4	✓	5	G,E	31	38	7	1	7
	5	✓	6	K,L,J	44	51	7	1	7
	6	✓	1	A,C	66	92	26	1	7
	7	✓	2	A,B,E	97	125	28	1	7
	8	✓	4	E,F	132	139	7	1	7
	9	✓	5	G,E	145	152	7	1	7
	10	✓	7	H,E	152	159	7	1	7

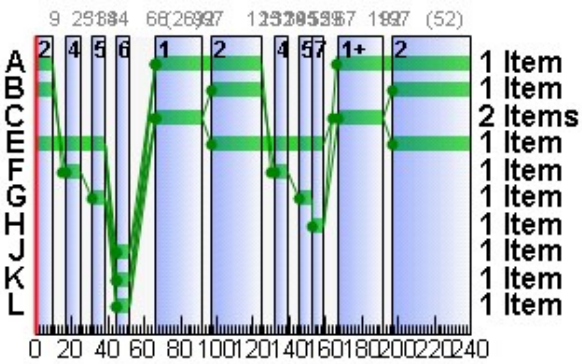
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	66	125	59
		2	✓	166	9	83
	B	1	✓	197	9	52
		2	✓	97	125	28
	C	1	✓	66	92	26
		2	✓	167	192	25
	E	1	✓	197	38	81
		2	✓	97	159	62
	F	1	✓	16	25	9
		2	✓	132	139	7
	G	1	✓	31	38	7
		2	✓	145	152	7
	H	1	✓	152	159	7
	J	1	✓	44	51	7
	K	1	✓	44	51	7
	L	1	✓	44	51	7

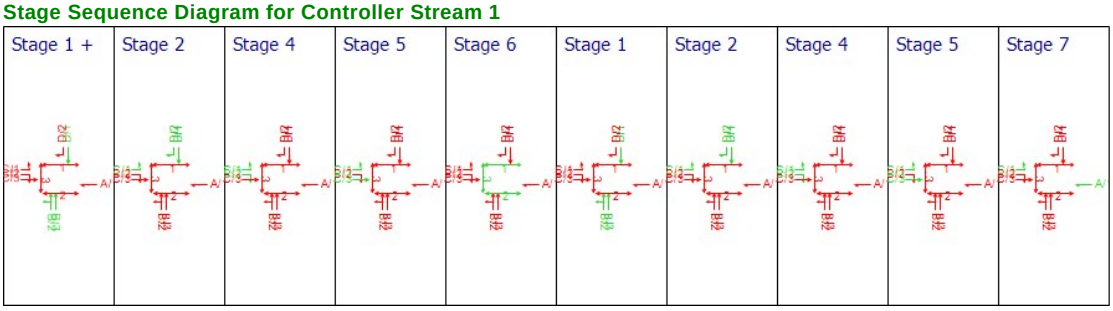
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	152	159	7			
B	2	1	1	C	66	92	26	167	192	25
B	3	1	1	C	66	92	26	167	192	25
C	1	1	1	E	197	38	81	97	159	62
C	2	1	1	F	16	25	9	132	139	7
C	3	1	1	G	31	38	7	145	152	7
D	1	1	1	A	66	125	59	166	9	83
D	2	1	1	B	197	9	52	97	125	28

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	159	8	15
	2	✓	2	A,B,E	192	5	12
	3	✓	4	E,F	9	7	14
	4	✓	5	G,E	25	6	13
	5	✓	6	K,L,J	38	6	13
	6	✓	1	A,C	51	15	22
	7	✓	2	A,B,E	92	5	12
	8	✓	4	E,F	125	7	14
	9	✓	5	G,E	139	6	13
	10	✓	7	H,E	152	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	159	192	9	25	38	51	92	125	139	152

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	8	1065	139	1800	240	0.08	0.00	0.05	0.05	0.00	0.05
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	71	27	1280	1800	240	2.45	0.87	1.25	12.35	0.00	12.35
	13	1	8	1041	142	1800	240	0.09	0.00	0.00	0.05	0.00	0.05
	14	1	0	Unrestricted	412	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	32	183	572	1800	240	0.47	0.07	0.32	1.05	0.00	1.05
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	83	8	372	2026	51	65.07	16.17	422.68	95.47	5.07	100.54
		3	47	90	200	1915	51	46.25	7.21	188.47	36.48	2.22	38.71
	C	1	1	7445	12	1665	143	10.08	0.19	5.56	0.48	0.06	0.54
		2	84	8	127	2023	16	105.24	6.12	175.81	52.72	2.15	54.87
		3	2	3730	3	1915	14	53.22	0.10	2.84	0.63	0.03	0.66
	D	1	88	3	1080	2055	142	31.26	37.74	504.72	133.15	11.69	144.84
		2	28	216	200	2055	80	30.13	5.39	72.08	23.77	1.81	25.58
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	1207	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	375	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	200	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	212	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	139	139	0		1800	1800	8		1065	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	1280	1280	0		1800	1800	71		27	0.00	240	24
	13	1	142	142	0		1800	1800	8		1041	0.00	240	24
	14	1	412	412	0		Unrestricted	Unrestricted	0		Unrestricted	1.30	240	24
	15	1	572	572	0		1800	1800	32		183	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	372	372	0		2026	447	83		8	0.00	51	53
		3	200	200	0		1915	423	47		90	0.00	51	53
	C	1	12	12	0		1665	1006	1		7445	0.00	143	14
		2	127	127	0		2023	152	84		8	0.00	16	18
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	1080	1080	0		2055	1233	88		3	0.00	142	14
		2	200	200	0		2055	702	28		216	0.00	80	82
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	1207	1207	0		Unrestricted	Unrestricted	0		Unrestricted	0.59	240	24
	Cx	1	375	375	0		Unrestricted	Unrestricted	0		Unrestricted	0.96	240	24
	Dx	1	200	200	0		Unrestricted	Unrestricted	0		Unrestricted	1.45	240	24
		2	212	212	0		Unrestricted	Unrestricted	0		Unrestricted	1.39	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.08	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	2.45	0.00	0.87	12.35	12.35	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.09	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	0.47	0.00	0.07	1.05	1.05	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	65.07	4.81	1.91	95.47	95.47	108.62	348.86	55.20	5.07	5.07
		3	2.64	46.25	2.36	0.21	36.48	36.48	88.64	171.01	6.28	2.22	2.22
	C	1	2.40	10.08	0.03	0.00	0.48	0.48	38.61	4.63	0.00	0.06	0.06
		2	2.40	105.24	1.94	1.78	52.72	52.72	135.04	123.44	48.06	2.15	2.15
		3	2.40	53.22	0.04	0.00	0.63	0.63	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	31.26	6.43	2.94	133.15	133.15	86.32	888.49	43.72	11.69	11.69
		2	5.16	30.13	1.62	0.06	23.77	23.77	72.28	142.87	1.70	1.81	1.81
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.00	6.96	0.05	0.00	0.00	0.00			0.00	140.00	140.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.87	69.57	1.25	0.00	0.00	0.00			0.00	174.00	174.00	
	13	1	0.00	0.00	78.26	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			145.00	0.00	145.00	
	15	1	0.00	0.07	23.42	0.32	0.00	0.00	0.00			0.00	192.00	192.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	16.17	3.83	422.68	4.21	0.00	0.00	1.91	13.59	0.00	0.00	0.00	
		3	0.00	7.21	3.83	188.47	0.47	0.00	0.00	0.21	6.49	0.00	0.00	0.00	
	C	1	0.00	0.19	3.48	5.56	0.00	0.00	0.00	0.00	0.19	143.00	0.00	143.00	
		2	0.00	6.12	3.48	175.81	0.73	0.00	0.00	1.78	5.87	0.00	0.00	0.00	
		3	0.00	0.10	3.48	2.84	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	D	1	0.00	37.74	7.48	504.72	9.78	0.00	0.00	3.49	19.74	0.00	0.00	0.00	
		2	0.00	5.39	7.48	72.08	0.00	0.00	0.00	0.06	4.89	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			43.00	0.00	43.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			85.00	0.00	85.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			173.00	0.00	173.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			168.00	0.00	168.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
4	05/12/2018 10:05:55	05/12/2018 10:05:55	08:00	240	380.62	25.18	87.59	D/1	0	0	D/1	11/1	D/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	88	0	6542	3144	13.86	357.55	23.07	380.62

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	6542	6542	0		88		3	3186	3201

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	18.11	13.86	17.33	7.85	357.55	357.55	28.12	1684.95	154.98	23.07	23.07

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	504.72	0.00	1255.00	506.00	1761.00

A5 - DS 2035 AM
D5 - AM Peak 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2054	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2023	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	1	47.43		2054
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	93.94		2023
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	311	311		
	2	3	3	0	0
11	1	344	344		
13	1	314	314	0	0
14	1	1140	1140		
15	1	876	876		
A	1	3	3	0	0
B	2	440	440		
	3	437	437		
C	1	267	267		
	2	44	44	0	0
	3	3	3		
D	1	226	226		
	2	118	118		
Ax	1	3	3		
Bx	1	270	270		
Cx	1	124	124		
Dx	1	437	437		
	2	704	704		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	267	3	44
	2	118	0	0	226
	3	3	0	0	0
	4	3	873	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	118
	9		4	1	15/1, B/2, Cx/1	Normal	3
	13		2	4	11/1, D/1, Bx/1	Normal	226
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	44
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	267
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	437
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	437

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	53, 65, 89, 102, 115, 167, 189, 203, 216, 223

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	231	53	62	1	7
	2	✓	2	A,B,E	58	65	7	1	7
	3	✓	4	E,F	72	89	17	1	7
	4	✓	5	G,E	95	102	7	1	7
	5	✓	6	K,L,J	108	115	7	1	7
	6	✓	1	A,C	130	167	37	1	7
	7	✓	2	A,B,E	172	189	17	1	7
	8	✓	4	E,F	196	203	7	1	7
	9	✓	5	G,E	209	216	7	1	7
	10	✓	7	H,E	216	223	7	1	7

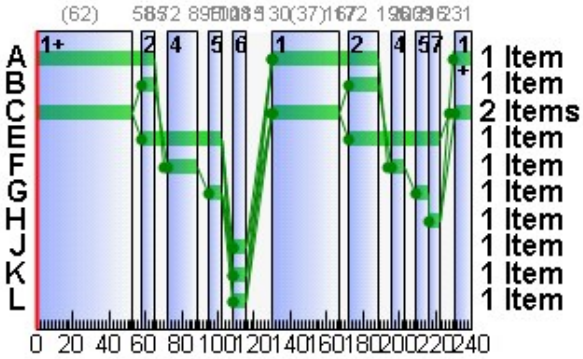
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	130	189	59
		2	✓	230	65	75
	B	1	✓	58	65	7
		2	✓	172	189	17
	C	1	✓	130	167	37
		2	✓	231	53	62
	E	1	✓	58	102	44
		2	✓	172	223	51
	F	1	✓	72	89	17
		2	✓	196	203	7
	G	1	✓	95	102	7
		2	✓	209	216	7
	H	1	✓	216	223	7
	J	1	✓	108	115	7
	K	1	✓	108	115	7
	L	1	✓	108	115	7

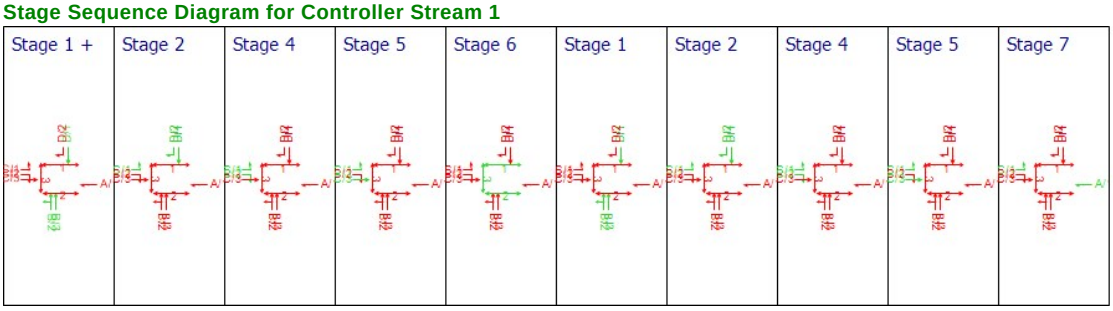
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	216	223	7			
B	2	1	1	C	130	167	37	231	53	62
B	3	1	1	C	130	167	37	231	53	62
C	1	1	1	E	58	102	44	172	223	51
C	2	1	1	F	72	89	17	196	203	7
C	3	1	1	G	95	102	7	209	216	7
D	1	1	1	A	130	189	59	230	65	75
D	2	1	1	B	58	65	7	172	189	17

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	223	8	15
	2	✓	2	A,B,E	53	5	12
	3	✓	4	E,F	65	7	14
	4	✓	5	G,E	89	6	13
	5	✓	6	K,L,J	102	6	13
	6	✓	1	A,C	115	15	22
	7	✓	2	A,B,E	167	5	12
	8	✓	4	E,F	189	7	14
	9	✓	5	G,E	203	6	13
	10	✓	7	H,E	216	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	223	53	65	89	102	115	167	189	203	216

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	17	421	311	1800	240	0.21	0.02	0.26	0.26	0.00	0.26
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	19	371	344	1800	240	0.24	0.02	0.03	0.32	0.00	0.32
	13	1	17	416	314	1800	240	0.21	0.02	0.02	0.26	0.00	0.26
	14	1	0	Unrestricted	1141	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	49	85	877	1800	240	0.95	0.23	0.99	3.28	0.00	3.28
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	51	77	440	2054	99	27.99	12.00	313.54	48.58	4.07	52.65
		3	54	66	437	1915	99	28.94	12.22	319.28	49.89	4.13	54.02
	C	1	40	127	267	1665	95	27.16	6.66	191.38	28.60	2.37	30.97
		2	20	348	44	2023	24	50.87	1.37	39.38	8.83	0.51	9.33
		3	2	3730	3	1915	14	53.22	0.10	2.84	0.63	0.03	0.66
	D	1	19	364	226	2055	134	13.71	4.48	59.91	12.22	1.34	13.56
		2	53	70	118	2055	24	59.61	4.03	53.90	27.74	1.49	29.23
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	270	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	124	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	437	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	704	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	311	311	0		1800	1800	17		421	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	344	344	0		1800	1800	19		371	0.00	240	24
	13	1	314	314	0		1800	1800	17		416	0.00	240	24
	14	1	1141	1141	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.68	240	24
	15	1	877	877	-1	✓	1800	1800	49		85	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	440	440	-1	✓	2054	864	51		77	0.00	99	10
		3	437	437	-1	✓	1915	806	54		66	0.00	99	10
	C	1	267	267	0		1665	673	40		127	0.00	95	97
		2	44	44	0		2023	219	20		348	0.00	24	26
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	226	226	0		2055	1165	19		364	0.00	134	13
		2	118	118	0		2055	223	53		70	0.00	24	26
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	270	270	0		Unrestricted	Unrestricted	0		Unrestricted	0.75	240	24
	Cx	1	124	124	0		Unrestricted	Unrestricted	0		Unrestricted	1.55	240	24
	Dx	1	437	437	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.10	240	24
		2	704	704	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.73	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.21	0.00	0.02	0.26	0.26	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	0.24	0.00	0.02	0.32	0.32	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.21	0.00	0.02	0.26	0.26	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	0.95	0.00	0.23	3.28	3.28	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	27.99	3.16	0.26	48.58	48.58	73.71	316.47	7.85	4.07	4.07
		3	2.64	28.94	3.19	0.32	49.89	49.89	75.46	320.23	9.54	4.13	4.13
	C	1	2.40	27.16	1.88	0.13	28.60	28.60	70.81	185.18	3.89	2.37	2.37
		2	2.40	50.87	0.60	0.03	8.83	8.83	91.56	39.53	0.75	0.51	0.51
		3	2.40	53.22	0.04	0.00	0.63	0.63	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	13.71	0.84	0.02	12.22	12.22	47.23	106.04	0.70	1.34	1.34
		2	5.16	59.61	1.66	0.29	27.74	27.74	100.52	109.95	8.67	1.49	1.49
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.02	6.96	0.26	0.00	0.00	0.00			0.00	80.00	80.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.02	69.57	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	13	1	0.00	0.02	78.26	0.02	0.00	0.00	0.00			0.00	0.00	0.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			15.00	0.00	15.00	
	15	1	0.00	0.23	23.42	0.99	0.00	0.00	0.00			0.00	123.00	123.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	12.00	3.83	313.54	1.83	0.00	0.00	0.26	9.55	0.00	0.00	0.00	
		3	0.00	12.22	3.83	319.28	1.93	0.00	0.00	0.32	9.55	0.00	0.00	0.00	
	C	1	0.00	6.66	3.48	191.38	0.51	0.00	0.00	0.13	5.62	0.00	0.00	0.00	
		2	0.00	1.37	3.48	39.38	0.00	0.00	0.00	0.03	1.35	20.00	0.00	20.00	
		3	0.00	0.10	3.48	2.84	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	D	1	0.00	4.48	7.48	59.91	0.00	0.00	0.00	0.02	4.04	0.00	0.00	0.00	
		2	0.00	4.03	7.48	53.90	0.00	0.00	0.00	0.29	3.83	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			63.00	0.00	63.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			195.00	0.00	195.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			125.00	0.00	125.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			24.00	0.00	24.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
5	05/12/2018 10:05:55	05/12/2018 10:05:56	08:00	240	195.93	12.81	54.23	B/3	0	0	B/3	15/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	54	0	6066	3136	7.60	181.96	13.97	195.93

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	6066	6066	-4	✓	54		66	3178	3193

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.10	7.60	11.47	1.35	181.96	181.96	18.37	1083.05	31.42	13.97	13.97

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	319.28	0.00	940.00	203.00	1143.00

A6 - DS 2035 PM
D6 - PM Peak 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2049	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	9	47.43		2049
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	93.94		2055
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	53	53		
	2	3	3	0	0
11	1	975	975		
13	1	56	56	0	0
14	1	987	987		
15	1	983	983		
A	1	3	3	0	0
B	2	516	516		
	3	467	467		
C	1	53	53		
	2	0	0	0	0
	3	3	3		
D	1	700	700		
	2	275	275		
Ax	1	3	3		
Bx	1	700	700		
Cx	1	327	327		
Dx	1	467	467		
	2	520	520		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	53	3	0
	2	275	0	0	700
	3	3	0	0	0
	4	49	934	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	275
	9		4	1	15/1, B/2, Cx/1	Normal	49
	13		2	4	11/1, D/1, Bx/1	Normal	700
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	0
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	53
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	467
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	467

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	83, 113, 127, 140, 153, 191, 217, 231, 4, 11

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	19	83	64	1	7
	2	✓	2	A,B,E	88	113	25	1	7
	3	✓	4	E,F	120	127	7	1	7
	4	✓	5	G,E	133	140	7	1	7
	5	✓	6	K,L,J	146	153	7	1	7
	6	✓	1	A,C	168	191	23	1	7
	7	✓	2	A,B,E	196	217	21	1	7
	8	✓	4	E,F	224	231	7	1	7
	9	✓	5	G,E	237	4	7	1	7
	10	✓	7	H,E	4	11	7	1	7

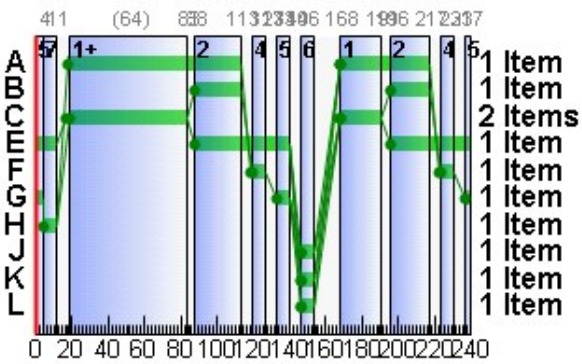
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	168	217	49
		2	✓	18	113	95
	B	1	✓	88	113	25
		2	✓	196	217	21
	C	1	✓	168	191	23
		2	✓	19	83	64
	E	1	✓	88	140	52
		2	✓	196	11	55
	F	1	✓	120	127	7
		2	✓	224	231	7
	G	1	✓	133	140	7
		2	✓	237	4	7
	H	1	✓	4	11	7
	J	1	✓	146	153	7
	K	1	✓	146	153	7
	L	1	✓	146	153	7

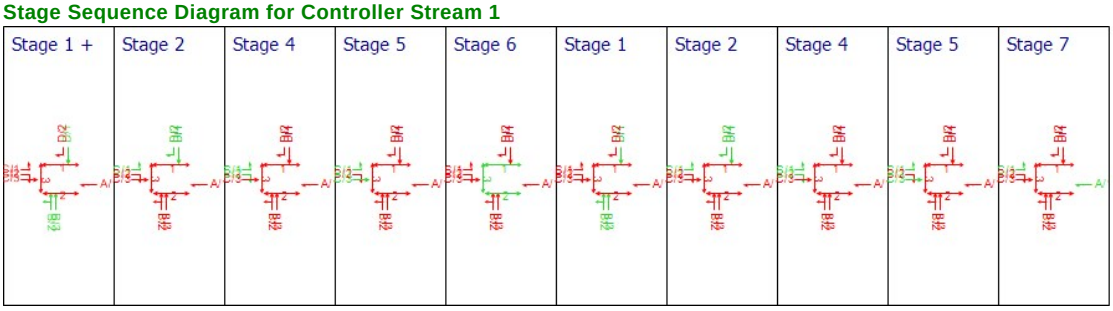
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	4	11	7			
B	2	1	1	C	168	191	23	19	83	64
B	3	1	1	C	168	191	23	19	83	64
C	1	1	1	E	88	140	52	196	11	55
C	2	1	1	F	120	127	7	224	231	7
C	3	1	1	G	133	140	7	237	4	7
D	1	1	1	A	168	217	49	18	113	95
D	2	1	1	B	88	113	25	196	217	21

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	11	8	15
	2	✓	2	A,B,E	83	5	12
	3	✓	4	E,F	113	7	14
	4	✓	5	G,E	127	6	13
	5	✓	6	K,L,J	140	6	13
	6	✓	1	A,C	153	15	22
	7	✓	2	A,B,E	191	5	12
	8	✓	4	E,F	217	7	14
	9	✓	5	G,E	231	6	13
	10	✓	7	H,E	4	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	11	83	113	127	140	153	191	217	231	4

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	3	2957	53	1800	240	0.03	0.00	0.01	0.01	0.00	0.01
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	54	66	975	1800	240	1.18	0.32	0.46	4.54	0.00	4.54
	13	1	3	2793	56	1800	240	0.03	0.00	0.00	0.01	0.00	0.01
	14	1	0	Unrestricted	987	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	55	65	983	1800	240	1.20	0.33	1.40	4.66	0.00	4.66
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	68	33	516	2049	87	41.84	16.62	434.40	85.17	5.51	90.68
		3	66	37	467	1915	87	40.17	14.89	389.28	73.99	4.94	78.92
	C	1	7	1184	53	1665	107	19.14	1.15	33.09	4.00	0.37	4.37
		2	0	Unrestricted	0	2055	14	0.00	0.00	0.00	0.00	0.00	0.00
		3	2	3730	3	1915	14	54.14	0.11	3.07	0.64	0.03	0.68
	D	1	56	61	700	2055	144	16.10	16.11	215.36	44.44	5.16	49.60
		2	67	35	275	2055	46	53.96	10.29	137.58	58.54	3.37	61.91
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	700	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	327	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	467	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	520	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	53	53	0		1800	1800	3		2957	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	975	975	0		1800	1800	54		66	0.00	240	24
	13	1	56	56	0		1800	1800	3		2793	0.00	240	24
	14	1	987	987	0		Unrestricted	Unrestricted	0		Unrestricted	1.00	240	24
	15	1	983	983	0		1800	1800	55		65	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	516	516	0		2049	760	68		33	0.00	87	89
		3	467	467	0		1915	710	66		37	0.00	87	89
	C	1	53	53	0		1665	756	7		1184	0.00	107	10
		2	0	0	0		2055	137	0		Unrestricted	0.00	14	16
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	700	700	0		2055	1250	56		61	0.00	144	14
		2	275	275	0		2055	411	67		35	0.00	46	48
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	700	700	0		Unrestricted	Unrestricted	0		Unrestricted	0.73	240	24
	Cx	1	327	327	0		Unrestricted	Unrestricted	0		Unrestricted	1.22	240	24
	Dx	1	467	467	0		Unrestricted	Unrestricted	0		Unrestricted	1.16	240	24
		2	520	520	0		Unrestricted	Unrestricted	0		Unrestricted	1.01	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	1.18	0.00	0.32	4.54	4.54	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	1.20	0.00	0.33	4.66	4.66	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	41.84	5.29	0.71	85.17	85.17	85.19	428.95	10.60	5.51	5.51
		3	2.64	40.17	4.59	0.62	73.99	73.99	84.28	384.26	9.33	4.94	4.94
	C	1	2.40	19.14	0.28	0.00	4.00	4.00	55.00	29.07	0.08	0.37	0.37
		2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		3	2.40	54.14	0.04	0.00	0.64	0.64	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	16.10	2.77	0.36	44.44	44.44	58.78	400.85	10.61	5.16	5.16
		2	5.16	53.96	3.46	0.66	58.54	58.54	97.73	249.22	19.55	3.37	3.37
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.00	6.96	0.01	0.00	0.00	0.00			240.00	0.00	240.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.32	69.57	0.46	0.00	0.00	0.00			0.00	111.00	111.00	
	13	1	0.00	0.00	78.26	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			74.00	0.00	74.00	
	15	1	0.00	0.33	23.42	1.40	0.00	0.00	0.00			0.00	174.00	174.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	16.62	3.83	434.40	4.54	0.00	0.00	2.53	12.75	0.00	0.00	0.00	
		3	0.00	14.89	3.83	389.28	3.57	0.00	0.00	1.87	11.52	0.00	0.00	0.00	
	C	1	0.00	1.15	3.48	33.09	0.00	0.00	0.00	0.00	1.12	104.00	0.00	104.00	
		2	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	16.00	
		3	0.00	0.11	3.48	3.07	0.00	0.00	0.00	0.00	0.11	14.00	0.00	14.00	
	D	1	0.00	16.11	7.48	215.36	1.05	0.00	0.00	0.36	10.86	0.00	0.00	0.00	
		2	0.00	10.29	7.48	137.58	0.23	0.00	0.00	0.66	9.07	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			76.00	0.00	76.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			112.00	0.00	112.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			131.00	0.00	131.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			103.00	0.00	103.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
6	05/12/2018 10:05:56	05/12/2018 10:05:57	08:00	240	296.74	19.53	67.91	B/2	0	0	B/2	15/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	68	0	7091	3146	9.92	277.33	19.41	296.74

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	7091	7091	0		68		33	3188	3203

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	16.15	9.92	16.52	3.01	277.33	277.33	21.83	1498.01	50.19	19.41	19.41

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	434.40	0.00	1594.00	285.00	1879.00

A7 - DS 2020 AM
D7 - AM Peak 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2055	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2023	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	0	47.43		2055
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	93.94		2023
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	105	105		
	2	3	3	0	0
11	1	397	397		
13	1	108	108	0	0
14	1	654	654		
15	1	552	552		
A	1	3	3	0	0
B	2	277	277		
	3	276	276		
C	1	103	103		
	2	2	2	0	0
	3	3	3		
D	1	327	327		
	2	70	70		
Ax	1	3	3		
Bx	1	329	329		
Cx	1	74	74		
Dx	1	276	276		
	2	379	379		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	103	3	2
	2	70	0	0	327
	3	3	0	0	0
	4	1	551	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	70
	9		4	1	15/1, B/2, Cx/1	Normal	1
	13		2	4	11/1, D/1, Bx/1	Normal	327
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	2
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	103
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	276
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	276

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	90, 112, 126, 144, 157, 209, 221, 235, 8, 15

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	23	90	67	1	7
	2	✓	2	A,B,E	95	112	17	1	7
	3	✓	4	E,F	119	126	7	1	7
	4	✓	5	G,E	132	144	12	1	7
	5	✓	6	K,L,J	150	157	7	1	7
	6	✓	1	A,C	172	209	37	1	7
	7	✓	2	A,B,E	214	221	7	1	7
	8	✓	4	E,F	228	235	7	1	7
	9	✓	5	G,E	1	8	7	1	7
	10	✓	7	H,E	8	15	7	1	7

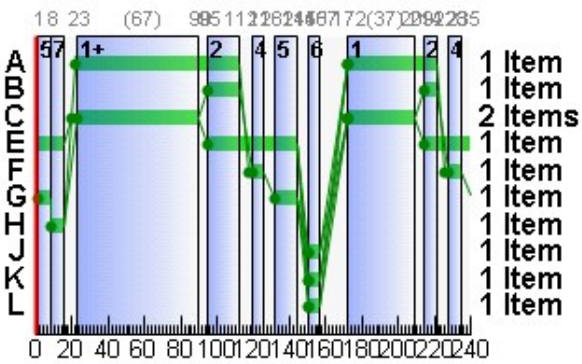
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	172	221	49
		2	✓	22	112	90
	B	1	✓	95	112	17
		2	✓	214	221	7
	C	1	✓	172	209	37
		2	✓	23	90	67
	E	1	✓	95	144	49
		2	✓	214	15	41
	F	1	✓	119	126	7
		2	✓	228	235	7
	G	1	✓	132	144	12
		2	✓	1	8	7
	H	1	✓	8	15	7
	J	1	✓	150	157	7
	K	1	✓	150	157	7
	L	1	✓	150	157	7

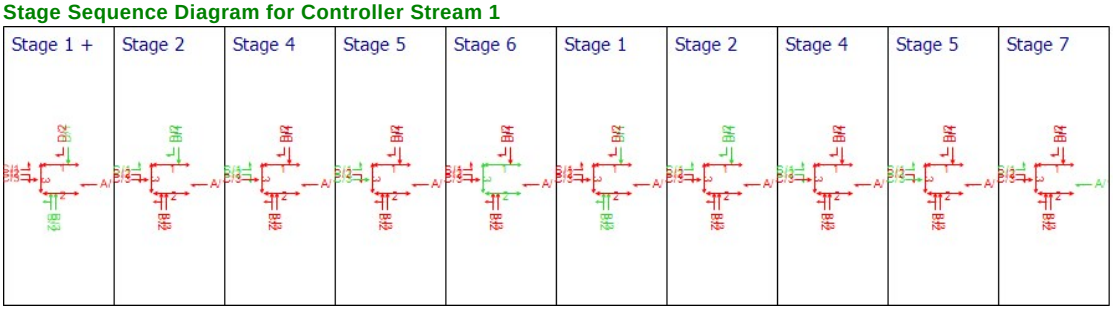
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	8	15	7			
B	2	1	1	C	172	209	37	23	90	67
B	3	1	1	C	172	209	37	23	90	67
C	1	1	1	E	95	144	49	214	15	41
C	2	1	1	F	119	126	7	228	235	7
C	3	1	1	G	132	144	12	1	8	7
D	1	1	1	A	172	221	49	22	112	90
D	2	1	1	B	95	112	17	214	221	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	15	8	15
	2	✓	2	A,B,E	90	5	12
	3	✓	4	E,F	112	7	14
	4	✓	5	G,E	126	6	13
	5	✓	6	K,L,J	144	6	13
	6	✓	1	A,C	157	15	22
	7	✓	2	A,B,E	209	5	12
	8	✓	4	E,F	221	7	14
	9	✓	5	G,E	235	6	13
	10	✓	7	H,E	8	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	15	90	112	126	144	157	209	221	235	8

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	6	1443	105	1800	240	0.06	0.00	0.03	0.03	0.00	0.03
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	22	308	397	1800	240	0.28	0.03	0.04	0.44	0.00	0.44
	13	1	6	1400	108	1800	240	0.06	0.00	0.00	0.03	0.00	0.03
	14	1	0	Unrestricted	655	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	31	193	553	1800	240	0.44	0.07	0.29	0.97	0.00	0.97
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	31	195	277	2055	104	23.44	7.22	188.78	25.61	2.21	27.82
		3	33	176	276	1915	104	23.84	7.29	190.42	25.96	2.23	28.18
	C	1	16	458	103	1665	90	24.99	2.42	69.54	10.15	0.84	10.99
		2	1	5969	2	2023	14	53.44	0.07	1.97	0.42	0.02	0.44
		3	2	4927	3	1915	19	51.37	0.10	2.95	0.61	0.03	0.64
	D	1	27	232	327	2055	139	13.15	6.41	85.70	16.96	1.96	18.92
		2	31	186	70	2055	24	53.25	2.33	31.12	14.70	0.82	15.52
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	329	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	74	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	276	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	379	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	105	105	0		1800	1800	6		1443	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	397	397	0		1800	1800	22		308	0.00	240	24
	13	1	108	108	0		1800	1800	6		1400	0.00	240	24
	14	1	655	655	-1		Unrestricted	Unrestricted	0		Unrestricted	0.77	240	24
	15	1	553	553	-1		1800	1800	31		193	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	277	277	-1		2055	908	31		195	0.00	104	10
		3	276	276	-1		1915	846	33		176	0.00	104	10
	C	1	103	103	0		1665	638	16		458	0.00	90	92
		2	2	2	0		2023	135	1		5969	0.00	14	16
		3	3	3	0		1915	168	2		4927	0.00	19	21
	D	1	327	327	0		2055	1207	27		232	0.00	139	14
		2	70	70	0		2055	223	31		186	0.00	24	26
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.70	240	24
	Bx	1	329	329	0		Unrestricted	Unrestricted	0		Unrestricted	0.76	240	24
	Cx	1	74	74	0		Unrestricted	Unrestricted	0		Unrestricted	1.57	240	24
	Dx	1	276	276	-1		Unrestricted	Unrestricted	0		Unrestricted	1.06	240	24
		2	379	379	-1		Unrestricted	Unrestricted	0		Unrestricted	0.83	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.06	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	0.28	0.00	0.03	0.44	0.44	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.06	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	0.44	0.00	0.07	0.97	0.97	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	23.44	1.74	0.07	25.61	25.61	63.71	174.47	2.00	2.21	2.21
		3	2.64	23.84	1.75	0.08	25.96	25.96	64.38	175.31	2.36	2.23	2.23
	C	1	2.40	24.99	0.70	0.02	10.15	10.15	64.81	66.29	0.46	0.84	0.84
		2	2.40	53.44	0.03	0.00	0.42	0.42	92.43	1.85	0.00	0.02	0.02
		3	2.40	51.37	0.04	0.00	0.61	0.61	90.35	2.71	0.00	0.03	0.03
	D	1	5.16	13.15	1.14	0.05	16.96	16.96	47.91	155.17	1.51	1.96	1.96
		2	5.16	53.25	0.96	0.07	14.70	14.70	93.73	63.48	2.14	0.82	0.82
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.00	6.96	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.03	69.57	0.04	0.00	0.00	0.00			0.00	0.00	0.00	
	13	1	0.00	0.00	78.26	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			23.00	0.00	23.00	
	15	1	0.00	0.07	23.42	0.29	0.00	0.00	0.00			0.00	59.00	59.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	7.22	3.83	188.78	0.35	0.00	0.00	0.07	6.30	0.00	0.00	0.00	
		3	0.00	7.29	3.83	190.42	0.36	0.00	0.00	0.08	6.29	0.00	0.00	0.00	
	C	1	0.00	2.42	3.48	69.54	0.00	0.00	0.00	0.02	2.28	0.00	0.00	0.00	
		2	0.00	0.07	3.48	1.97	0.00	0.00	0.00	0.00	0.07	14.00	0.00	14.00	
		3	0.00	0.10	3.48	2.95	0.00	0.00	0.00	0.00	0.10	19.00	0.00	19.00	
	D	1	0.00	6.41	7.48	85.70	0.00	0.00	0.00	0.05	5.41	0.00	0.00	0.00	
		2	0.00	2.33	7.48	31.12	0.00	0.00	0.00	0.07	2.27	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			82.00	0.00	82.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			201.00	0.00	201.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			124.00	0.00	124.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			30.00	0.00	30.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
7	05/12/2018 10:05:58	05/12/2018 10:05:59	08:00	240	105.37	6.85	32.63	B/3	0	0	B/3	15/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	33	0	3943	3141	6.25	97.21	8.16	105.37

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	3943	3943	-4		33		176	3183	3198

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.70	6.25	6.46	0.39	97.21	97.21	16.50	642.15	8.49	8.16	8.16

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	190.42	0.00	977.00	59.00	1036.00

A8 - DS 2020 PM
D8 - PM Peak 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
10	(untitled)		4
11	(untitled)		6
13	(untitled)		5
14	(untitled)		
15	(untitled)		3
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		2

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
10	1	(untitled)			40.00	✓	Sum of lanes	1800			Normal	
	2	(untitled)			40.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
11	1	(untitled)			400.00	✓	Sum of lanes	1800			Normal	
13	1	(untitled)			450.00	✓	Sum of lanes	1800			Normal, Bus, Tram	
14	1	(untitled)		✓	139.02						Normal	
15	1	(untitled)		✓	134.64	✓	Sum of lanes	1800			Normal	
A	1	(untitled)			400.00	✓	Sum of lanes	2055	✓		Normal, Bus, Tram	
B	2	(untitled)			22.00	✓	Sum of lanes	2054	✓		Normal	
	3	(untitled)			22.00	✓	Sum of lanes	1915	✓		Normal	
C	1	(untitled)			20.00	✓	Sum of lanes	1665	✓		Normal	
	2	(untitled)			20.00	✓	Sum of lanes	2023	✓		Normal, Bus, Tram	
	3	(untitled)			20.00	✓	Sum of lanes	1915	✓		Normal	
D	1	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
	2	(untitled)			43.00	✓	Sum of lanes	2055	✓		Normal	
Ax	1	(untitled)			100.00						Normal	
Bx	1	(untitled)			100.00						Normal	
Cx	1	(untitled)			100.00						Normal	
Dx	1	(untitled)			100.00						Normal	
	2	(untitled)			100.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
10	1	2	(untitled)											1800
	2	1	(untitled)											1800
11	1	1	(untitled)											1800
13	1	1	(untitled)											1800
14	1	1	(untitled)											
15	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
B	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	1	47.43		2054
	3	1	(untitled)		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
C	1	2	(untitled)		✓	N/A	N/A	0	3.00		100	10.00	✓	1665
	2	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	93.94		2023
	3	3	(untitled)		✓	N/A	N/A	0	3.00		0	16.00	✓	1915
D	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
	2	2	(untitled)		✓	N/A	N/A	0	3.00		0	16.00		2055
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											
Dx	1	1	(untitled)											
	2	1	(untitled)											

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	240

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Bus - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Tram - Modelling

Arm	Traffic Stream	Stationary time (seconds)	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	0.00	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
10	1	13	13		
	2	3	3	0	0
11	1	515	515		
13	1	16	16	0	0
14	1	435	435		
15	1	428	428		
A	1	3	3	0	0
B	2	216	216		
	3	213	213		
C	1	10	10		
	2	3	3	0	0
	3	3	3		
D	1	417	417		
	2	98	98		
Ax	1	3	3		
Bx	1	420	420		
Cx	1	104	104		
Dx	1	213	213		
	2	223	223		

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	H	
B	2	1	C	
	3	1	C	
C	1	1	E	
	2	1	F	
	3	1	G	
D	1	1	A	
	2	1	B	

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
(ALL)	(untitled)				Farside	3.00	2.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
1	1	K	
2	1	L	
3	1	J	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	10	3	3
	2	98	0	0	417
	3	3	0	0	0
	4	3	425	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	13/1	Cx/1	#0000FF
	2	(untitled)	11/1	14/1	#FF0000
	3	(untitled)	A/1	Ax/1	#00FF00
	4	(untitled)	15/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	7		3	1	A/1, Cx/1	Normal	3
	8		2	1	11/1, D/2, Cx/1	Normal	98
	9		4	1	15/1, B/2, Cx/1	Normal	3
	13		2	4	11/1, D/1, Bx/1	Normal	417
	14		1	4	13/1, 10/1, C/2, Bx/1	Normal	3
	15		1	3	13/1, 10/2, C/3, Ax/1	Normal	3
	16		1	2	13/1, 10/1, C/1, Dx/2, 14/1	Normal	10
	17		4	2	15/1, B/2, Dx/1, 14/1	Normal	213
	18		4	2	15/1, B/3, Dx/2, 14/1	Normal	213

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Pedestrian	0
	K	(untitled)	7	300	0	0	Pedestrian	0
	L	(untitled)	7	300	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, C	1
	2	A, B, E	1
	4	E, F	1
	5	G, E	1
	6	K, L, J	1
	7	H, E	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 4, 5, 6, 1, 2, 4, 5, 7	83, 104, 118, 131, 144, 192, 215, 229, 2, 9

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A					5	5	5	0	5	7
	B			0		7	6	5	7	5	0
	C		5		5	5	5	5	0	7	5
	E			5					6	6	6
	F	6	6	6			6	0	5	0	7
	G	5	5	5		0		0	6	6	6
	H	7	7	8		7	7		8	0	0
	J	15	15	15	15	15	15	15			
	K	15	15	15	15	15	15	15			
	L	15	15	15	15	15	15	15			

Interstage Matrix for Controller Stream 1

		To					
		1	2	4	5	6	7
From	1	0	5	5	5	7	5
	2	5	0	7	6	7	5
	4	6	6	0	6	7	0
	5	5	5	0	0	6	0
	6	15	15	15	15	0	15
	7	8	7	7	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,C	17	83	66	1	7
	2	✓	2	A,B,E	88	104	16	1	7
	3	✓	4	E,F	111	118	7	1	7
	4	✓	5	G,E	124	131	7	1	7
	5	✓	6	K,L,J	137	144	7	1	7
	6	✓	1	A,C	159	192	33	1	7
	7	✓	2	A,B,E	197	215	18	1	7
	8	✓	4	E,F	222	229	7	1	7
	9	✓	5	G,E	235	2	7	1	7
	10	✓	7	H,E	2	9	7	1	7

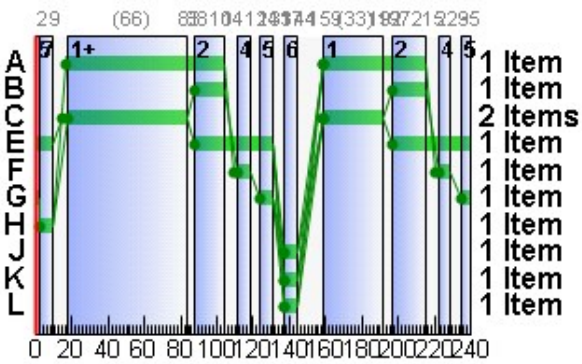
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	159	215	56
		2	✓	16	104	88
	B	1	✓	88	104	16
		2	✓	197	215	18
	C	1	✓	159	192	33
		2	✓	17	83	66
	E	1	✓	88	131	43
		2	✓	197	9	52
	F	1	✓	111	118	7
		2	✓	222	229	7
	G	1	✓	124	131	7
		2	✓	235	2	7
	H	1	✓	2	9	7
	J	1	✓	137	144	7
	K	1	✓	137	144	7
	L	1	✓	137	144	7

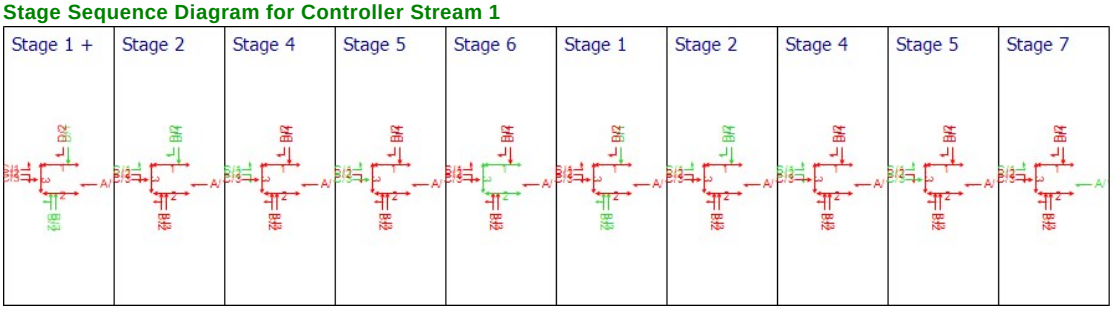
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	H	2	9	7			
B	2	1	1	C	159	192	33	17	83	66
B	3	1	1	C	159	192	33	17	83	66
C	1	1	1	E	88	131	43	197	9	52
C	2	1	1	F	111	118	7	222	229	7
C	3	1	1	G	124	131	7	235	2	7
D	1	1	1	A	159	215	56	16	104	88
D	2	1	1	B	88	104	16	197	215	18

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	A,C	9	8	15
	2	✓	2	A,B,E	83	5	12
	3	✓	4	E,F	104	7	14
	4	✓	5	G,E	118	6	13
	5	✓	6	K,L,J	131	6	13
	6	✓	1	A,C	144	15	22
	7	✓	2	A,B,E	192	5	12
	8	✓	4	E,F	215	7	14
	9	✓	5	G,E	229	6	13
	10	✓	7	H,E	2	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	6	8	15	0
		2	1	3	7	0
	B	1	2	3	5	0
		2	7	8	5	0
	C	1	6	7	15	0
		2	1	2	8	0
	E	1	2	5	5	0
		2	7	1	5	0
	F	1	3	4	7	0
		2	8	9	7	0
	G	1	4	5	6	0
		2	9	10	6	0
	H	1	10	1	0	0
	J	1	5	6	6	0
	K	1	5	6	6	0
	L	1	5	6	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
1	10	9	83	104	118	131	144	192	215	229	2

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	1	1	12362	13	1800	240	0.01	0.00	0.00	0.00	0.00	0.00
		2	0	53900	3	1800	240	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	29	215	515	1800	240	0.40	0.06	0.08	0.81	0.00	0.81
	13	1	1	10025	16	1800	240	0.01	0.00	0.00	0.00	0.00	0.00
	14	1	0	Unrestricted	436	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	24	278	429	1800	240	0.31	0.04	0.16	0.53	0.00	0.53
	A	1	4	1955	3	2055	7	113.82	0.19	0.28	1.35	0.04	1.38
	B	2	25	260	216	2054	99	23.33	5.02	131.25	19.88	1.73	21.60
		3	26	241	213	1915	99	23.59	5.02	131.14	19.82	1.71	21.54
	C	1	1	5956	10	1665	95	21.82	0.22	6.23	0.86	0.07	0.93
		2	2	3946	3	2023	14	53.37	0.10	2.91	0.63	0.03	0.67
		3	2	3730	3	1915	14	53.41	0.10	2.91	0.63	0.03	0.67
	D	1	33	170	417	2055	144	12.53	7.84	104.89	20.60	2.51	23.11
		2	32	183	98	2055	34	48.69	3.26	43.58	18.82	1.11	19.93
	Ax	1	0	Unrestricted	3	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	420	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	104	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	0	Unrestricted	213	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
		2	0	Unrestricted	223	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	10	1	13	13	0		1800	1800	1		12362	0.00	240	24
		2	3	3	0		1800	1800	0		53900	0.00	240	24
	11	1	515	515	0		1800	1800	29		215	0.00	240	24
	13	1	16	16	0		1800	1800	1		10025	0.00	240	24
	14	1	436	436	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	0.99	240	24
	15	1	429	429	-1	✓	1800	1800	24		278	0.00	240	24
	A	1	3	3	0		2055	69	4		1955	0.00	7	8
	B	2	216	216	-1	✓	2054	864	25		260	0.00	99	10
		3	213	213	-1	✓	1915	806	26		241	0.00	99	10
	C	1	10	10	0		1665	673	1		5956	0.00	95	97
		2	3	3	0		2023	135	2		3946	0.00	14	16
		3	3	3	0		1915	128	2		3730	0.00	14	16
	D	1	417	417	0		2055	1250	33		170	0.00	144	14
		2	98	98	0		2055	308	32		183	0.00	34	36
	Ax	1	3	3	0		Unrestricted	Unrestricted	0		Unrestricted	1.71	240	24
	Bx	1	420	420	0		Unrestricted	Unrestricted	0		Unrestricted	0.72	240	24
	Cx	1	104	104	0		Unrestricted	Unrestricted	0		Unrestricted	1.51	240	24
	Dx	1	213	213	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.10	240	24
		2	223	223	-1	✓	Unrestricted	Unrestricted	0		Unrestricted	1.03	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10	1	4.80	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	48.00	0.40	0.00	0.06	0.81	0.81	0.00	0.00	0.00	0.00	0.00
	13	1	54.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	14	1	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	16.16	0.31	0.00	0.04	0.53	0.53	0.00	0.00	0.00	0.00	0.00
	A	1	48.00	113.82	0.09	0.00	1.35	1.35	96.67	2.89	0.02	0.04	0.04
	B	2	2.64	23.33	1.36	0.04	19.88	19.88	63.71	136.36	1.25	1.73	1.73
		3	2.64	23.59	1.35	0.05	19.82	19.82	64.20	135.33	1.42	1.71	1.71
	C	1	2.40	21.82	0.06	0.00	0.86	0.86	58.61	5.86	0.00	0.07	0.07
		2	2.40	53.37	0.04	0.00	0.63	0.63	92.47	2.77	0.00	0.03	0.03
		3	2.40	53.41	0.04	0.00	0.63	0.63	92.49	2.77	0.00	0.03	0.03
	D	1	5.16	12.53	1.37	0.08	20.60	20.60	47.98	197.59	2.50	2.51	2.51
		2	5.16	48.69	1.25	0.07	18.82	18.82	90.01	86.01	2.20	1.11	1.11
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		2	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	10	1	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
		2	0.00	0.00	6.96	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	11	1	0.00	0.06	69.57	0.08	0.00	0.00	0.00			0.00	4.00	4.00	
	13	1	0.00	0.00	78.26	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	14	1	0.00	0.00	24.18	0.00	0.00	0.00	0.00			103.00	0.00	103.00	
	15	1	0.00	0.04	23.42	0.16	0.00	0.00	0.00			0.00	30.00	30.00	
	A	1	0.00	0.19	69.57	0.28	0.00	0.00	0.00	0.00	0.19	7.00	0.00	7.00	
	B	2	0.00	5.02	3.83	131.25	0.06	0.00	0.00	0.04	4.54	0.00	0.00	0.00	
		3	0.00	5.02	3.83	131.14	0.06	0.00	0.00	0.05	4.48	0.00	0.00	0.00	
	C	1	0.00	0.22	3.48	6.23	0.00	0.00	0.00	0.00	0.22	95.00	0.00	95.00	
		2	0.00	0.10	3.48	2.91	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
		3	0.00	0.10	3.48	2.91	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	D	1	0.00	7.84	7.48	104.89	0.00	0.00	0.00	0.08	6.34	0.00	0.00	0.00	
		2	0.00	3.26	7.48	43.58	0.00	0.00	0.00	0.07	3.12	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			237.00	0.00	237.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			74.00	0.00	74.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			194.00	0.00	194.00	
	Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			131.00	0.00	131.00	
		2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			119.00	0.00	119.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
8	05/12/2018 10:05:59	05/12/2018 10:06:00	08:00	240	91.17	5.91	33.36	D/1	0	0	D/1	11/1	D/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	33	0	3338	3146	6.38	83.94	7.23	91.17

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	3338	3338	-4	✓	33		170	3188	3203

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	16.60	6.38	5.57	0.34	83.94	83.94	17.29	569.59	7.39	7.23	7.23

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	131.25	0.00	1708.00	34.00	1742.00

TRANSYT 15

Version: 15.5.1.7048
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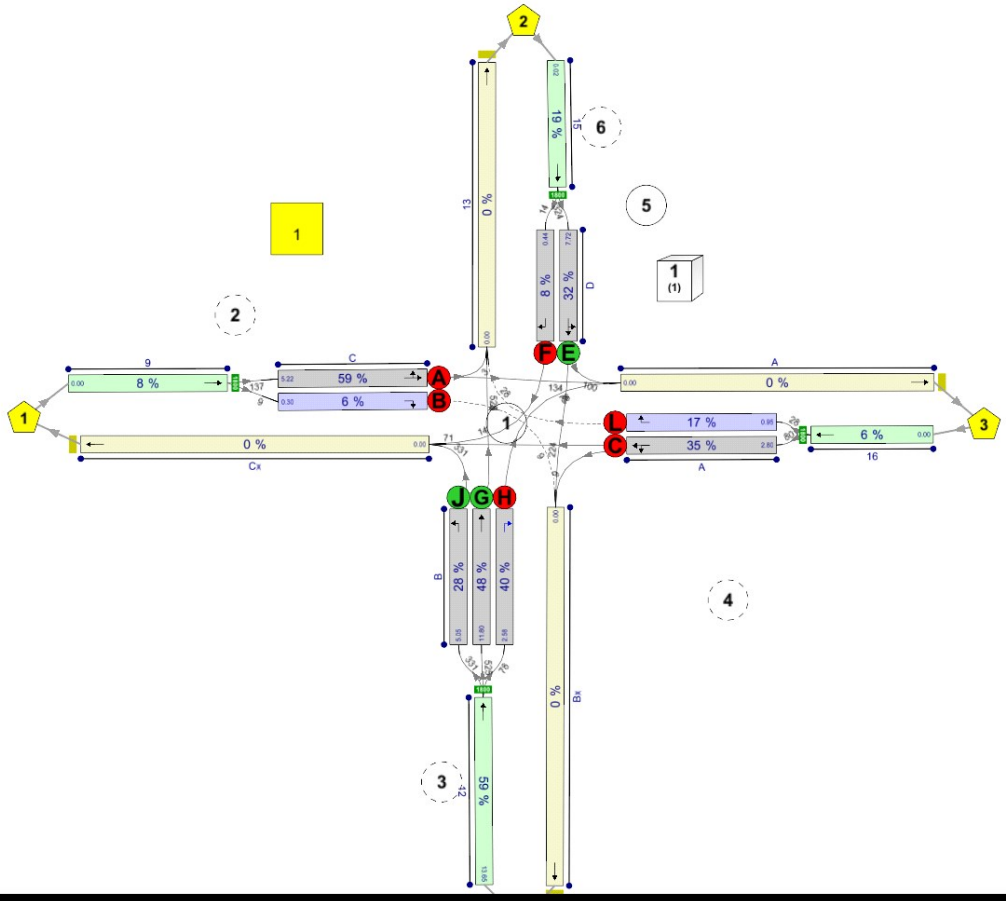
Filename: Ballycorous Interchange Jnc_RevC.t15
Path: G:\2017\p170172\calcs\transyt\Ballycorous Interchange Jnc
Report generation date: 05/12/2018 09:49:27

»A1 - DS&CM2035_NoBan_AM : D1 - AM Peak DS&CM NoBan 2035* :
»A2 - DS&CM2035_NoBan_PM : D2 - PM PeakDS&CM NoBan 2035* :
»A3 - DS&CM2035_Ban_AM : D3 - AM Peak DS&CM Ban 2035* :
»A4 - DS&CM2035_Ban_PM : D4 - PM Peak DS&CM Ban 2035* :
»A5 - DS 2035 AM : D5 - AM Peak DS 2035* :
»A6 - DS 2035 PM : D6 - PM Peak DS 2035* :
»A7 - DS 2020 AM : D7 - AM Peak DS 2020* :
»A8 - DS 2020 PM : D8 - PM Peak DS 2020* :

Network Diagrams



[redacted]

A1 - DS&CM2035_NoBan_AM
D1 - AM Peak DS&CM NoBan 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2050			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2017			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	9	53.61		2050
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	33	26.61		2017
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	94	187	32
	2	3	0	286	382
	3	208	163	0	20
	4	273	777	2	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	273
	11		4	2	12/1, B/2, 13/1	Normal	777
	12		3	2	16/1, A/2, 13/1	Normal	163
	26		1	4	9/1, C/3, Bx/1	Normal	32
	27		4	3	12/1, B/3, Ax/1	Normal	2
	30		2	1	15/1, D/3, Cx/1	Normal	3
	31		1	2	9/1, C/2, 13/1	Normal	94
	35		2	4	15/1, D/2, Bx/1	Normal	382
	36		2	3	15/1, D/2, Ax/1	Normal	286
	37		3	4	16/1, A/1, Bx/1	Normal	20
	38		3	1	16/1, A/1, Cx/1	Normal	208
	39		1	3	9/1, C/2, Ax/1	Normal	187

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	68, 80, 112, 126, 186, 198, 218

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	223	68	85	1	7
	2	✓	2	H,F	73	80	7	1	7
	3	✓	3	A,B,L,C	85	112	27	1	7
	4	✓	4	K	119	126	7	1	7
	5	✓	1	E,G,J	143	186	43	1	7
	6	✓	2	H,F	191	198	7	1	7
	7	✓	3	A,B,L,C	203	218	15	1	7

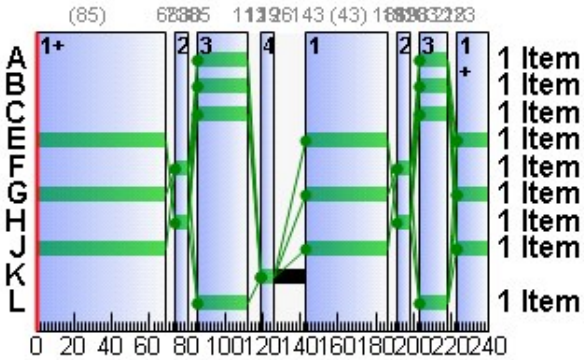
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	85	112	27
		2	✓	203	218	15
	B	1	✓	85	112	27
		2	✓	203	218	15
	C	1	✓	85	112	27
		2	✓	203	218	15
	E	1	✓	143	186	43
		2	✓	223	68	85
	F	1	✓	73	80	7
		2	✓	191	198	7
	G	1	✓	143	186	43
		2	✓	223	68	85
	H	1	✓	73	80	7
		2	✓	191	198	7
	J	1	✓	143	186	43
		2	✓	223	68	85
	K	1	✓	119	126	7
	L	1	✓	85	112	27
		2	✓	203	218	15

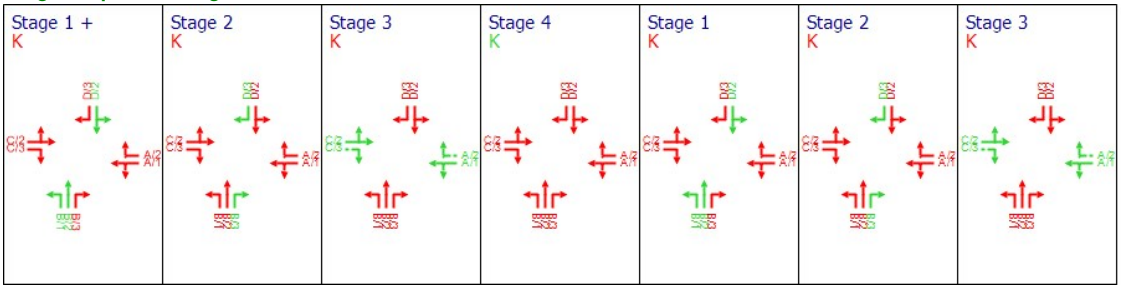
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	85	112	27	203	218	15
A	2	1	1	L	85	112	27	203	218	15
B	1	1	1	J	143	186	43	223	68	85
B	2	1	1	G	143	186	43	223	68	85
B	3	1	1	H	73	80	7	191	198	7
C	2	1	1	A	85	112	27	203	218	15
C	3	1	1	B	85	112	27	203	218	15
D	2	1	1	E	143	186	43	223	68	85
D	3	1	1	F	73	80	7	191	198	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	218	5	12
	2	✓	2	H,F	68	5	12
	3	✓	3	A,B,L,C	80	5	12
	4	✓	4	K	112	7	14
	5	✓	1	E,G,J	126	17	24
	6	✓	2	H,F	186	5	12
	7	✓	3	A,B,L,C	198	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	218	68	80	112	126	186	198

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	9	1	17	418	313	1800	240	0.21	0.02	0.08	0.26	0.00	0.26
	12	1	63	42	1052	1800	240	3.33	12.53	44.35	13.82	2.28	16.09
	13	1	0	Unrestricted	1034	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	37	141	671	1800	240	0.59	0.11	0.58	1.57	0.00	1.57
	16	1	22	314	391	1800	240	0.28	0.03	0.16	0.43	0.00	0.43
	A	1	61	48	228	2050	42	52.61	8.00	114.97	47.32	2.76	50.07
		2	62	46	163	1439	42	56.23	5.88	84.48	36.15	2.03	38.19
	B	1	25	264	273	2036	128	16.14	5.04	100.81	17.38	1.52	18.90
		2	76	18	777	1879	128	31.17	27.54	527.92	95.53	7.73	103.26
		3	1	6065	2	2055	14	51.48	0.06	1.59	0.41	0.02	0.43
	C	2	76	18	281	2017	42	61.58	10.75	154.59	68.25	3.71	71.96
		3	12	642	32	1439	42	42.17	1.46	20.95	5.32	0.33	5.65
	D	2	70	28	668	1751	128	27.93	22.91	365.94	73.59	6.24	79.83
		3	2	3524	3	1812	14	53.13	0.10	1.52	0.63	0.04	0.66
	Ax	1	0	Unrestricted	475	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	434	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	484	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	9	1	313	313	0		1800	1800	17		418	0.00	240	24
	12	1	1052	1052	0		1800	1662	63		42	0.00	240	24
	13	1	1034	1034	0		Unrestricted	Unrestricted	0		Unrestricted	0.40	240	24
	15	1	671	671	0		1800	1800	37		141	0.00	240	24
	16	1	391	391	0		1800	1800	22		314	0.00	240	24
	A	1	228	228	0		2050	376	61		48	0.00	42	44
		2	163	163	0		1439	264	62		46	0.00	42	44
	B	1	273	273	0		2036	1103	25		264	0.14	128	13
		2	777	777	0		1879	1018	76		18	0.14	128	13
		3	2	2	0		2055	137	1		6065	0.14	14	16
	C	2	281	281	0		2017	370	76		18	0.00	42	44
		3	32	32	0		1439	264	12		642	0.00	42	44
	D	2	668	668	0		1751	948	70		28	0.00	128	13
		3	3	3	0		1812	121	2		3524	0.00	14	16
	Ax	1	475	475	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	240	24
	Bx	1	434	434	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	240	24
	Cx	1	484	484	0		Unrestricted	Unrestricted	0		Unrestricted	0.78	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	9	1	16.54	0.21	0.00	0.02	0.26	0.26	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	3.33	0.43	0.54	13.82	13.82	17.26	165.27	16.26	2.28	2.28
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.59	0.00	0.11	1.57	1.57	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.28	0.00	0.03	0.43	0.43	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	52.61	2.87	0.46	47.32	47.32	96.43	206.23	13.63	2.76	2.76
		2	4.80	56.23	2.06	0.49	36.15	36.15	99.38	147.65	14.34	2.03	2.03
	B	1	3.60	16.14	1.18	0.04	17.38	17.38	44.33	119.80	1.22	1.52	1.52
		2	3.60	31.17	5.52	1.21	95.53	95.53	79.30	598.07	18.07	7.73	7.73
		3	3.00	51.48	0.03	0.00	0.41	0.41	92.43	1.85	0.00	0.02	0.02
	C	2	4.80	61.58	3.65	1.15	68.25	68.25	105.27	262.27	33.55	3.71	3.71
		3	4.80	42.17	0.37	0.01	5.32	5.32	82.45	26.13	0.25	0.33	0.33
	D	2	4.32	27.93	4.35	0.83	73.59	73.59	74.52	485.44	12.39	6.24	6.24
		3	4.32	53.13	0.04	0.00	0.63	0.63	93.65	2.80	0.01	0.04	0.04
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	9	1	0.00	0.02	23.98	0.08	0.00	0.00	0.00			0.00	79.00	79.00	
	12	1	0.00	12.53	28.24	44.35	0.00	0.00	0.00			0.00	167.00	167.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	15	1	0.00	0.11	19.07	0.58	0.00	0.00	0.00			0.00	123.00	123.00	
	16	1	0.00	0.03	18.47	0.16	0.00	0.00	0.00			0.00	17.00	17.00	
	A	1	0.00	8.00	6.96	114.97	0.04	0.00	0.00	0.46	7.17	0.00	0.00	0.00	
		2	0.00	5.88	6.96	84.48	0.00	0.00	0.00	0.49	5.29	0.00	0.00	0.00	
	B	1	0.00	5.04	5.00	100.81	0.00	0.00	0.00	0.04	5.04	0.00	0.00	0.00	
		2	0.00	27.54	5.22	527.92	6.30	0.00	0.00	3.71	15.44	0.00	0.00	0.00	
		3	0.00	0.06	4.00	1.59	0.00	0.00	0.00	0.00	0.06	14.00	0.00	14.00	
	C	2	0.00	10.75	6.96	154.59	0.54	0.00	0.00	1.15	9.43	0.00	0.00	0.00	
		3	0.00	1.46	6.96	20.95	0.00	0.00	0.00	0.01	0.95	38.00	0.00	38.00	
	D	2	0.00	22.91	6.26	365.94	3.57	0.00	0.00	1.32	14.56	0.00	0.00	0.00	
		3	0.00	0.10	6.26	1.52	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			39.00	0.00	39.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			50.00	0.00	50.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			41.00	0.00	41.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
1	05/12/2018 09:48:21	05/12/2018 09:48:22	08:00	240	387.30	25.40	76.34	B/2	0	0	B/2	12/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	76	18	7281	2500	12.56	360.66	26.65	387.30

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	7281	7281	0		76		18	2500	2518

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.41	12.56	20.50	4.90	360.66	360.66	29.19	2015.50	109.71	26.65	26.65

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	527.92	0.00	196.00	386.00	582.00

A2 - DS&CM2035_NoBan_PM
D2 - PM PeakDS&CM NoBan 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2047			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2050			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	14	53.61		2047
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	4	26.61		2050
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	3	77	131
	2	90	0	157	570
	3	351	218	0	56
	4	39	488	41	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	39
	11		4	2	12/1, B/2, 13/1	Normal	488
	12		3	2	16/1, A/2, 13/1	Normal	218
	26		1	4	9/1, C/3, Bx/1	Normal	131
	27		4	3	12/1, B/3, Ax/1	Normal	41
	30		2	1	15/1, D/3, Cx/1	Normal	90
	31		1	2	9/1, C/2, 13/1	Normal	3
	35		2	4	15/1, D/2, Bx/1	Normal	570
	36		2	3	15/1, D/2, Ax/1	Normal	157
	37		3	4	16/1, A/1, Bx/1	Normal	56
	38		3	1	16/1, A/1, Cx/1	Normal	351
	39		1	3	9/1, C/2, Ax/1	Normal	77

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	60, 73, 115, 129, 193, 205, 227

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	232	60	68	1	7
	2	✓	2	H,F	65	73	8	1	7
	3	✓	3	A,B,L,C	78	115	37	1	7
	4	✓	4	K	122	129	7	1	7
	5	✓	1	E,G,J	146	193	47	1	7
	6	✓	2	H,F	198	205	7	1	7
	7	✓	3	A,B,L,C	210	227	17	1	7

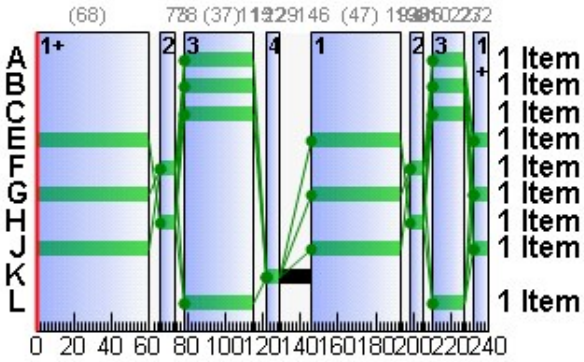
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	78	115	37
		2	✓	210	227	17
	B	1	✓	78	115	37
		2	✓	210	227	17
	C	1	✓	78	115	37
		2	✓	210	227	17
	E	1	✓	146	193	47
		2	✓	232	60	68
	F	1	✓	65	73	8
		2	✓	198	205	7
	G	1	✓	146	193	47
		2	✓	232	60	68
	H	1	✓	65	73	8
		2	✓	198	205	7
	J	1	✓	146	193	47
		2	✓	232	60	68
	K	1	✓	122	129	7
	L	1	✓	78	115	37
		2	✓	210	227	17

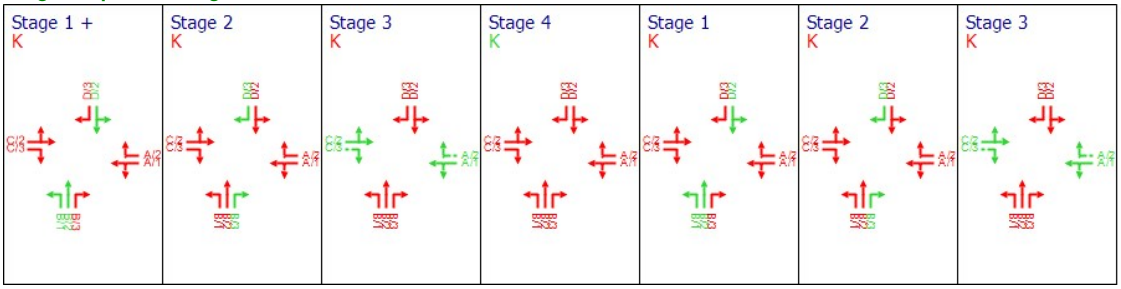
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	78	115	37	210	227	17
A	2	1	1	L	78	115	37	210	227	17
B	1	1	1	J	146	193	47	232	60	68
B	2	1	1	G	146	193	47	232	60	68
B	3	1	1	H	65	73	8	198	205	7
C	2	1	1	A	78	115	37	210	227	17
C	3	1	1	B	78	115	37	210	227	17
D	2	1	1	E	146	193	47	232	60	68
D	3	1	1	F	65	73	8	198	205	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	227	5	12
	2	✓	2	H,F	60	5	12
	3	✓	3	A,B,L,C	73	5	12
	4	✓	4	K	115	7	14
	5	✓	1	E,G,J	129	17	24
	6	✓	2	H,F	193	5	12
	7	✓	3	A,B,L,C	205	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	227	60	73	115	129	193	205

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	9	1	12	668	211	1800	240	0.13	0.01	0.03	0.11	0.00	0.11
	12	1	32	185	568	1800	240	0.46	0.07	0.26	1.03	0.00	1.03
	13	1	0	Unrestricted	709	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	45	98	817	1800	240	0.83	0.19	0.99	2.67	0.00	2.67
	16	1	35	159	625	1800	240	0.53	0.09	0.50	1.31	0.00	1.31
	A	1	85	6	407	2047	54	74.05	17.91	257.48	118.88	5.25	124.14
		2	65	39	218	1439	54	51.31	7.25	104.21	44.12	2.64	46.76
	B	1	4	2191	39	2036	115	18.53	0.92	18.43	2.85	0.25	3.10
		2	53	69	488	1879	115	26.63	15.76	301.99	51.26	4.24	55.50
		3	28	220	41	2055	15	58.36	1.47	36.68	9.44	0.50	9.94
	C	2	17	438	80	2050	54	37.49	2.17	31.23	11.83	0.79	12.62
		3	39	131	131	1439	54	42.23	3.69	53.05	21.82	1.36	23.18
	D	2	85	6	727	1751	115	47.12	30.60	488.76	135.12	8.31	143.44
		3	70	28	90	1812	15	85.79	3.96	63.32	30.46	1.35	31.80
	Ax	1	0	Unrestricted	275	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	757	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	480	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
17:00-18:00	9	1	211	211	0		1800	1800	12		668	0.00	240	24
	12	1	568	568	0		1800	1800	32		185	0.00	240	24
	13	1	709	709	0		Unrestricted	Unrestricted	0		Unrestricted	0.49	240	24
	15	1	817	817	0		1800	1800	45		98	0.00	240	24
	16	1	625	625	0		1800	1800	35		159	0.00	240	24
	A	1	407	407	0		2047	478	85		6	0.00	54	56
		2	218	218	0		1439	336	65		39	0.00	54	56
	B	1	39	39	0		2036	993	4		2191	0.00	115	11
		2	488	488	0		1879	916	53		69	0.00	115	11
		3	41	41	0		2055	146	28		220	0.00	15	17
	C	2	80	80	0		2050	478	17		438	0.00	54	56
		3	131	131	0		1439	336	39		131	0.00	54	56
	D	2	727	727	0		1751	854	85		6	0.00	115	11
		3	90	90	0		1812	128	70		28	0.00	15	17
	Ax	1	275	275	0		Unrestricted	Unrestricted	0		Unrestricted	0.62	240	24
	Bx	1	757	757	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	240	24
	Cx	1	480	480	0		Unrestricted	Unrestricted	0		Unrestricted	1.10	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	9	1	16.54	0.13	0.00	0.01	0.11	0.11	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	0.46	0.00	0.07	1.03	1.03	0.00	0.00	0.00	0.00	0.00
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.83	0.00	0.19	2.67	2.67	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.53	0.00	0.09	1.31	1.31	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	74.05	6.12	2.26	118.88	118.88	102.97	385.93	33.16	5.25	5.25
		2	4.80	51.31	2.52	0.59	44.12	44.12	96.56	193.21	17.30	2.64	2.64
	B	1	3.60	18.53	0.20	0.00	2.85	2.85	50.71	19.77	0.01	0.25	0.25
		2	3.60	26.63	3.31	0.30	51.26	51.26	69.21	328.72	9.03	4.24	4.24
		3	3.00	58.36	0.61	0.05	9.44	9.44	97.33	38.27	1.63	0.50	0.50
	C	2	4.80	37.49	0.82	0.02	11.83	11.83	78.81	62.54	0.50	0.79	0.79
		3	4.80	42.23	1.41	0.12	21.82	21.82	82.82	104.80	3.70	1.36	1.36
	D	2	4.32	47.12	7.19	2.33	135.12	135.12	91.19	628.41	34.51	8.31	8.31
		3	4.32	85.79	1.38	0.76	30.46	30.46	119.35	85.87	21.54	1.35	1.35
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
17:00-18:00	9	1	0.00	0.01	23.98	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	12	1	0.00	0.07	28.24	0.26	0.00	0.00	0.00			0.00	93.00	93.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			7.00	0.00	7.00	
	15	1	0.00	0.19	19.07	0.99	0.00	0.00	0.00			0.00	191.00	191.00	
	16	1	0.00	0.09	18.47	0.50	0.00	0.00	0.00			0.00	172.00	172.00	
	A	1	0.00	17.91	6.96	257.48	3.56	0.00	0.00	4.68	14.86	0.00	0.00	0.00	
		2	0.00	7.25	6.96	104.21	0.00	0.00	0.00	0.59	6.28	0.00	0.00	0.00	
	B	1	0.00	0.92	5.00	18.43	0.00	0.00	0.00	0.00	0.92	114.00	0.00	114.00	
		2	0.00	15.76	5.22	301.99	1.79	0.00	0.00	0.30	11.82	0.00	0.00	0.00	
		3	0.00	1.47	4.00	36.68	0.00	0.00	0.00	0.05	1.47	11.00	0.00	11.00	
	C	2	0.00	2.17	6.96	31.23	0.00	0.00	0.00	0.02	2.11	0.00	0.00	0.00	
		3	0.00	3.69	6.96	53.05	0.00	0.00	0.00	0.12	3.62	0.00	0.00	0.00	
	D	2	0.00	30.60	6.26	488.76	8.54	0.00	0.00	5.84	19.49	0.00	0.00	0.00	
		3	0.00	3.96	6.26	63.32	0.00	0.00	0.00	0.76	3.91	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			33.00	0.00	33.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			39.00	0.00	39.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			119.00	0.00	119.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
2	05/12/2018 09:48:22	05/12/2018 09:48:23	17:00	240	455.60	30.35	85.21	A/1	0	0	A/1	15/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	85	6	6663	2511	16.40	430.91	24.69	455.60

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	6663	6663	0		85		6	2511	2529

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	13.88	16.40	23.55	6.80	430.91	430.91	29.55	1847.52	121.38	24.69	24.69

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	488.76	0.00	323.00	456.00	779.00

A3 - DS&CM2035_Ban_AM
D3 - AM Peak DS&CM Ban 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2050			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2017			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	8	53.61		2050
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	33	26.61		2017
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	92	188	32
	2	3	0	286	382
	3	217	173	0	20
	4	263	787	2	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	263
	11		4	2	12/1, B/2, 13/1	Normal	787
	12		3	2	16/1, A/2, 13/1	Normal	173
	26		1	4	9/1, C/3, Bx/1	Normal	32
	27		4	3	12/1, B/3, Ax/1	Normal	2
	30		2	1	15/1, D/3, Cx/1	Normal	3
	31		1	2	9/1, C/2, 13/1	Normal	92
	35		2	4	15/1, D/2, Bx/1	Normal	382
	36		2	3	15/1, D/2, Ax/1	Normal	286
	37		3	4	16/1, A/1, Bx/1	Normal	20
	38		3	1	16/1, A/1, Cx/1	Normal	217
	39		1	3	9/1, C/2, Ax/1	Normal	188

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	69, 81, 116, 130, 189, 201, 217

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	222	69	87	1	7
	2	✓	2	H,F	74	81	7	1	7
	3	✓	3	A,B,L,C	86	116	30	1	7
	4	✓	4	K	123	130	7	1	7
	5	✓	1	E,G,J	147	189	42	1	7
	6	✓	2	H,F	194	201	7	1	7
	7	✓	3	A,B,L,C	206	217	11	1	7

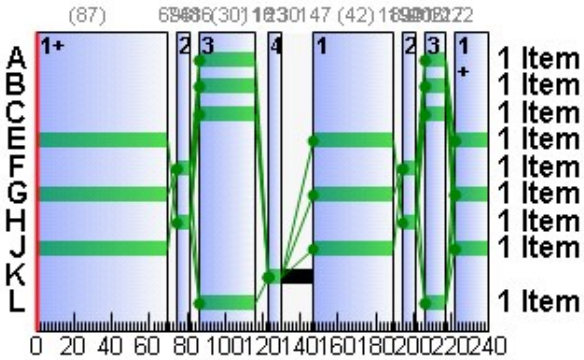
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	86	116	30
		2	✓	206	217	11
	B	1	✓	86	116	30
		2	✓	206	217	11
	C	1	✓	86	116	30
		2	✓	206	217	11
	E	1	✓	147	189	42
		2	✓	222	69	87
	F	1	✓	74	81	7
		2	✓	194	201	7
	G	1	✓	147	189	42
		2	✓	222	69	87
	H	1	✓	74	81	7
		2	✓	194	201	7
	J	1	✓	147	189	42
		2	✓	222	69	87
	K	1	✓	123	130	7
	L	1	✓	86	116	30
		2	✓	206	217	11

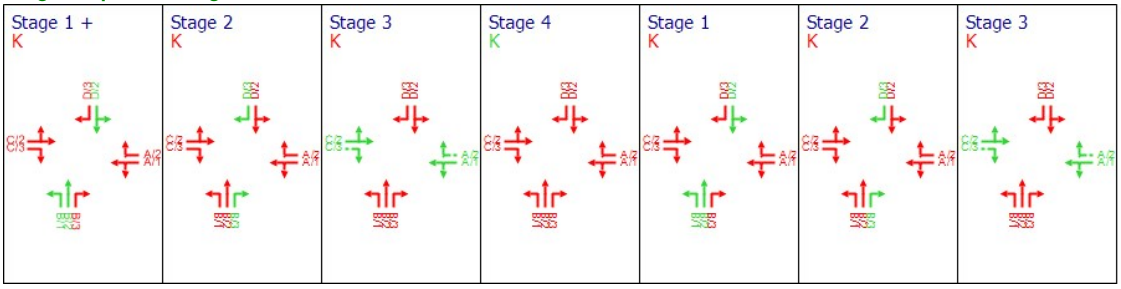
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	86	116	30	206	217	11
A	2	1	1	L	86	116	30	206	217	11
B	1	1	1	J	147	189	42	222	69	87
B	2	1	1	G	147	189	42	222	69	87
B	3	1	1	H	74	81	7	194	201	7
C	2	1	1	A	86	116	30	206	217	11
C	3	1	1	B	86	116	30	206	217	11
D	2	1	1	E	147	189	42	222	69	87
D	3	1	1	F	74	81	7	194	201	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	217	5	12
	2	✓	2	H,F	69	5	12
	3	✓	3	A,B,L,C	81	5	12
	4	✓	4	K	116	7	14
	5	✓	1	E,G,J	130	17	24
	6	✓	2	H,F	189	5	12
	7	✓	3	A,B,L,C	201	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	217	69	81	116	130	189	201

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	9	1	17	419	312	1800	240	0.21	0.02	0.08	0.26	0.00	0.26
	12	1	63	43	1052	1800	240	3.39	12.81	45.36	14.06	2.20	16.26
	13	1	0	Unrestricted	1052	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	37	141	671	1800	240	0.59	0.11	0.58	1.57	0.00	1.57
	16	1	23	295	410	1800	240	0.29	0.03	0.18	0.48	0.00	0.48
	A	1	65	39	237	2050	41	54.89	8.61	123.74	51.31	2.93	54.24
		2	67	34	173	1439	41	60.79	6.58	94.63	41.48	2.12	43.60
	B	1	24	280	263	2036	129	16.41	5.04	100.73	17.03	1.43	18.46
		2	77	17	787	1879	129	33.05	29.01	555.99	102.59	7.83	110.42
		3	1	6065	2	2055	14	51.38	0.06	1.56	0.41	0.02	0.43
	C	2	77	16	280	2017	41	71.31	12.28	176.51	78.76	3.55	82.31
		3	12	625	32	1439	41	42.74	1.46	20.96	5.40	0.33	5.73
	D	2	70	29	668	1751	129	29.32	23.44	374.40	77.25	6.20	83.45
		3	2	3524	3	1812	14	53.11	0.09	1.50	0.63	0.04	0.66
	Ax	1	0	Unrestricted	476	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	434	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	483	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	9	1	312	312	0		1800	1800	17		419	0.00	240	24
	12	1	1052	1052	0		1800	1667	63		43	0.00	240	24
	13	1	1052	1052	0		Unrestricted	Unrestricted	0		Unrestricted	0.41	240	24
	15	1	671	671	0		1800	1800	37		141	0.00	240	24
	16	1	410	410	0		1800	1800	23		295	0.00	240	24
	A	1	237	237	0		2050	367	65		39	0.00	41	43
		2	173	173	0		1439	258	67		34	0.00	41	43
	B	1	263	263	0		2036	1111	24		280	0.14	129	13
		2	787	787	0		1879	1026	77		17	0.14	129	13
		3	2	2	0		2055	137	1		6065	0.14	14	16
	C	2	280	280	0		2017	361	77		16	0.00	41	43
		3	32	32	0		1439	258	12		625	0.00	41	43
	D	2	668	668	0		1751	956	70		29	0.00	129	13
		3	3	3	0		1812	121	2		3524	0.00	14	16
	Ax	1	476	476	0		Unrestricted	Unrestricted	0		Unrestricted	0.66	240	24
	Bx	1	434	434	0		Unrestricted	Unrestricted	0		Unrestricted	0.67	240	24
	Cx	1	483	483	0		Unrestricted	Unrestricted	0		Unrestricted	0.80	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	9	1	16.54	0.21	0.00	0.02	0.26	0.26	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	3.39	0.45	0.54	14.06	14.06	16.69	167.56	8.05	2.20	2.20
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.59	0.00	0.11	1.57	1.57	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.29	0.00	0.03	0.48	0.48	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	54.89	3.04	0.58	51.31	51.31	98.43	216.31	16.97	2.93	2.93
		2	4.80	60.79	2.26	0.66	41.48	41.48	97.63	159.08	9.81	2.12	2.12
	B	1	3.60	16.41	1.16	0.04	17.03	17.03	43.41	113.08	1.10	1.43	1.43
		2	3.60	33.05	5.98	1.24	102.59	102.59	79.32	605.66	18.56	7.83	7.83
		3	3.00	51.38	0.03	0.00	0.41	0.41	92.43	1.85	0.00	0.02	0.02
	C	2	4.80	71.31	4.28	1.27	78.76	78.76	101.16	264.52	18.72	3.55	3.55
		3	4.80	42.74	0.37	0.01	5.40	5.40	82.91	26.27	0.26	0.33	0.33
	D	2	4.32	29.32	4.64	0.80	77.25	77.25	74.08	482.86	11.99	6.20	6.20
		3	4.32	53.11	0.04	0.00	0.63	0.63	93.65	2.80	0.01	0.04	0.04
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	9	1	0.00	0.02	23.98	0.08	0.00	0.00	0.00			0.00	99.00	99.00	
	12	1	0.00	12.81	28.24	45.36	0.00	0.00	0.00			0.00	169.00	169.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	15	1	0.00	0.11	19.07	0.58	0.00	0.00	0.00			0.00	127.00	127.00	
	16	1	0.00	0.03	18.47	0.18	0.00	0.00	0.00			0.00	30.00	30.00	
	A	1	0.00	8.61	6.96	123.74	0.09	0.00	0.00	0.58	7.69	0.00	0.00	0.00	
		2	0.00	6.58	6.96	94.63	0.00	0.00	0.00	0.72	5.91	0.00	0.00	0.00	
	B	1	0.00	5.04	5.00	100.73	0.00	0.00	0.00	0.04	5.04	0.00	0.00	0.00	
		2	0.00	29.01	5.22	555.99	7.11	0.00	0.00	5.03	16.21	0.00	0.00	0.00	
		3	0.00	0.06	4.00	1.56	0.00	0.00	0.00	0.00	0.06	14.00	0.00	14.00	
	C	2	0.00	12.28	6.96	176.51	0.92	0.00	0.00	2.40	10.80	0.00	0.00	0.00	
		3	0.00	1.46	6.96	20.96	0.00	0.00	0.00	0.01	0.97	37.00	0.00	37.00	
	D	2	0.00	23.44	6.26	374.40	3.81	0.00	0.00	2.15	15.09	0.00	0.00	0.00	
		3	0.00	0.09	6.26	1.50	0.00	0.00	0.00	0.00	0.09	14.00	0.00	14.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			39.00	0.00	39.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			50.00	0.00	50.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			41.00	0.00	41.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
3	05/12/2018 09:48:23	05/12/2018 09:48:23	08:00	240	417.86	27.55	77.48	C/2	0	0	C/2	12/1	C/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	77	16	7335	2499	13.52	391.21	26.65	417.86

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	7335	7335	0		77		16	2499	2517

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.45	13.52	22.25	5.30	391.21	391.21	28.98	2039.98	85.47	26.65	26.65

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	555.99	0.00	195.00	425.00	620.00

A4 - DS&CM2035_Ban_PM
D4 - PM Peak DS&CM Ban 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2047			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2050			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	14	53.61		2047
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	4	26.61		2050
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	3	78	131
	2	91	0	156	571
	3	349	173	0	56
	4	39	488	41	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	39
	11		4	2	12/1, B/2, 13/1	Normal	488
	12		3	2	16/1, A/2, 13/1	Normal	173
	26		1	4	9/1, C/3, Bx/1	Normal	131
	27		4	3	12/1, B/3, Ax/1	Normal	41
	30		2	1	15/1, D/3, Cx/1	Normal	91
	31		1	2	9/1, C/2, 13/1	Normal	3
	35		2	4	15/1, D/2, Bx/1	Normal	571
	36		2	3	15/1, D/2, Ax/1	Normal	156
	37		3	4	16/1, A/1, Bx/1	Normal	56
	38		3	1	16/1, A/1, Cx/1	Normal	349
	39		1	3	9/1, C/2, Ax/1	Normal	78

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	59, 71, 115, 129, 193, 205, 225

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	230	59	69	1	7
	2	✓	2	H,F	64	71	7	1	7
	3	✓	3	A,B,L,C	76	115	39	1	7
	4	✓	4	K	122	129	7	1	7
	5	✓	1	E,G,J	146	193	47	1	7
	6	✓	2	H,F	198	205	7	1	7
	7	✓	3	A,B,L,C	210	225	15	1	7

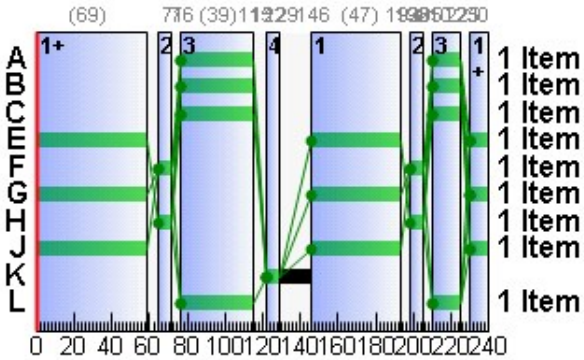
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	76	115	39
		2	✓	210	225	15
	C	1	✓	76	115	39
		2	✓	210	225	15
	E	1	✓	146	193	47
		2	✓	230	59	69
	F	1	✓	64	71	7
		2	✓	198	205	7
	G	1	✓	146	193	47
		2	✓	230	59	69
	H	1	✓	64	71	7
		2	✓	198	205	7
	J	1	✓	146	193	47
		2	✓	230	59	69
	K	1	✓	122	129	7
	L	1	✓	76	115	39
		2	✓	210	225	15

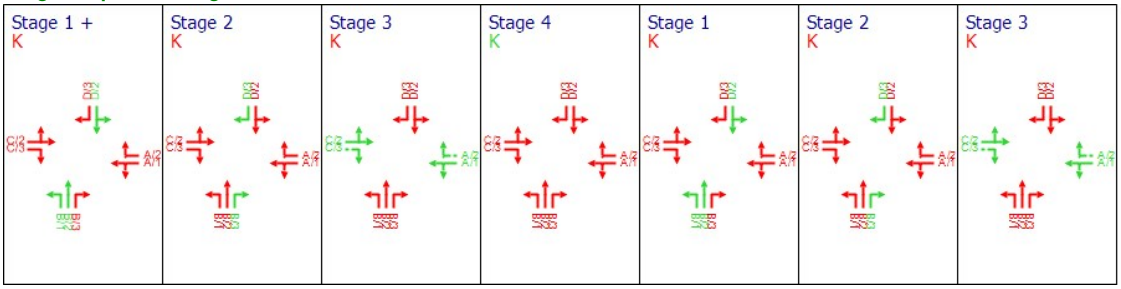
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	76	115	39	210	225	15
A	2	1	1	L	76	115	39	210	225	15
B	1	1	1	J	146	193	47	230	59	69
B	2	1	1	G	146	193	47	230	59	69
B	3	1	1	H	64	71	7	198	205	7
C	2	1	1	A	76	115	39	210	225	15
C	3	1	1	B	76	115	39	210	225	15
D	2	1	1	E	146	193	47	230	59	69
D	3	1	1	F	64	71	7	198	205	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	225	5	12
	2	✓	2	H,F	59	5	12
	3	✓	3	A,B,L,C	71	5	12
	4	✓	4	K	115	7	14
	5	✓	1	E,G,J	129	17	24
	6	✓	2	H,F	193	5	12
	7	✓	3	A,B,L,C	205	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	225	59	71	115	129	193	205

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	9	1	12	664	212	1800	240	0.13	0.01	0.03	0.11	0.00	0.11
	12	1	32	185	568	1800	240	0.46	0.07	0.26	1.03	0.00	1.03
	13	1	0	Unrestricted	664	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	45	98	818	1800	240	0.83	0.19	0.99	2.68	0.00	2.68
	16	1	32	180	578	1800	240	0.47	0.08	0.41	1.08	0.00	1.08
	A	1	85	6	405	2047	54	77.00	18.85	270.92	123.01	5.21	128.23
		2	52	75	173	1439	54	45.75	5.37	77.12	31.22	1.96	33.18
	B	1	4	2210	39	2036	116	18.58	0.93	18.65	2.86	0.25	3.10
		2	53	70	488	1879	116	26.64	16.02	307.03	51.27	4.20	55.47
		3	30	201	41	2055	14	59.76	1.50	37.46	9.66	0.50	10.17
	C	2	17	431	81	2050	54	37.52	2.20	31.62	11.99	0.80	12.79
		3	39	131	131	1439	54	42.23	3.69	53.05	21.82	1.36	23.18
	D	2	84	7	727	1751	116	46.54	30.67	489.82	133.46	8.22	141.69
		3	75	19	91	1812	14	96.57	4.31	68.90	34.66	1.45	36.11
	Ax	1	0	Unrestricted	275	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	758	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	479	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
17:00-18:00	9	1	212	212	0		1800	1800	12		664	0.00	240	24
	12	1	568	568	0		1800	1800	32		185	0.00	240	24
	13	1	664	664	0		Unrestricted	Unrestricted	0		Unrestricted	0.51	240	24
	15	1	818	818	0		1800	1800	45		98	0.00	240	24
	16	1	578	578	0		1800	1800	32		180	0.00	240	24
	A	1	405	405	0		2047	478	85		6	0.00	54	56
		2	173	173	0		1439	336	52		75	0.00	54	56
	B	1	39	39	0		2036	1001	4		2210	0.00	116	11
		2	488	488	0		1879	924	53		70	0.00	116	11
		3	41	41	0		2055	137	30		201	0.00	14	16
	C	2	81	81	0		2050	478	17		431	0.00	54	56
		3	131	131	0		1439	336	39		131	0.00	54	56
	D	2	727	727	0		1751	861	84		7	0.00	116	11
		3	91	91	0		1812	121	75		19	0.00	14	16
	Ax	1	275	275	0		Unrestricted	Unrestricted	0		Unrestricted	0.62	240	24
	Bx	1	758	758	0		Unrestricted	Unrestricted	0		Unrestricted	0.63	240	24
	Cx	1	479	479	0		Unrestricted	Unrestricted	0		Unrestricted	1.10	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	9	1	16.54	0.13	0.00	0.01	0.11	0.11	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	0.46	0.00	0.07	1.03	1.03	0.00	0.00	0.00	0.00	0.00
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.83	0.00	0.19	2.68	2.68	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.47	0.00	0.08	1.08	1.08	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	77.00	6.48	2.18	123.01	123.01	102.67	383.74	32.08	5.21	5.21
		2	4.80	45.75	1.93	0.27	31.22	31.22	90.20	148.01	8.04	1.96	1.96
	B	1	3.60	18.58	0.20	0.00	2.86	2.86	50.29	19.60	0.01	0.25	0.25
		2	3.60	26.64	3.32	0.29	51.27	51.27	68.59	325.90	8.80	4.20	4.20
		3	3.00	59.76	0.62	0.06	9.66	9.66	98.19	38.38	1.88	0.50	0.50
	C	2	4.80	37.52	0.83	0.02	11.99	11.99	78.82	63.33	0.52	0.80	0.80
		3	4.80	42.23	1.41	0.12	21.82	21.82	82.82	104.80	3.70	1.36	1.36
	D	2	4.32	46.54	7.21	2.19	133.46	133.46	90.22	623.36	32.52	8.22	8.22
		3	4.32	96.57	1.41	1.03	34.66	34.66	127.00	87.21	28.37	1.45	1.45
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
17:00-18:00	9	1	0.00	0.01	23.98	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	12	1	0.00	0.07	28.24	0.26	0.00	0.00	0.00			0.00	92.00	92.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			11.00	0.00	11.00	
	15	1	0.00	0.19	19.07	0.99	0.00	0.00	0.00			0.00	188.00	188.00	
	16	1	0.00	0.08	18.47	0.41	0.00	0.00	0.00			0.00	179.00	179.00	
	A	1	0.00	18.85	6.96	270.92	3.89	0.00	0.00	5.46	15.58	0.00	0.00	0.00	
		2	0.00	5.37	6.96	77.12	0.00	0.00	0.00	0.27	4.79	0.00	0.00	0.00	
	B	1	0.00	0.93	5.00	18.65	0.00	0.00	0.00	0.00	0.93	115.00	0.00	115.00	
		2	0.00	16.02	5.22	307.03	1.86	0.00	0.00	0.29	11.95	0.00	0.00	0.00	
		3	0.00	1.50	4.00	37.46	0.00	0.00	0.00	0.06	1.50	11.00	0.00	11.00	
	C	2	0.00	2.20	6.96	31.62	0.00	0.00	0.00	0.02	2.13	0.00	0.00	0.00	
		3	0.00	3.69	6.96	53.05	0.00	0.00	0.00	0.12	3.62	0.00	0.00	0.00	
	D	2	0.00	30.67	6.26	489.82	8.41	0.00	0.00	5.91	19.56	0.00	0.00	0.00	
		3	0.00	4.31	6.26	68.90	0.00	0.00	0.00	1.03	4.26	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			32.00	0.00	32.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			38.00	0.00	38.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			120.00	0.00	120.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
4	05/12/2018 09:48:24	05/12/2018 09:48:25	17:00	240	448.82	29.92	84.79	A/1	0	0	A/1	15/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	85	6	6528	2512	16.50	424.87	23.95	448.82

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	6528	6528	0		85		6	2512	2530

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	13.74	16.50	23.40	6.52	424.87	424.87	29.26	1794.33	115.92	23.95	23.95

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	489.82	0.00	327.00	459.00	786.00

A5 - DS 2035 AM
D5 - AM Peak DS 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2049			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2034			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	10	53.61		2049
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	18	26.61		2034
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	28	126	43
	2	3	0	264	369
	3	211	180	0	23
	4	294	775	5	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	294
	11		4	2	12/1, B/2, 13/1	Normal	775
	12		3	2	16/1, A/2, 13/1	Normal	180
	26		1	4	9/1, C/3, Bx/1	Normal	43
	27		4	3	12/1, B/3, Ax/1	Normal	5
	30		2	1	15/1, D/3, Cx/1	Normal	3
	31		1	2	9/1, C/2, 13/1	Normal	28
	35		2	4	15/1, D/2, Bx/1	Normal	369
	36		2	3	15/1, D/2, Ax/1	Normal	264
	37		3	4	16/1, A/1, Bx/1	Normal	23
	38		3	1	16/1, A/1, Cx/1	Normal	211
	39		1	3	9/1, C/2, Ax/1	Normal	126

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	70, 82, 109, 123, 183, 195, 217

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	222	70	88	1	7
	2	✓	2	H,F	75	82	7	1	7
	3	✓	3	A,B,L,C	87	109	22	1	7
	4	✓	4	K	116	123	7	1	7
	5	✓	1	E,G,J	140	183	43	1	7
	6	✓	2	H,F	188	195	7	1	7
	7	✓	3	A,B,L,C	200	217	17	1	7

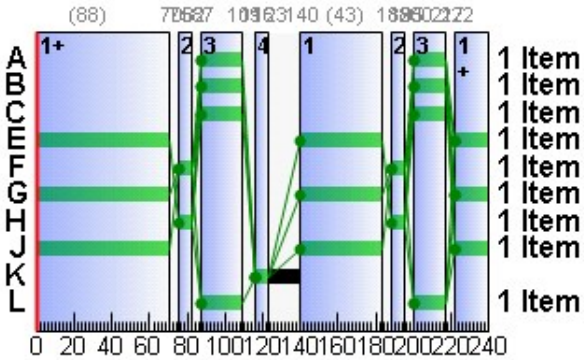
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	109	22
		2	✓	200	217	17
	B	1	✓	87	109	22
		2	✓	200	217	17
	C	1	✓	87	109	22
		2	✓	200	217	17
	E	1	✓	140	183	43
		2	✓	222	70	88
	F	1	✓	75	82	7
		2	✓	188	195	7
	G	1	✓	140	183	43
		2	✓	222	70	88
	H	1	✓	75	82	7
		2	✓	188	195	7
	J	1	✓	140	183	43
		2	✓	222	70	88
	K	1	✓	116	123	7
	L	1	✓	87	109	22
		2	✓	200	217	17

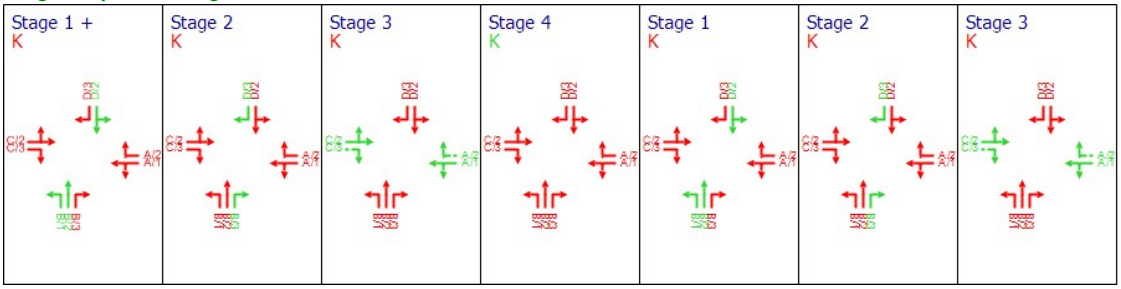
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	87	109	22	200	217	17
A	2	1	1	L	87	109	22	200	217	17
B	1	1	1	J	140	183	43	222	70	88
B	2	1	1	G	140	183	43	222	70	88
B	3	1	1	H	75	82	7	188	195	7
C	2	1	1	A	87	109	22	200	217	17
C	3	1	1	B	87	109	22	200	217	17
D	2	1	1	E	140	183	43	222	70	88
D	3	1	1	F	75	82	7	188	195	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	217	5	12
	2	✓	2	H,F	70	5	12
	3	✓	3	A,B,L,C	82	5	12
	4	✓	4	K	109	7	14
	5	✓	1	E,G,J	123	17	24
	6	✓	2	H,F	183	5	12
	7	✓	3	A,B,L,C	195	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	217	70	82	109	123	183	195

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	9	1	11	722	197	1800	240	0.12	0.01	0.03	0.10	0.00	0.10
	12	1	64	40	1074	1800	240	3.41	12.81	45.37	14.46	2.36	16.82
	13	1	0	Unrestricted	983	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	35	155	636	1800	240	0.55	0.10	0.51	1.37	0.00	1.37
	16	1	23	291	414	1800	240	0.30	0.03	0.19	0.49	0.00	0.49
	A	1	67	35	234	2049	39	57.14	8.65	124.40	52.74	2.94	55.68
		2	73	23	180	1439	39	66.63	7.15	102.82	47.31	2.45	49.76
	B	1	26	245	294	2036	131	14.99	5.05	100.91	17.39	1.61	19.00
		2	74	21	775	1879	131	27.21	25.83	494.99	83.17	7.45	90.63
		3	4	2366	5	2055	14	51.97	0.17	4.15	1.03	0.06	1.08
	C	2	44	103	154	2034	39	49.14	5.18	74.47	29.85	1.77	31.62
		3	17	415	43	1439	39	44.49	1.47	21.10	7.55	0.45	8.00
	D	2	65	38	633	1751	131	23.70	19.60	313.02	59.18	5.59	64.78
		3	2	3524	3	1812	14	53.32	0.10	1.59	0.63	0.04	0.67
	Ax	1	0	Unrestricted	395	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	435	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	508	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	9	1	197	197	0		1800	1800	11		722	0.00	240	24
	12	1	1074	1074	0		1800	1666	64		40	0.00	240	24
	13	1	983	983	0		Unrestricted	Unrestricted	0		Unrestricted	0.39	240	24
	15	1	636	636	0		1800	1800	35		155	0.00	240	24
	16	1	414	414	0		1800	1800	23		291	0.00	240	24
	A	1	234	234	0		2049	350	67		35	0.00	39	41
		2	180	180	0		1439	246	73		23	0.00	39	41
	B	1	294	294	0		2036	1128	26		245	0.14	131	13
		2	775	775	0		1879	1041	74		21	0.14	131	13
		3	5	5	0		2055	137	4		2366	0.14	14	16
	C	2	154	154	0		2034	347	44		103	0.00	39	41
		3	43	43	0		1439	246	17		415	0.00	39	41
	D	2	633	633	0		1751	970	65		38	0.00	131	13
		3	3	3	0		1812	121	2		3524	0.00	14	16
	Ax	1	395	395	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	240	24
	Bx	1	435	435	0		Unrestricted	Unrestricted	0		Unrestricted	0.66	240	24
	Cx	1	508	508	0		Unrestricted	Unrestricted	0		Unrestricted	0.76	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	9	1	16.54	0.12	0.00	0.01	0.10	0.10	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	3.41	0.44	0.58	14.46	14.46	17.52	170.74	17.40	2.36	2.36
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.55	0.00	0.10	1.37	1.37	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.30	0.00	0.03	0.49	0.49	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	57.14	3.05	0.66	52.74	52.74	100.26	215.25	19.36	2.94	2.94
		2	4.80	66.63	2.38	0.95	47.31	47.31	108.38	167.61	27.47	2.45	2.45
	B	1	3.60	14.99	1.18	0.05	17.39	17.39	43.62	126.86	1.37	1.61	1.61
		2	3.60	27.21	4.79	1.07	83.17	83.17	76.70	578.46	15.95	7.45	7.45
		3	3.00	51.97	0.07	0.00	1.03	1.03	92.56	4.62	0.01	0.06	0.06
	C	2	4.80	49.14	1.93	0.18	29.85	29.85	91.53	135.74	5.21	1.77	1.77
		3	4.80	44.49	0.51	0.02	7.55	7.55	84.20	35.65	0.55	0.45	0.45
	D	2	4.32	23.70	3.56	0.61	59.18	59.18	70.49	428.10	18.09	5.59	5.59
		3	4.32	53.32	0.04	0.00	0.63	0.63	93.65	2.80	0.01	0.04	0.04
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	9	1	0.00	0.01	23.98	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	12	1	0.00	12.81	28.24	45.37	0.00	0.00	0.00			0.00	153.00	153.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	15	1	0.00	0.10	19.07	0.51	0.00	0.00	0.00			0.00	103.00	103.00	
	16	1	0.00	0.03	18.47	0.19	0.00	0.00	0.00			0.00	33.00	33.00	
	A	1	0.00	8.65	6.96	124.40	0.10	0.00	0.00	0.66	7.74	0.00	0.00	0.00	
		2	0.00	7.15	6.96	102.82	0.00	0.00	0.00	0.95	6.40	0.00	0.00	0.00	
	B	1	0.00	5.05	5.00	100.91	0.00	0.00	0.00	0.05	5.05	0.00	0.00	0.00	
		2	0.00	25.83	5.22	494.99	5.27	0.00	0.00	2.43	14.25	0.00	0.00	0.00	
		3	0.00	0.17	4.00	4.15	0.00	0.00	0.00	0.00	0.17	14.00	0.00	14.00	
	C	2	0.00	5.18	6.96	74.47	0.00	0.00	0.00	0.18	4.84	0.00	0.00	0.00	
		3	0.00	1.47	6.96	21.10	0.00	0.00	0.00	0.02	1.32	34.00	0.00	34.00	
	D	2	0.00	19.60	6.26	313.02	2.41	0.00	0.00	0.61	12.74	0.00	0.00	0.00	
		3	0.00	0.10	6.26	1.59	0.00	0.00	0.00	0.00	0.10	14.00	0.00	14.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			39.00	0.00	39.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			49.00	0.00	49.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			40.00	0.00	40.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
5	05/12/2018 09:48:25	05/12/2018 09:48:26	08:00	240	339.97	22.20	74.43	B/2	0	0	B/2	12/1	B/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	74	21	6963	2497	11.48	315.25	24.72	339.97

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	6963	6963	0		74		21	2497	2515

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.38	11.48	17.95	4.25	315.25	315.25	28.31	1865.83	105.43	24.72	24.72

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	494.99	0.00	190.00	289.00	479.00

A6 - DS 2035 PM
D6 - PM Peak DS 2035*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2052			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2050			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	5	53.61		2052
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	4	26.61		2050
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	3	82	129
	2	71	0	217	466
	3	409	180	0	23
	4	38	490	41	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	38
	11		4	2	12/1, B/2, 13/1	Normal	490
	12		3	2	16/1, A/2, 13/1	Normal	180
	26		1	4	9/1, C/3, Bx/1	Normal	129
	27		4	3	12/1, B/3, Ax/1	Normal	41
	30		2	1	15/1, D/3, Cx/1	Normal	71
	31		1	2	9/1, C/2, 13/1	Normal	3
	35		2	4	15/1, D/2, Bx/1	Normal	466
	36		2	3	15/1, D/2, Ax/1	Normal	217
	37		3	4	16/1, A/1, Bx/1	Normal	23
	38		3	1	16/1, A/1, Cx/1	Normal	409
	39		1	3	9/1, C/2, Ax/1	Normal	82

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	58, 70, 116, 130, 195, 207, 230

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	235	58	63	1	7
	2	✓	2	H,F	63	70	7	1	7
	3	✓	3	A,B,L,C	75	116	41	1	7
	4	✓	4	K	123	130	7	1	7
	5	✓	1	E,G,J	147	195	48	1	7
	6	✓	2	H,F	200	207	7	1	7
	7	✓	3	A,B,L,C	212	230	18	1	7

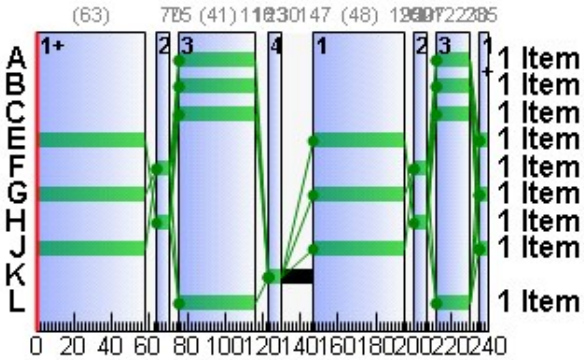
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	75	116	41
		2	✓	212	230	18
	B	1	✓	75	116	41
		2	✓	212	230	18
	C	1	✓	75	116	41
		2	✓	212	230	18
	E	1	✓	147	195	48
		2	✓	235	58	63
	F	1	✓	63	70	7
		2	✓	200	207	7
	G	1	✓	147	195	48
		2	✓	235	58	63
	H	1	✓	63	70	7
		2	✓	200	207	7
	J	1	✓	147	195	48
		2	✓	235	58	63
	K	1	✓	123	130	7
	L	1	✓	75	116	41
		2	✓	212	230	18

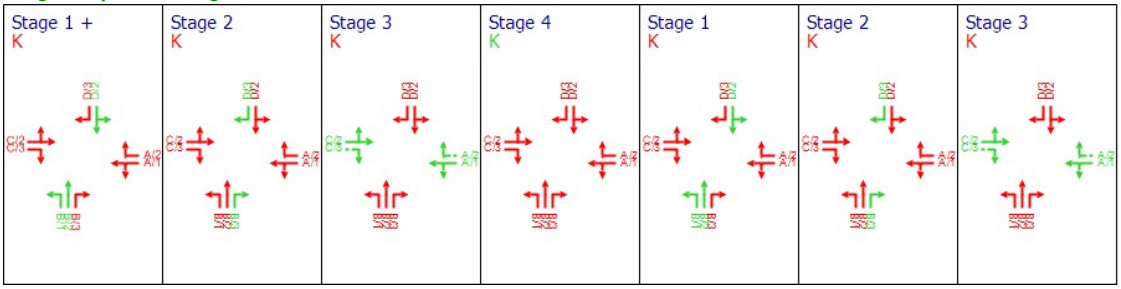
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	75	116	41	212	230	18
A	2	1	1	L	75	116	41	212	230	18
B	1	1	1	J	147	195	48	235	58	63
B	2	1	1	G	147	195	48	235	58	63
B	3	1	1	H	63	70	7	200	207	7
C	2	1	1	A	75	116	41	212	230	18
C	3	1	1	B	75	116	41	212	230	18
D	2	1	1	E	147	195	48	235	58	63
D	3	1	1	F	63	70	7	200	207	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	230	5	12
	2	✓	2	H,F	58	5	12
	3	✓	3	A,B,L,C	70	5	12
	4	✓	4	K	116	7	14
	5	✓	1	E,G,J	130	17	24
	6	✓	2	H,F	195	5	12
	7	✓	3	A,B,L,C	207	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	230	58	70	116	130	195	207

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	9	1	12	657	214	1800	240	0.13	0.01	0.03	0.11	0.00	0.11
	12	1	32	185	569	1800	240	0.46	0.07	0.26	1.04	0.00	1.04
	13	1	0	Unrestricted	673	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	42	115	754	1800	240	0.72	0.15	0.79	2.14	0.00	2.14
	16	1	34	165	612	1800	240	0.51	0.09	0.47	1.24	0.00	1.24
	A	1	83	9	432	2052	59	68.67	18.17	261.25	117.01	5.42	122.42
		2	49	83	180	1439	59	43.03	5.64	81.03	30.55	1.97	32.52
	B	1	4	2170	38	2036	111	19.79	0.93	18.59	2.97	0.25	3.22
		2	55	62	490	1879	111	28.63	16.54	317.01	55.33	4.41	59.74
		3	30	201	41	2055	14	60.16	1.53	38.31	9.73	0.50	10.23
	C	2	16	452	85	2050	59	35.64	2.35	33.83	11.95	0.82	12.77
		3	35	155	129	1439	59	39.48	3.64	52.37	20.09	1.30	21.39
	D	2	83	9	683	1751	111	44.83	28.68	458.02	120.77	7.69	128.46
		3	59	53	71	1812	14	76.10	2.99	47.70	21.31	0.99	22.30
	Ax	1	0	Unrestricted	340	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	618	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	518	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
17:00-18:00	9	1	214	214	0		1800	1800	12		657	0.00	240	24
	12	1	569	569	0		1800	1800	32		185	0.00	240	24
	13	1	673	673	0		Unrestricted	Unrestricted	0		Unrestricted	0.51	240	24
	15	1	754	754	0		1800	1800	42		115	0.00	240	24
	16	1	612	612	0		1800	1800	34		165	0.00	240	24
	A	1	432	432	0		2052	522	83		9	0.00	59	61
		2	180	180	0		1439	366	49		83	0.00	59	61
	B	1	38	38	0		2036	959	4		2170	0.00	111	11
		2	490	490	0		1879	885	55		62	0.00	111	11
		3	41	41	0		2055	137	30		201	0.00	14	16
	C	2	85	85	0		2050	521	16		452	0.00	59	61
		3	129	129	0		1439	366	35		155	0.00	59	61
	D	2	683	683	0		1751	824	83		9	0.00	111	11
		3	71	71	0		1812	121	59		53	0.00	14	16
	Ax	1	340	340	0		Unrestricted	Unrestricted	0		Unrestricted	0.66	240	24
	Bx	1	618	618	0		Unrestricted	Unrestricted	0		Unrestricted	0.69	240	24
	Cx	1	518	518	0		Unrestricted	Unrestricted	0		Unrestricted	1.10	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	9	1	16.54	0.13	0.00	0.01	0.11	0.11	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	0.46	0.00	0.07	1.04	1.04	0.00	0.00	0.00	0.00	0.00
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.72	0.00	0.15	2.14	2.14	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.51	0.00	0.09	1.24	1.24	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	68.67	6.36	1.88	117.01	117.01	100.01	404.24	27.80	5.42	5.42
		2	4.80	43.03	1.91	0.24	30.55	30.55	87.46	150.40	7.03	1.97	1.97
	B	1	3.60	19.79	0.21	0.00	2.97	2.97	52.38	19.89	0.01	0.25	0.25
		2	3.60	28.63	3.55	0.34	55.33	55.33	71.71	341.18	10.21	4.41	4.41
		3	3.00	60.16	0.62	0.06	9.73	9.73	98.19	38.38	1.88	0.50	0.50
	C	2	4.80	35.64	0.83	0.02	11.95	11.95	76.98	64.95	0.48	0.82	0.82
		3	4.80	39.48	1.32	0.10	20.09	20.09	80.13	100.51	2.86	1.30	1.30
	D	2	4.32	44.83	6.58	1.93	120.77	120.77	89.79	584.65	28.58	7.69	7.69
		3	4.32	76.10	1.10	0.40	21.31	21.31	111.32	67.45	11.59	0.99	0.99
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
17:00-18:00	9	1	0.00	0.01	23.98	0.03	0.00	0.00	0.00			0.00	0.00	0.00	
	12	1	0.00	0.07	28.24	0.26	0.00	0.00	0.00			0.00	101.00	101.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			12.00	0.00	12.00	
	15	1	0.00	0.15	19.07	0.79	0.00	0.00	0.00			0.00	179.00	179.00	
	16	1	0.00	0.09	18.47	0.47	0.00	0.00	0.00			0.00	170.00	170.00	
	A	1	0.00	18.17	6.96	261.25	3.66	0.00	0.00	4.73	14.81	0.00	0.00	0.00	
		2	0.00	5.64	6.96	81.03	0.00	0.00	0.00	0.24	4.99	0.00	0.00	0.00	
	B	1	0.00	0.93	5.00	18.59	0.00	0.00	0.00	0.00	0.93	110.00	0.00	110.00	
		2	0.00	16.54	5.22	317.01	2.06	0.00	0.00	0.34	12.32	0.00	0.00	0.00	
		3	0.00	1.53	4.00	38.31	0.00	0.00	0.00	0.06	1.53	11.00	0.00	11.00	
	C	2	0.00	2.35	6.96	33.83	0.00	0.00	0.00	0.02	2.26	0.00	0.00	0.00	
		3	0.00	3.64	6.96	52.37	0.00	0.00	0.00	0.10	3.57	0.00	0.00	0.00	
	D	2	0.00	28.68	6.26	458.02	6.99	0.00	0.00	4.08	18.62	0.00	0.00	0.00	
		3	0.00	2.99	6.26	47.70	0.00	0.00	0.00	0.40	2.97	0.00	0.00	0.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			31.00	0.00	31.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			41.00	0.00	41.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			116.00	0.00	116.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
6	05/12/2018 09:48:26	05/12/2018 09:48:27	17:00	240	417.58	27.76	82.85	D/2	0	0	D/2	15/1	D/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	83	9	6447	2517	15.50	394.24	23.35	417.58

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	6447	6447	0		83		9	2517	2535

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	13.84	15.50	22.48	5.29	394.24	394.24	28.88	1771.66	90.44	23.35	23.35

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	458.02	0.00	321.00	450.00	771.00

A7 - DS 2020 AM
D7 - AM Peak DS 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2049			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2053			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	11	53.61		2049
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	2	26.61		2053
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	3	134	9
	2	14	0	100	224
	3	71	28	0	9
	4	331	525	78	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	331
	11		4	2	12/1, B/2, 13/1	Normal	525
	12		3	2	16/1, A/2, 13/1	Normal	28
	26		1	4	9/1, C/3, Bx/1	Normal	9
	27		4	3	12/1, B/3, Ax/1	Normal	78
	30		2	1	15/1, D/3, Cx/1	Normal	14
	31		1	2	9/1, C/2, 13/1	Normal	3
	35		2	4	15/1, D/2, Bx/1	Normal	224
	36		2	3	15/1, D/2, Ax/1	Normal	100
	37		3	4	16/1, A/1, Bx/1	Normal	9
	38		3	1	16/1, A/1, Cx/1	Normal	71
	39		1	3	9/1, C/2, Ax/1	Normal	134

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	74, 92, 114, 128, 192, 205, 218

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	223	74	91	1	7
	2	✓	2	H,F	79	92	13	1	7
	3	✓	3	A,B,L,C	97	114	17	1	7
	4	✓	4	K	121	128	7	1	7
	5	✓	1	E,G,J	145	192	47	1	7
	6	✓	2	H,F	197	205	8	1	7
	7	✓	3	A,B,L,C	210	218	8	1	7

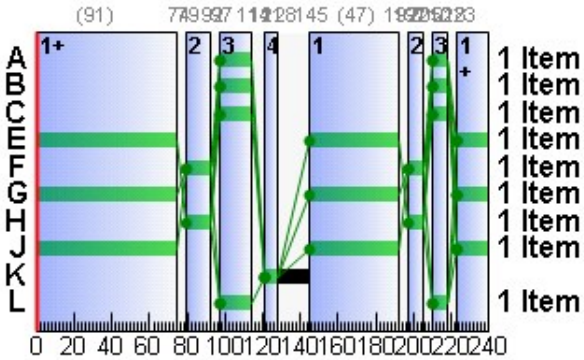
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	97	114	17
		2	✓	210	218	8
	B	1	✓	97	114	17
		2	✓	210	218	8
	C	1	✓	97	114	17
		2	✓	210	218	8
	E	1	✓	145	192	47
		2	✓	223	74	91
	F	1	✓	79	92	13
		2	✓	197	205	8
	G	1	✓	145	192	47
		2	✓	223	74	91
	H	1	✓	79	92	13
		2	✓	197	205	8
	J	1	✓	145	192	47
		2	✓	223	74	91
	K	1	✓	121	128	7
	L	1	✓	97	114	17
		2	✓	210	218	8

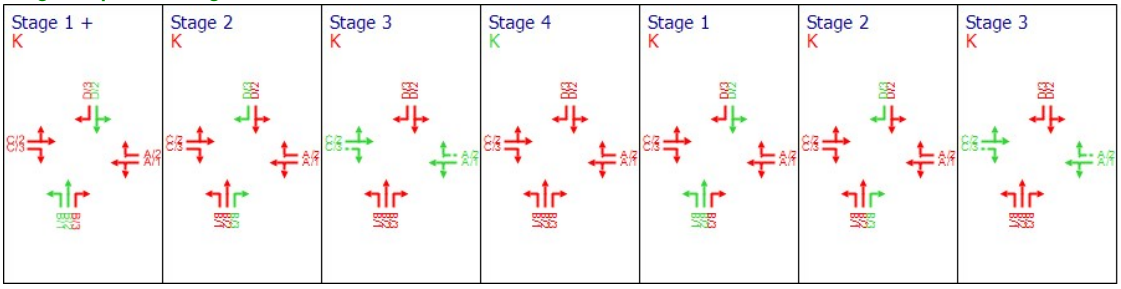
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	97	114	17	210	218	8
A	2	1	1	L	97	114	17	210	218	8
B	1	1	1	J	145	192	47	223	74	91
B	2	1	1	G	145	192	47	223	74	91
B	3	1	1	H	79	92	13	197	205	8
C	2	1	1	A	97	114	17	210	218	8
C	3	1	1	B	97	114	17	210	218	8
D	2	1	1	E	145	192	47	223	74	91
D	3	1	1	F	79	92	13	197	205	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	218	5	12
	2	✓	2	H,F	74	5	12
	3	✓	3	A,B,L,C	92	5	12
	4	✓	4	K	114	7	14
	5	✓	1	E,G,J	128	17	24
	6	✓	2	H,F	192	5	12
	7	✓	3	A,B,L,C	205	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	218	74	92	114	128	192	205

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	9	1	8	1010	146	1800	240	0.09	0.00	0.01	0.05	0.00	0.05
	12	1	59	53	934	1800	240	4.24	13.65	48.32	15.63	2.72	18.35
	13	1	0	Unrestricted	556	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	19	379	338	1800	240	0.23	0.02	0.11	0.31	0.00	0.31
	16	1	6	1400	108	1800	240	0.06	0.00	0.01	0.03	0.00	0.03
	A	1	35	159	80	2049	25	53.89	2.80	40.29	17.01	0.94	17.95
		2	17	420	28	1439	25	51.11	0.95	13.68	5.65	0.32	5.96
	B	1	28	223	331	2036	138	13.51	5.05	101.08	17.64	1.54	19.18
		2	48	88	525	1879	138	15.85	11.80	226.20	32.83	3.17	36.01
		3	40	127	78	2055	21	54.40	2.58	64.43	16.74	0.95	17.69
	C	2	59	52	137	2053	25	62.36	5.22	75.01	33.70	1.76	35.46
		3	6	1519	9	1439	25	48.91	0.30	4.26	1.74	0.10	1.84
	D	2	32	184	324	1751	138	15.65	7.72	123.36	20.00	2.03	22.03
		3	8	1016	14	1812	21	50.50	0.44	7.08	2.79	0.16	2.95
	Ax	1	0	Unrestricted	312	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	242	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	416	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
08:00-09:00	9	1	146	146	0		1800	1800	8		1010	0.00	240	24
	12	1	934	934	0		1800	1591	59		53	0.00	240	24
	13	1	556	556	0		Unrestricted	Unrestricted	0		Unrestricted	0.55	240	24
	15	1	338	338	0		1800	1800	19		379	0.00	240	24
	16	1	108	108	0		1800	1800	6		1400	0.00	240	24
	A	1	80	80	0		2049	231	35		159	0.00	25	27
		2	28	28	0		1439	162	17		420	0.00	25	27
	B	1	331	331	0		2036	1188	28		223	0.21	138	14
		2	525	525	0		1879	1096	48		88	0.21	138	14
		3	78	78	0		2055	197	40		127	0.21	21	23
	C	2	137	137	0		2053	231	59		52	0.00	25	27
		3	9	9	0		1439	162	6		1519	0.00	25	27
	D	2	324	324	0		1751	1021	32		184	0.00	138	14
		3	14	14	0		1812	174	8		1016	0.00	21	23
	Ax	1	312	312	0		Unrestricted	Unrestricted	0		Unrestricted	0.92	240	24
	Bx	1	242	242	0		Unrestricted	Unrestricted	0		Unrestricted	0.69	240	24
	Cx	1	416	416	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	9	1	16.54	0.09	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	4.24	0.69	0.42	15.63	15.63	23.26	192.47	24.77	2.72	2.72
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.23	0.00	0.02	0.31	0.31	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.06	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	53.89	1.11	0.09	17.01	17.01	94.09	72.54	2.73	0.94	0.94
		2	4.80	51.11	0.38	0.02	5.65	5.65	90.94	24.92	0.54	0.32	0.32
	B	1	3.60	13.51	1.19	0.05	17.64	17.64	37.09	121.16	1.61	1.54	1.54
		2	3.60	15.85	2.09	0.22	32.83	32.83	48.21	246.56	6.57	3.17	3.17
		3	3.00	54.40	1.05	0.13	16.74	16.74	97.36	72.12	3.81	0.95	0.95
	C	2	4.80	62.36	1.95	0.42	33.70	33.70	102.64	128.21	12.41	1.76	1.76
		3	4.80	48.91	0.12	0.00	1.74	1.74	89.29	7.99	0.05	0.10	0.10
	D	2	4.32	15.65	1.33	0.07	20.00	20.00	49.99	159.78	2.20	2.03	2.03
		3	4.32	50.50	0.19	0.00	2.79	2.79	91.17	12.66	0.11	0.16	0.16
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	9	1	0.00	0.00	23.98	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	12	1	0.00	13.65	28.24	48.32	0.00	0.00	0.00			0.00	68.00	68.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			21.00	0.00	21.00	
	15	1	0.00	0.02	19.07	0.11	0.00	0.00	0.00			0.00	17.00	17.00	
	16	1	0.00	0.00	18.47	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	2.80	6.96	40.29	0.00	0.00	0.00	0.09	2.71	0.00	0.00	0.00	
		2	0.00	0.95	6.96	13.68	0.00	0.00	0.00	0.02	0.94	22.00	0.00	22.00	
	B	1	0.00	5.05	5.00	101.08	0.00	0.00	0.00	0.05	5.05	0.00	0.00	0.00	
		2	0.00	11.80	5.22	226.20	0.71	0.00	0.00	0.22	8.15	0.00	0.00	0.00	
		3	0.00	2.58	4.00	64.43	0.00	0.00	0.00	0.13	2.58	0.00	0.00	0.00	
	C	2	0.00	5.22	6.96	75.01	0.00	0.00	0.00	0.42	4.91	0.00	0.00	0.00	
		3	0.00	0.30	6.96	4.26	0.00	0.00	0.00	0.00	0.30	25.00	0.00	25.00	
	D	2	0.00	7.72	6.26	123.36	0.05	0.00	0.00	0.07	6.37	0.00	0.00	0.00	
		3	0.00	0.44	6.26	7.08	0.00	0.00	0.00	0.00	0.44	21.00	0.00	21.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			31.00	0.00	31.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			69.00	0.00	69.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			41.00	0.00	41.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
7	05/12/2018 09:48:27	05/12/2018 09:48:28	08:00	240	177.81	11.56	59.32	C/2	0	0	C/2	12/1	C/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	59	52	4578	2476	9.09	164.10	13.71	177.81

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	4578	4578	0		59		52	2476	2494

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	15.02	9.09	10.10	1.46	164.10	164.10	23.88	1038.41	54.80	13.71	13.71

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	226.20	0.00	230.00	85.00	315.00

A8 - DS 2020 PM
D8 - PM Peak DS 2020*

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
240		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms^[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
				✓				Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
9	(untitled)		2
12	(untitled)		3
13	(untitled)		
15	(untitled)		6
16	(untitled)		4
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
9	1	(untitled)		✓	137.86	✓	Sum of lanes	1800					Normal	
12	1	(untitled)		✓	162.39	✓	Sum of lanes	1800					Normal	
13	1	(untitled)		✓	370.14								Normal	
15	1	(untitled)		✓	109.68	✓	Sum of lanes	1800					Normal	
16	1	(untitled)		✓	106.20	✓	Sum of lanes	1800					Normal	
A	1	Ballycorous Road WB			40.00	✓	Sum of lanes	2032			✓		Normal	
	2	(untitled)			40.00	✓	Sum of lanes	2009			✓	✓	Normal	
B	1	GLDR NB			30.00	✓	Sum of lanes	2036			✓		Normal	
	2	(untitled)			30.00	✓	Sum of lanes	1879			✓		Normal	
	3	(untitled)			25.00	✓	Sum of lanes	2055			✓		Normal	
C	2	Ballycorous Road EB			40.00	✓	Sum of lanes	2035			✓		Normal	
	3	(untitled)			40.00	✓	Sum of lanes	2022	✓	1800	✓	✓	Normal	
D	2	GLDR SB			36.00	✓	Sum of lanes	1751			✓		Normal	
	3	(untitled)			36.00	✓	Sum of lanes	1812	✓	1800	✓		Normal	
Ax	1	(untitled)			100.00								Normal	
Bx	1	(untitled)			100.00								Normal	
Cx	1	(untitled)			100.00								Normal	

Lanes

							Site			Use		Turning		Saturation
	Stream				Filter	Condition	factor	(%)	(m)	turning radius	that turn (%)	(m)	lane	(PCU/hr)
9	1	1	(untitled)											1800
12	1	1	(untitled)											1800
13	1	1	(untitled)											
15	1	1	(untitled)											1800
16	1	1	(untitled)											1800
A	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	41	53.61		2032
	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	100	65.36		2009
B	1	2	(untitled)		✓	N/A	N/A	0	3.00		30	49.47		2036
	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00		1879
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
C	2	2	(untitled)		✓	N/A	N/A	0	3.00	✓	17	26.61		2035
	3	3	(untitled)		✓	N/A	N/A	0	3.00	✓	100	92.02		2022
D	2	2	(untitled)		✓	N/A	N/A	0	3.00		100	16.00	✓	1751
	3	1	(untitled)		✓	N/A	N/A	0	3.00		53	14.00	✓	1812
Ax	1	1	(untitled)											
Bx	1	1	(untitled)											
Cx	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
A	1	1	C	
	2	1	L	
B	1	1	J	
	2	1	G	
	3	1	H	
C	2	1	A	
	3	1	B	
D	2	1	E	
	3	1	F	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	4	20	20
	2	43	0	52	316
	3	111	98	0	78
	4	80	222	9	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	9/1	Cx/1	#0000FF
	2	(untitled)	15/1	13/1	#FF0000
	3	(untitled)	16/1	Ax/1	#00FF00
	4	(untitled)	12/1	Bx/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	10		4	1	12/1, B/1, Cx/1	Normal	80
	11		4	2	12/1, B/2, 13/1	Normal	222
	12		3	2	16/1, A/2, 13/1	Normal	98
	26		1	4	9/1, C/3, Bx/1	Normal	20
	27		4	3	12/1, B/3, Ax/1	Normal	9
	30		2	1	15/1, D/3, Cx/1	Normal	43
	31		1	2	9/1, C/2, 13/1	Normal	4
	35		2	4	15/1, D/2, Bx/1	Normal	316
	36		2	3	15/1, D/2, Ax/1	Normal	52
	37		3	4	16/1, A/1, Bx/1	Normal	78
	38		3	1	16/1, A/1, Cx/1	Normal	111
	39		1	3	9/1, C/2, Ax/1	Normal	20

Signal Timings

Network Default: 240s cycle time; 240 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	Manual	240

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
1	A	(untitled)	7	300	0	0	Traffic	
	B	(untitled)	7	300	0	0	Traffic	
	C	(untitled)	7	300	0	0	Traffic	
	E	(untitled)	7	300	0	0	Traffic	
	F	(untitled)	7	300	0	0	Traffic	
	G	(untitled)	7	300	0	0	Traffic	
	H	(untitled)	7	300	0	0	Traffic	
	J	(untitled)	7	300	0	0	Traffic	
	K	(untitled)	7	300	0	0	Pedestrian	17
	L	(untitled)	7	300	0	0	Traffic	

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	E, G, J	1
	2	H, F	1
	3	A, B, L, C	1
	4	K	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 2, 3, 4, 1, 2, 3	58, 70, 109, 123, 192, 204, 225

Intergreen Matrix for Controller Stream 1

		To									
		A	B	C	E	F	G	H	J	K	L
From	A				5	0	5	0	5	7	
	B				5	0	5	0	5	7	
	C					0		0		7	
	E	0	0					5		7	0
	F	5	5	5			0		0	7	5
	G	5	0			5				7	0
	H	5	5	5	0					7	5
	J	0	0			5				7	0
	K	17	17	17	17	17	17	17	17		17
	L				5	0	5	0	5	7	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	7
	2	0	0	5	7
	3	5	0	0	7
	4	17	17	17	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	E,G,J	230	58	68	1	7
	2	✓	2	H,F	63	70	7	1	7
	3	✓	3	A,B,L,C	75	109	34	1	7
	4	✓	4	K	116	123	7	1	7
	5	✓	1	E,G,J	140	192	52	1	7
	6	✓	2	H,F	197	204	7	1	7
	7	✓	3	A,B,L,C	209	225	16	1	7

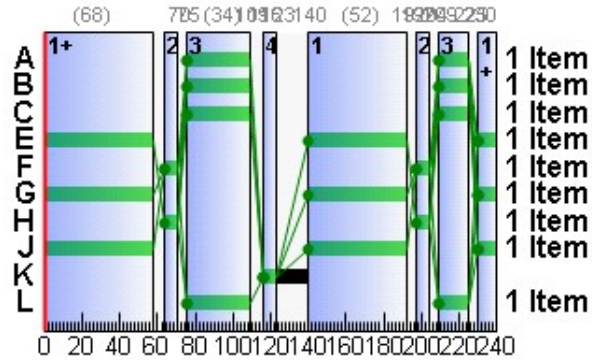
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	75	109	34
		2	✓	209	225	16
	B	1	✓	75	109	34
		2	✓	209	225	16
	C	1	✓	75	109	34
		2	✓	209	225	16
	E	1	✓	140	192	52
		2	✓	230	58	68
	F	1	✓	63	70	7
		2	✓	197	204	7
	G	1	✓	140	192	52
		2	✓	230	58	68
	H	1	✓	63	70	7
		2	✓	197	204	7
	J	1	✓	140	192	52
		2	✓	230	58	68
	K	1	✓	116	123	7
	L	1	✓	75	109	34
		2	✓	209	225	16

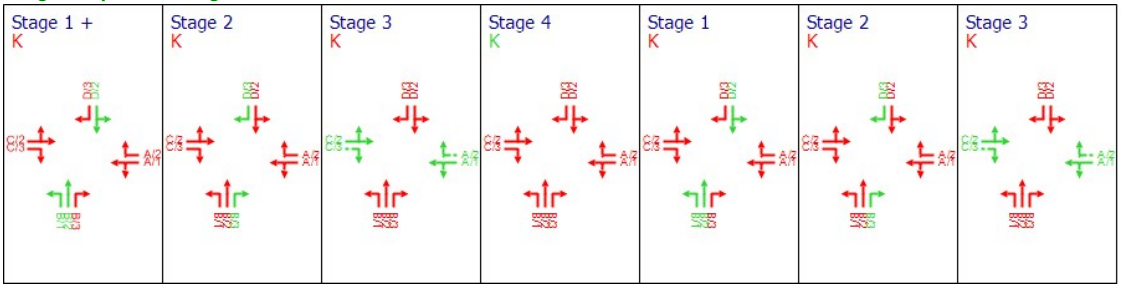
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
A	1	1	1	C	75	109	34	209	225	16
A	2	1	1	L	75	109	34	209	225	16
B	1	1	1	J	140	192	52	230	58	68
B	2	1	1	G	140	192	52	230	58	68
B	3	1	1	H	63	70	7	197	204	7
C	2	1	1	A	75	109	34	209	225	16
C	3	1	1	B	75	109	34	209	225	16
D	2	1	1	E	140	192	52	230	58	68
D	3	1	1	F	63	70	7	197	204	7

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	1	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
1	1	✓	1	E,G,J	225	5	12
	2	✓	2	H,F	58	5	12
	3	✓	3	A,B,L,C	70	5	12
	4	✓	4	K	109	7	14
	5	✓	1	E,G,J	123	17	24
	6	✓	2	H,F	192	5	12
	7	✓	3	A,B,L,C	204	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
1	A	1	3	4	5	0
		2	7	1	5	0
	B	1	3	4	5	0
		2	7	1	5	0
	C	1	3	4	5	0
		2	7	1	5	0
	E	1	5	6	17	0
		2	1	2	5	0
	F	1	2	3	5	0
		2	6	7	5	0
	G	1	5	6	17	0
		2	1	2	5	0
	H	1	2	3	5	0
		2	6	7	5	0
	J	1	5	6	17	0
		2	1	2	5	0
	K	1	4	5	7	0
	L	1	3	4	5	0
		2	7	1	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
1	7	225	58	70	109	123	192	204

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	9	1	2	3582	44	1800	240	0.03	0.00	0.00	0.00	0.00	0.00
	12	1	17	421	311	1800	240	0.21	0.02	0.06	0.26	0.00	0.26
	13	1	0	Unrestricted	324	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	23	294	411	1800	240	0.30	0.03	0.18	0.48	0.00	0.48
	16	1	16	464	287	1800	240	0.19	0.02	0.08	0.21	0.00	0.21
	A	1	43	110	189	2032	50	43.77	5.88	84.57	32.63	2.07	34.71
		2	31	186	98	1439	50	42.27	2.96	42.51	16.34	1.04	17.38
	B	1	8	1064	80	2036	120	17.37	1.80	36.06	5.48	0.50	5.98
		2	23	287	222	1879	120	19.31	5.65	108.23	16.91	1.52	18.42
		3	7	1270	9	2055	14	54.47	0.32	7.93	1.93	0.10	2.04
	C	2	5	1553	24	2035	50	37.63	0.67	9.61	3.56	0.24	3.80
		3	6	1303	20	1439	50	37.90	1.45	20.86	2.99	0.20	3.19
	D	2	41	118	368	1751	120	22.34	10.57	168.86	32.43	2.84	35.28
		3	36	153	43	1812	14	62.54	1.63	25.97	10.61	0.54	11.15
	Ax	1	0	Unrestricted	81	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	0	Unrestricted	414	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	0	Unrestricted	234	Unrestricted	240	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effec gree (pe cycl
17:00-18:00	9	1	44	44	0		1800	1800	2		3582	0.00	240	24
	12	1	311	311	0		1800	1800	17		421	0.00	240	24
	13	1	324	324	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	240	24
	15	1	411	411	0		1800	1800	23		294	0.00	240	24
	16	1	287	287	0		1800	1800	16		464	0.00	240	24
	A	1	189	189	0		2032	440	43		110	0.00	50	52
		2	98	98	0		1439	312	31		186	0.00	50	52
	B	1	80	80	0		2036	1035	8		1064	0.00	120	12
		2	222	222	0		1879	955	23		287	0.00	120	12
		3	9	9	0		2055	137	7		1270	0.00	14	16
	C	2	24	24	0		2035	441	5		1553	0.00	50	52
		3	20	20	0		1439	312	6		1303	0.00	50	52
	D	2	368	368	0		1751	890	41		118	0.00	120	12
		3	43	43	0		1812	121	36		153	0.00	14	16
	Ax	1	81	81	0		Unrestricted	Unrestricted	0		Unrestricted	0.76	240	24
	Bx	1	414	414	0		Unrestricted	Unrestricted	0		Unrestricted	0.75	240	24
	Cx	1	234	234	0		Unrestricted	Unrestricted	0		Unrestricted	0.92	240	24

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	9	1	16.54	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	19.49	0.21	0.00	0.02	0.26	0.26	0.00	0.00	0.00	0.00	0.00
	13	1	44.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	1	13.16	0.30	0.00	0.03	0.48	0.48	0.00	0.00	0.00	0.00	0.00
	16	1	12.74	0.19	0.00	0.02	0.21	0.21	0.00	0.00	0.00	0.00	0.00
	A	1	4.80	43.77	2.14	0.16	32.63	32.63	87.47	160.53	4.79	2.07	2.07
		2	4.80	42.27	1.08	0.07	16.34	16.34	84.87	81.03	2.14	1.04	1.04
	B	1	3.60	17.37	0.38	0.00	5.48	5.48	49.97	39.87	0.10	0.50	0.50
		2	3.60	19.31	1.16	0.04	16.91	16.91	54.47	119.87	1.05	1.52	1.52
		3	3.00	54.47	0.13	0.00	1.93	1.93	92.73	8.31	0.03	0.10	0.10
	C	2	4.80	37.63	0.25	0.00	3.56	3.56	78.35	18.76	0.05	0.24	0.24
		3	4.80	37.90	0.21	0.00	2.99	2.99	78.66	15.67	0.07	0.20	0.20
	D	2	4.32	22.34	2.14	0.15	32.43	32.43	61.65	222.51	4.35	2.84	2.84
		3	4.32	62.54	0.65	0.10	10.61	10.61	100.83	40.49	2.87	0.54	0.54
	Ax	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Cx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
17:00-18:00	9	1	0.00	0.00	23.98	0.00	0.00	0.00	0.00			240.00	0.00	240.00	
	12	1	0.00	0.02	28.24	0.06	0.00	0.00	0.00			0.00	7.00	7.00	
	13	1	0.00	0.00	64.37	0.00	0.00	0.00	0.00			18.00	0.00	18.00	
	15	1	0.00	0.03	19.07	0.18	0.00	0.00	0.00			0.00	43.00	43.00	
	16	1	0.00	0.02	18.47	0.08	0.00	0.00	0.00			0.00	0.00	0.00	
	A	1	0.00	5.88	6.96	84.57	0.00	0.00	0.00	0.16	5.36	0.00	0.00	0.00	
		2	0.00	2.96	6.96	42.51	0.00	0.00	0.00	0.07	2.77	0.00	0.00	0.00	
	B	1	0.00	1.80	5.00	36.06	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	
		2	0.00	5.65	5.22	108.23	0.01	0.00	0.00	0.04	5.03	0.00	0.00	0.00	
		3	0.00	0.32	4.00	7.93	0.00	0.00	0.00	0.00	0.32	14.00	0.00	14.00	
	C	2	0.00	0.67	6.96	9.61	0.00	0.00	0.00	0.00	0.66	48.00	0.00	48.00	
		3	0.00	1.45	6.96	20.86	0.00	0.00	0.00	0.00	0.55	48.00	0.00	48.00	
	D	2	0.00	10.57	6.26	168.86	0.39	0.00	0.00	0.15	8.43	0.00	0.00	0.00	
		3	0.00	1.63	6.26	25.97	0.00	0.00	0.00	0.10	1.61	9.00	0.00	9.00	
	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			155.00	0.00	155.00	
	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			49.00	0.00	49.00	
	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			34.00	0.00	34.00	

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
8	05/12/2018 09:48:28	05/12/2018 09:48:28	17:00	240	132.90	8.72	42.93	A/1	0	0	A/1	15/1	A/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	43	110	3159	2508	9.94	123.84	9.06	132.90

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	3159	3159	0		43		110	2508	2526

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	13.76	9.94	8.13	0.59	123.84	123.84	22.87	707.04	15.45	9.06	9.06

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	168.86	0.00	615.00	50.00	665.00

APPENDIX D

Traffic Model Flow Diagrams

DBFL Consulting Engineers

Dublin Office:
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email: info@dbfl.ie
website: www.dbfl.ie

Project:
Glenamuck District Roads Scheme

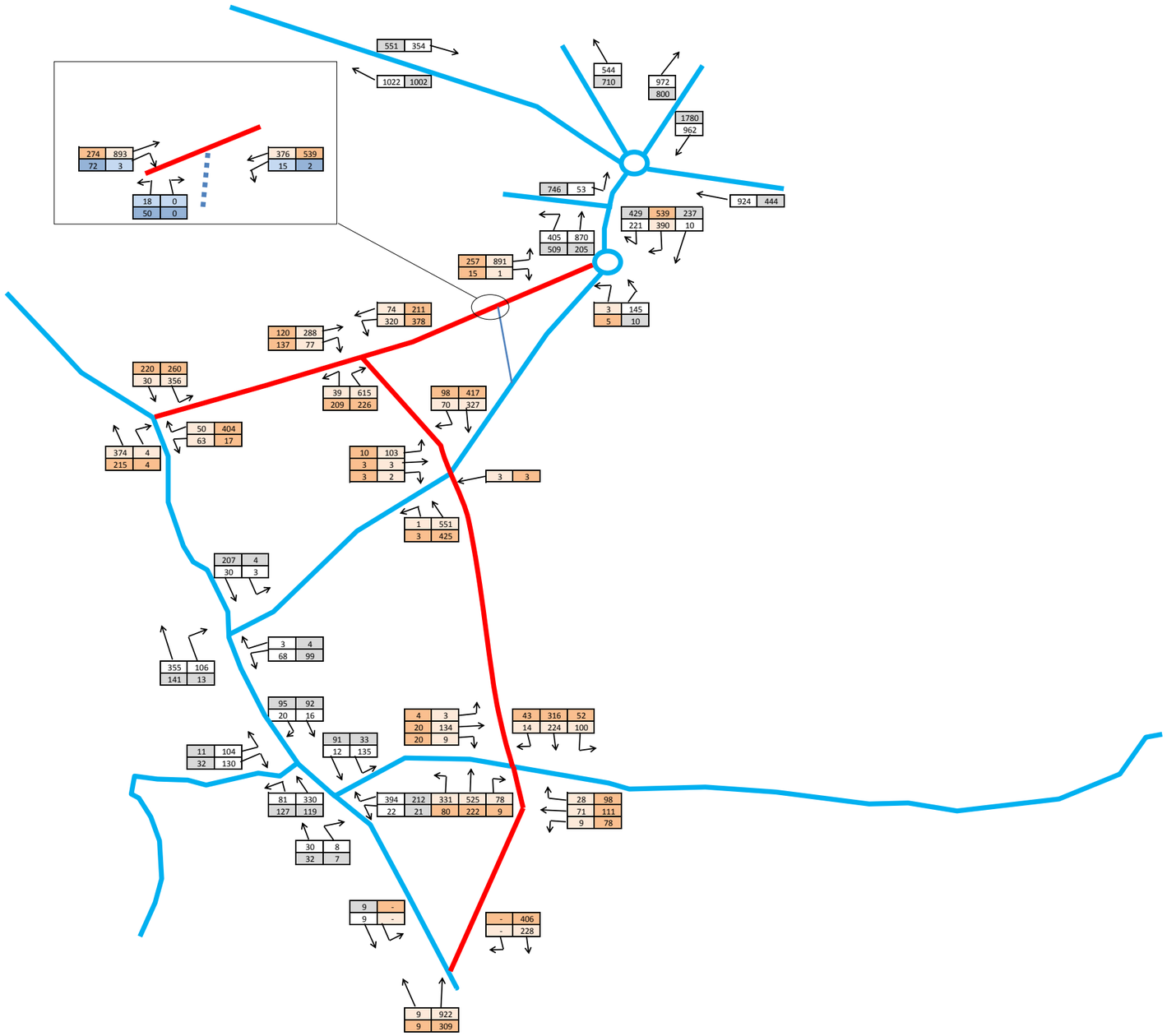
DRG. Title :
2020 Do Nothing Traffic Flows

Key:
AM Peak Hour
PM Peak Hour

Dwn:	Ckd:	Date:
DPM	RJK	21/09/2018

Ref:

Figure:	Rev:
1	C



DBFL Consulting Engineers	**Dublin Office:** Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 **phone:** +353 1 400 4000 **Waterford Office:** Unit 2, The Chandlery, 1-2 O'Connell Street, Waterford **phone:** +353 51 309 500 **email:** info@dbfl.ie **website:** www.dbfl.ie	**Project:** Glenamuck District Roads Scheme **DRG. Title :** 2020 Do Something Traffic Flows	**Key:** AM Peak Hour PM Peak Hour	**Dwn:** DPM	**Ckd:** RJK	**Date:** 21/09/2018
				Ref:		
				Figure: 2		**Rev:** C

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website: www.dbfl.ie

Project:
Glenamuck District Roads Scheme

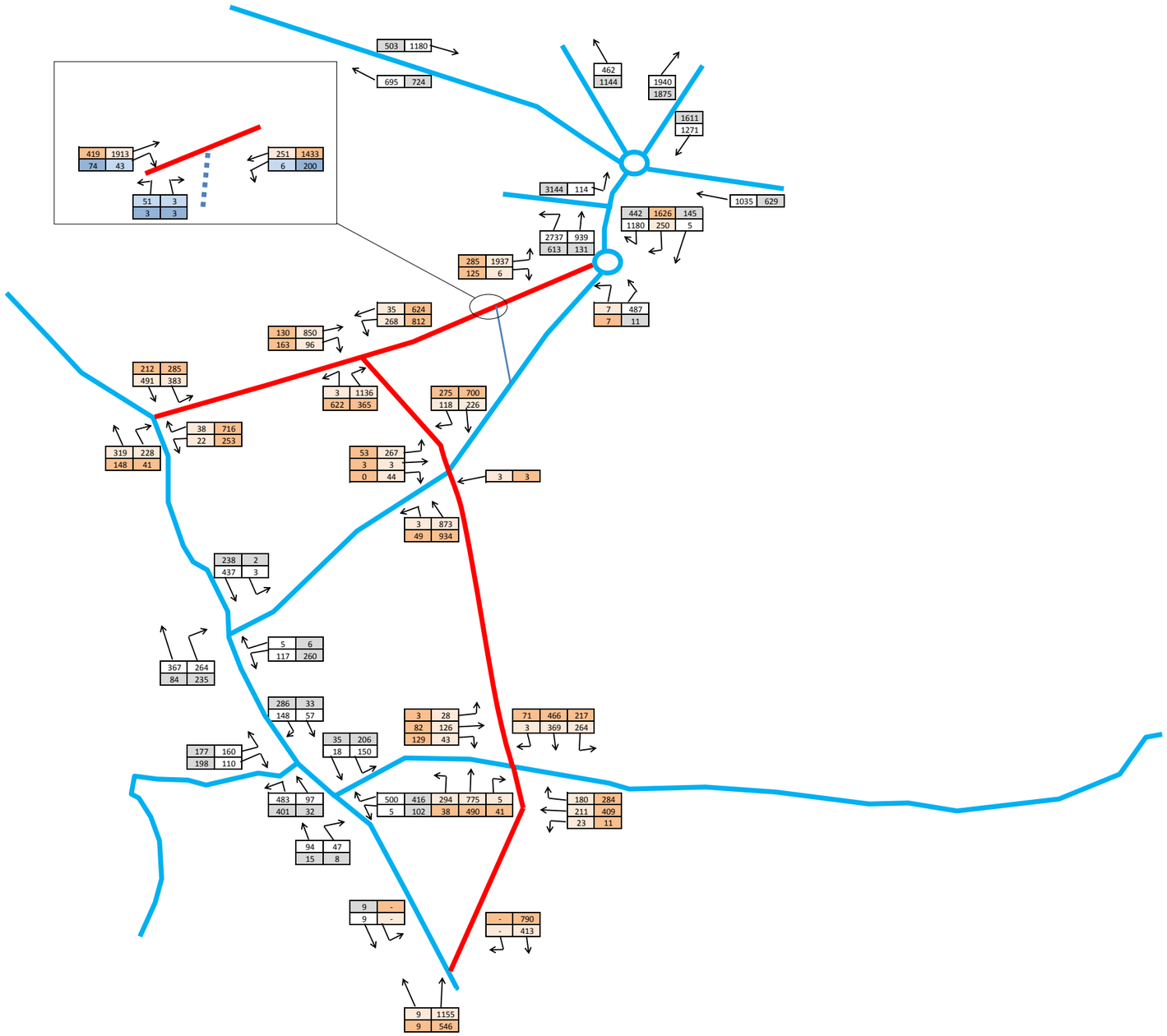
DRG. Title :
2035 Do Nothing Traffic Flows

Key:
AM Peak Hour
PM Peak Hour

Dwn:	Ckd:	Date:
DPM	RJK	21/09/2018

Ref:

Figure:	Rev:
3	C



DBFL Consulting Engineers

Dublin Office:
Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7
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phone: +353 51 309 500

email: info@dbfl.ie
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Project:
Glenamuck District Roads Scheme

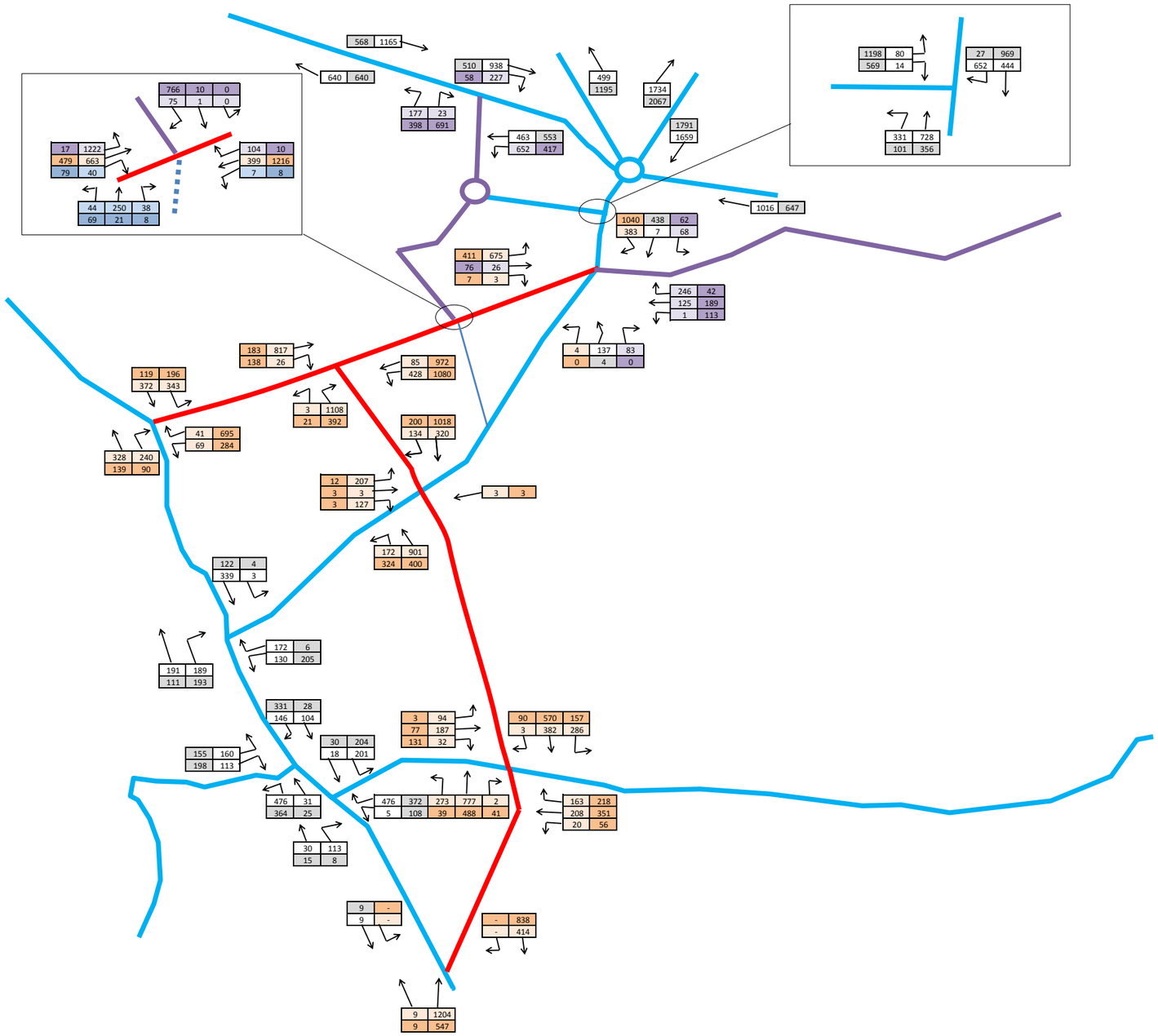
DRG. Title :
2035 Do Something Traffic Flows

Key:
AM Peak Hour
PM Peak Hour

Dwn:	Ckd:	Date:
DPM	RJK	21/09/2018

Ref:

Figure:	Rev:
4	C



DBFL Consulting Engineers	**Dublin Office:** Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 **phone:** +353 1 400 4000 **Waterford Office:** Unit 2, The Chandlery, 1-2 O'Connell Street, Waterford **phone:** +353 51 309 500 **email:** info@dbfl.ie **website:** www.dbfl.ie	**Project:** Glenamuck District Roads Scheme **DRG. Title :** 2035 Do Something with Complementary Measures Traffic Flows	**Key:** AM Peak Hour PM Peak Hour	**Dwn:** DPM	**Ckd:** RJK	**Date:** 21/09/2018
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				Figure: 5		**Rev:** C

APPENDIX E

ERM SATURN Plots of M50 Junctions

M50 Junctions 13 & 14 – Demand Flow Plots

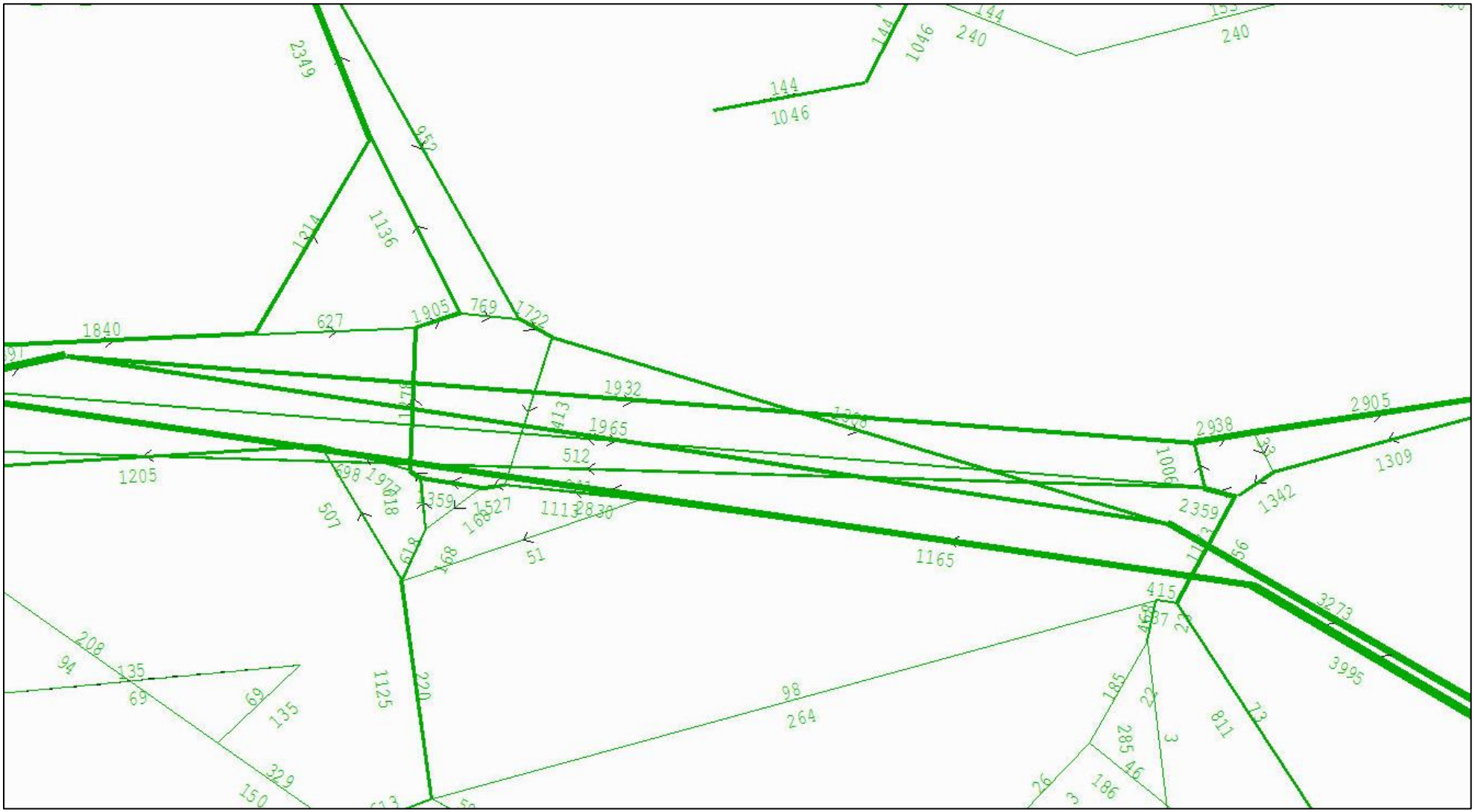


Figure 1: ERM SATURN Plot 2017 Base AM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

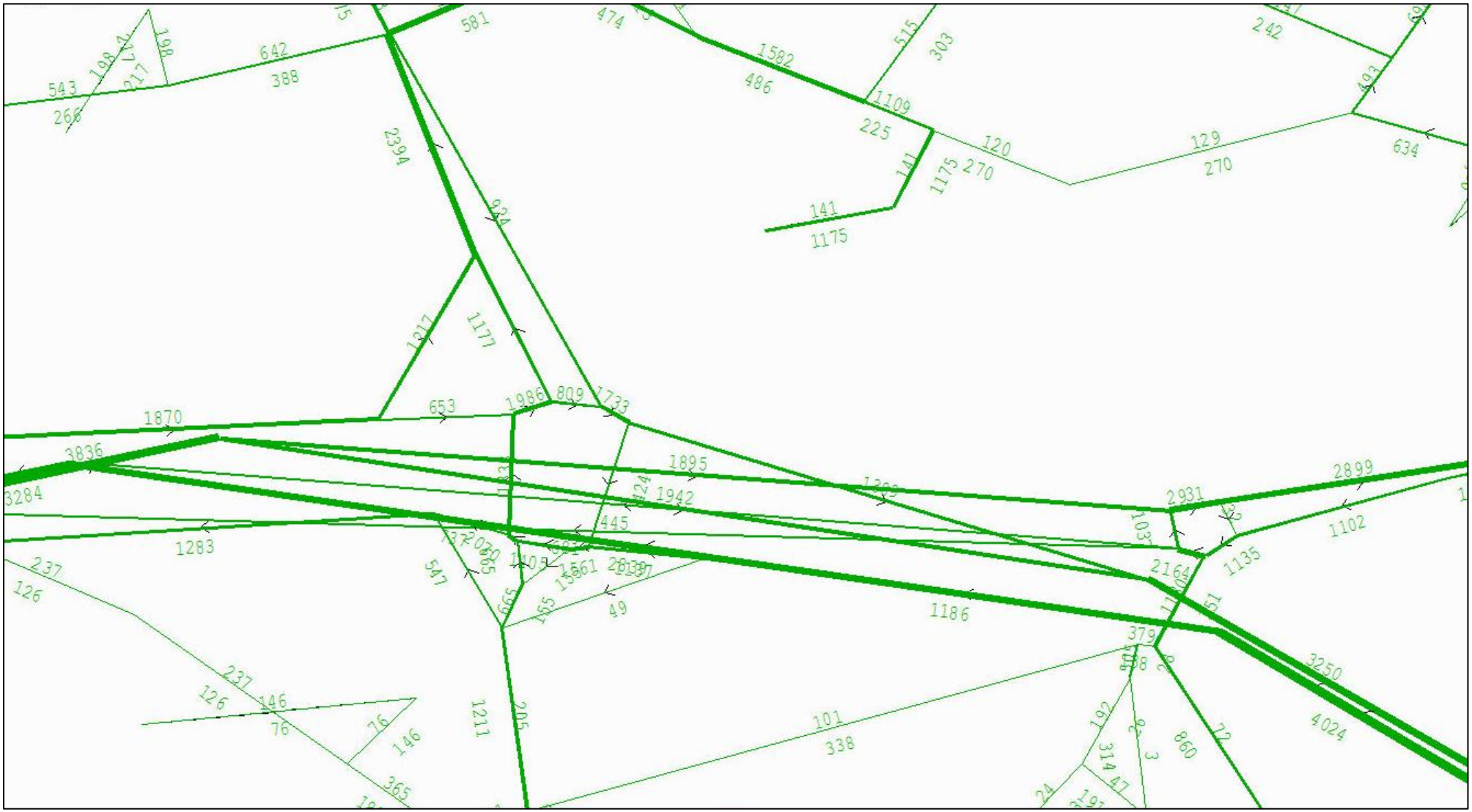


Figure 2: ERM SATURN Plot 2020 Do-Nothing AM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

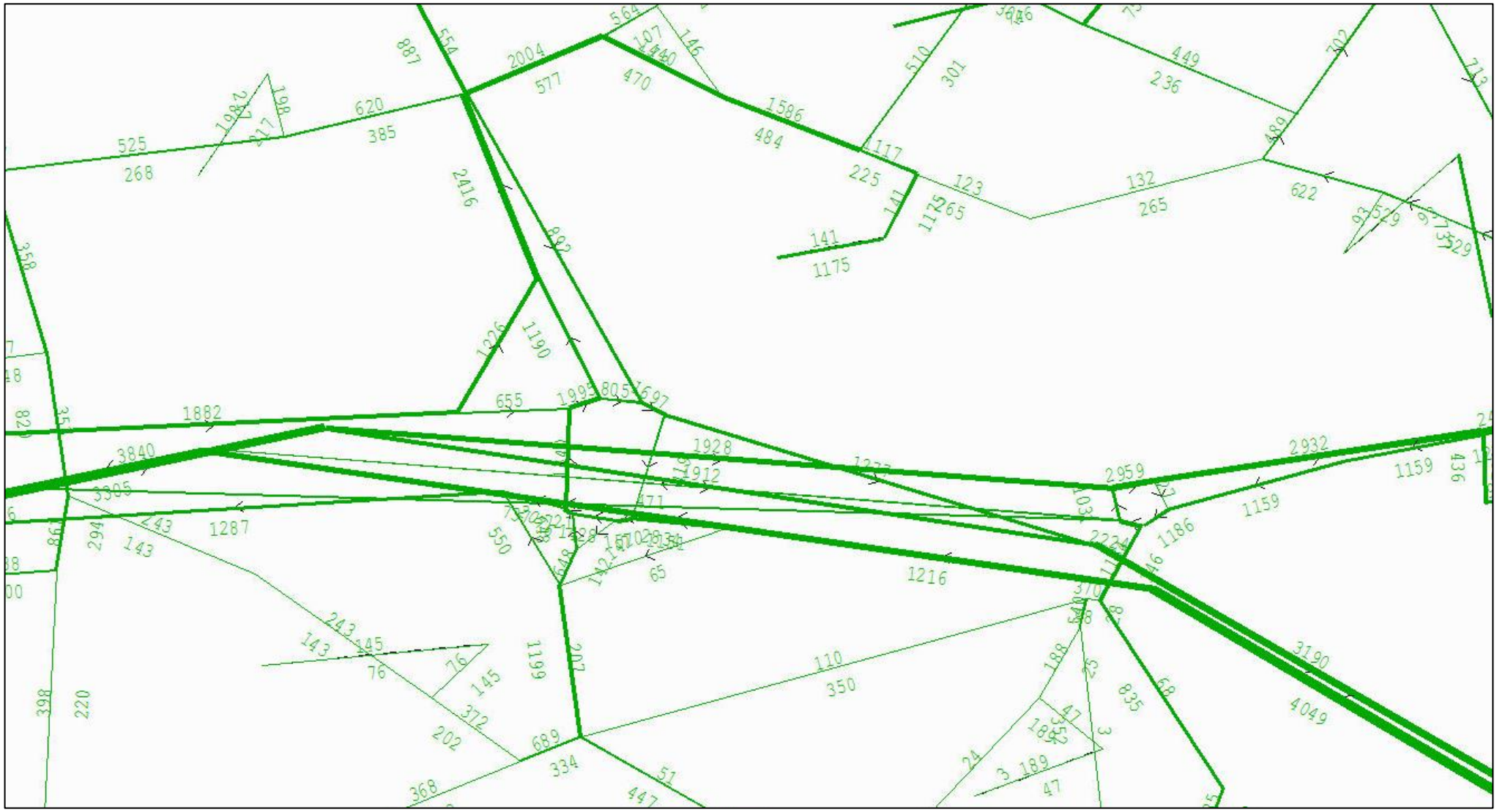


Figure 3: ERM SATURN Plot 2020 Do-Something AM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

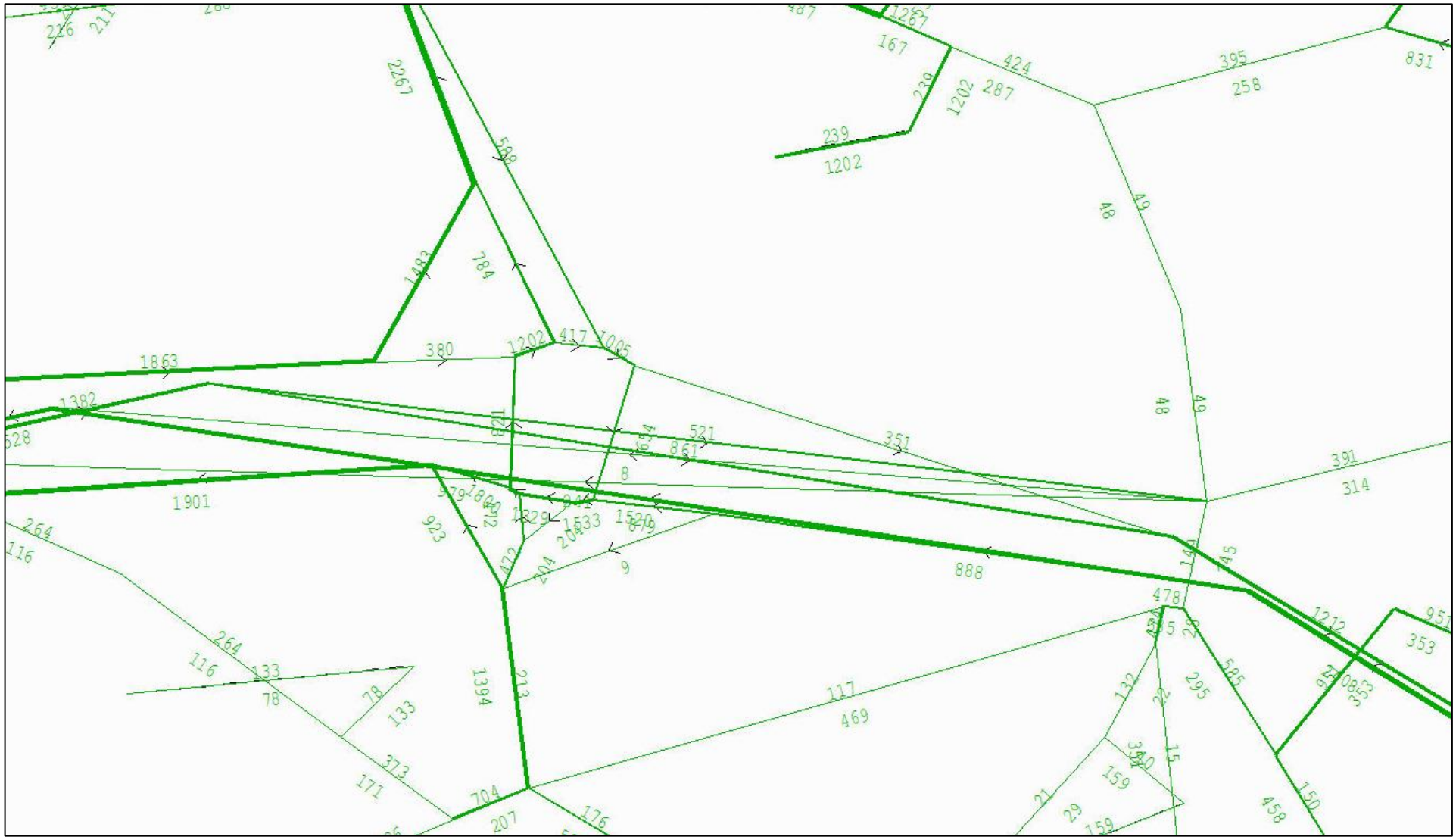


Figure 4: ERM SATURN Plot 2035 Do-Nothing AM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

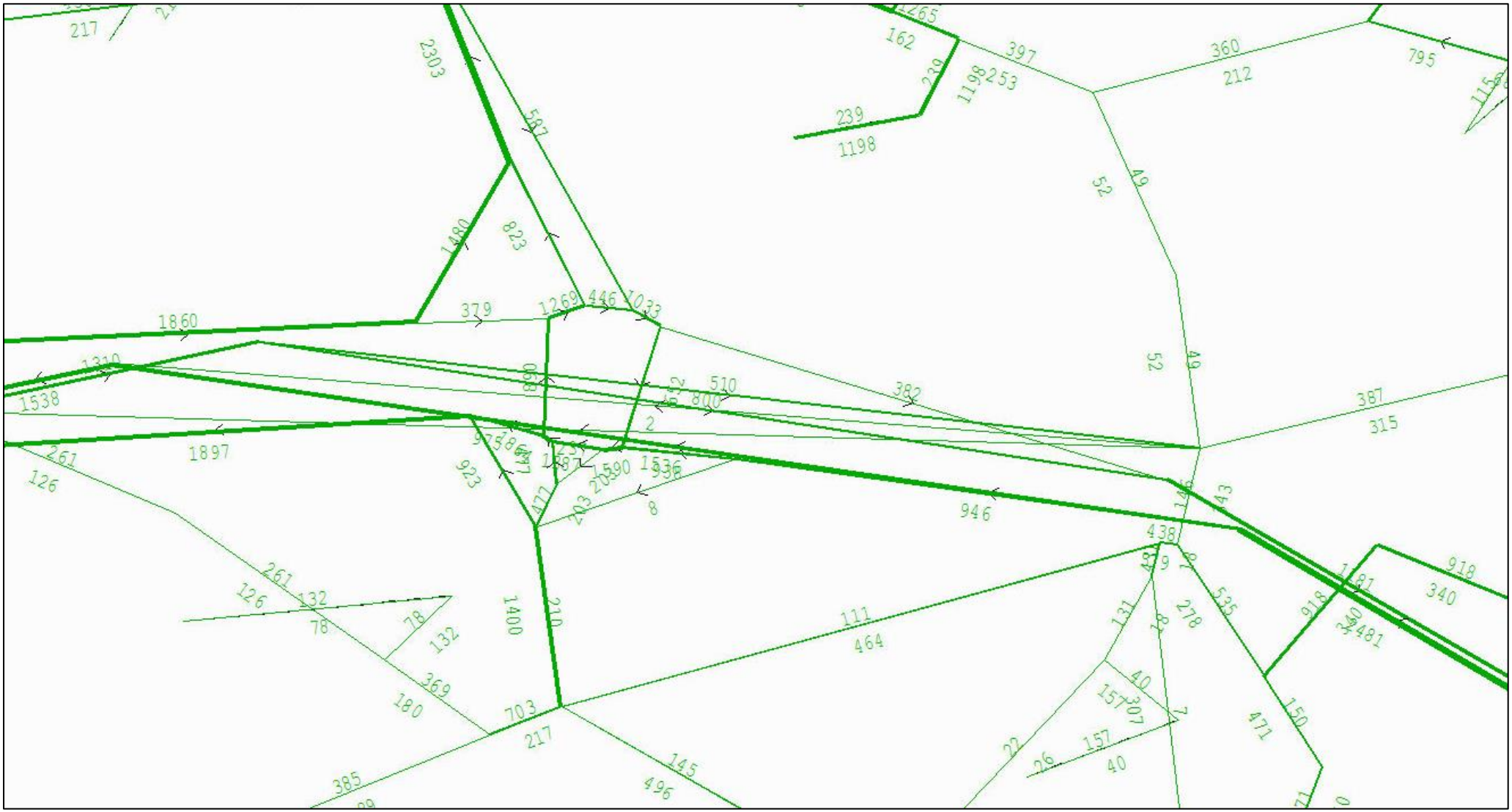


Figure 5: ERM SATURN Plot 2035 Do-Something AM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

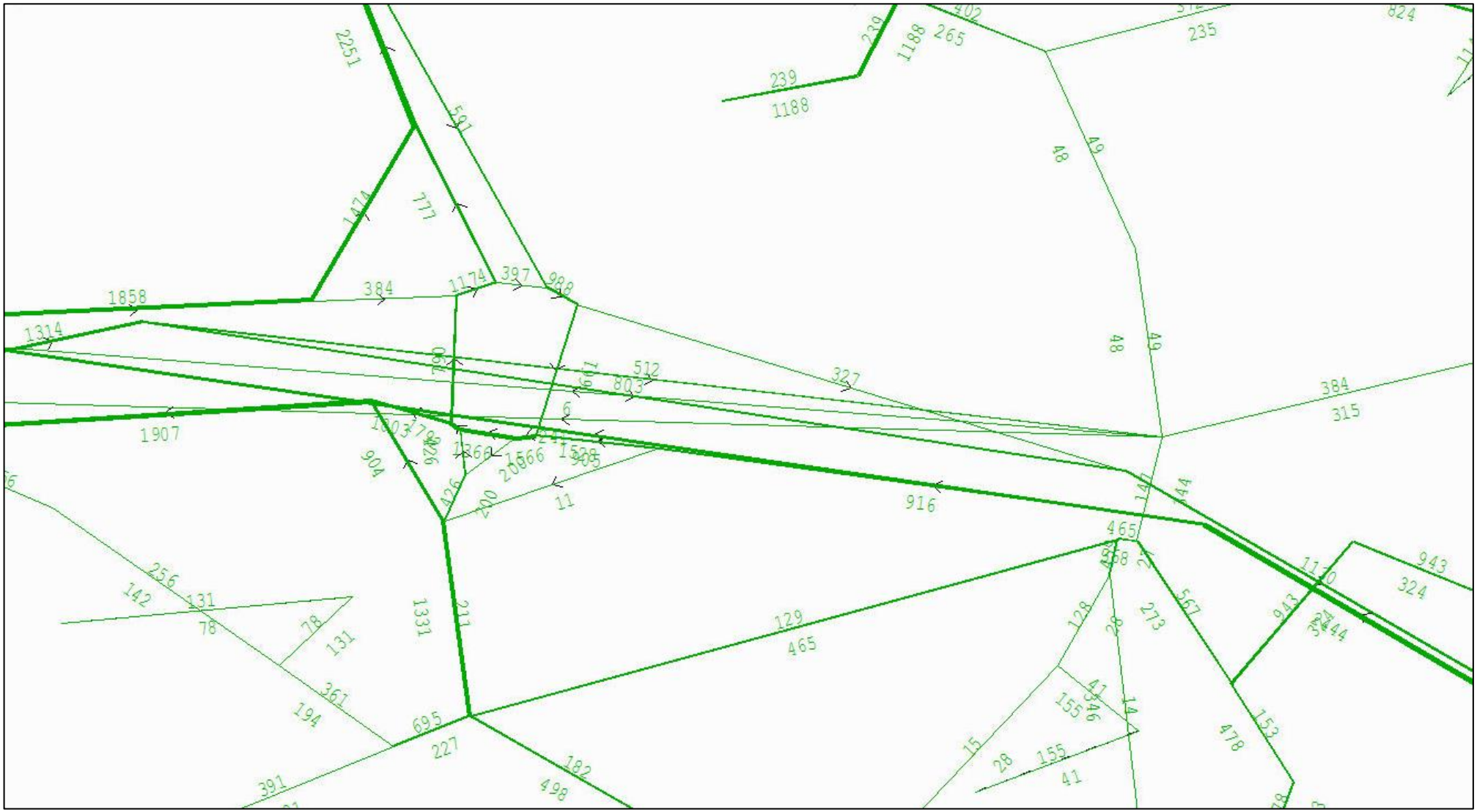


Figure 6: ERM SATURN Plot 2035 Do-Something with Complementary Measures AM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

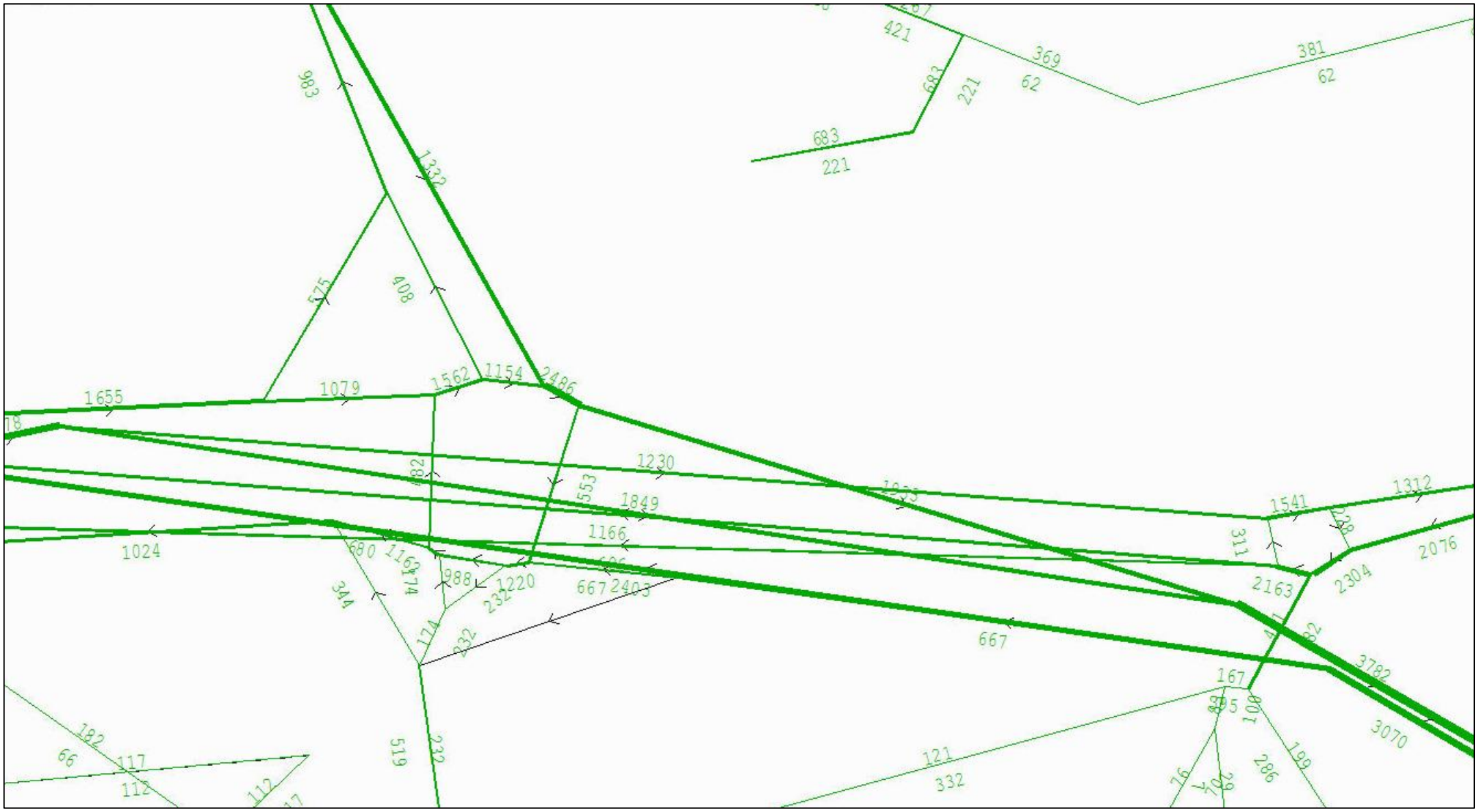


Figure 7: ERM SATURN Plot 2017 Base PM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

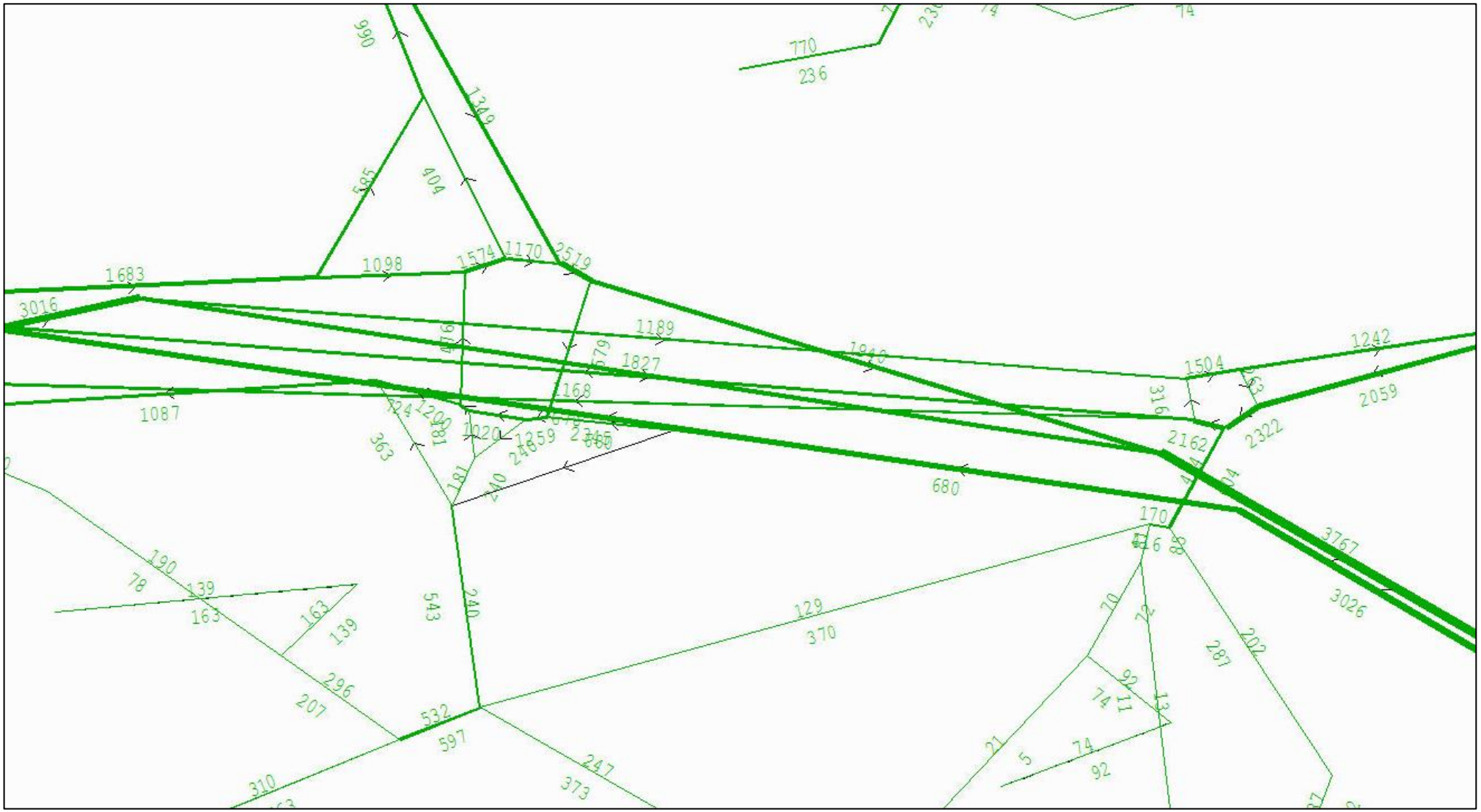


Figure 8: ERM SATURN Plot 2020 Do-Nothing PM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

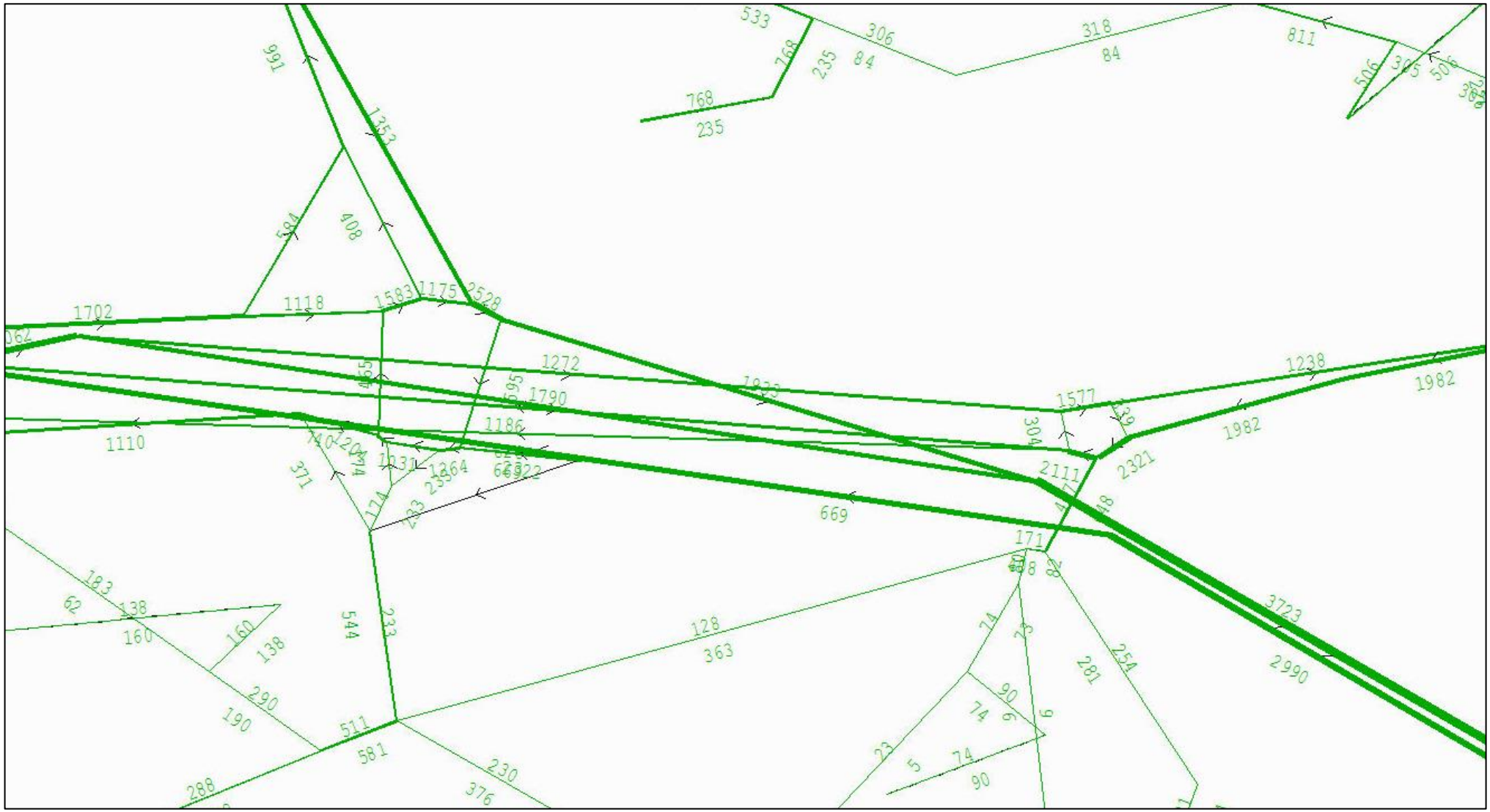


Figure 9: ERM SATURN Plot 2020 Do-Something PM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

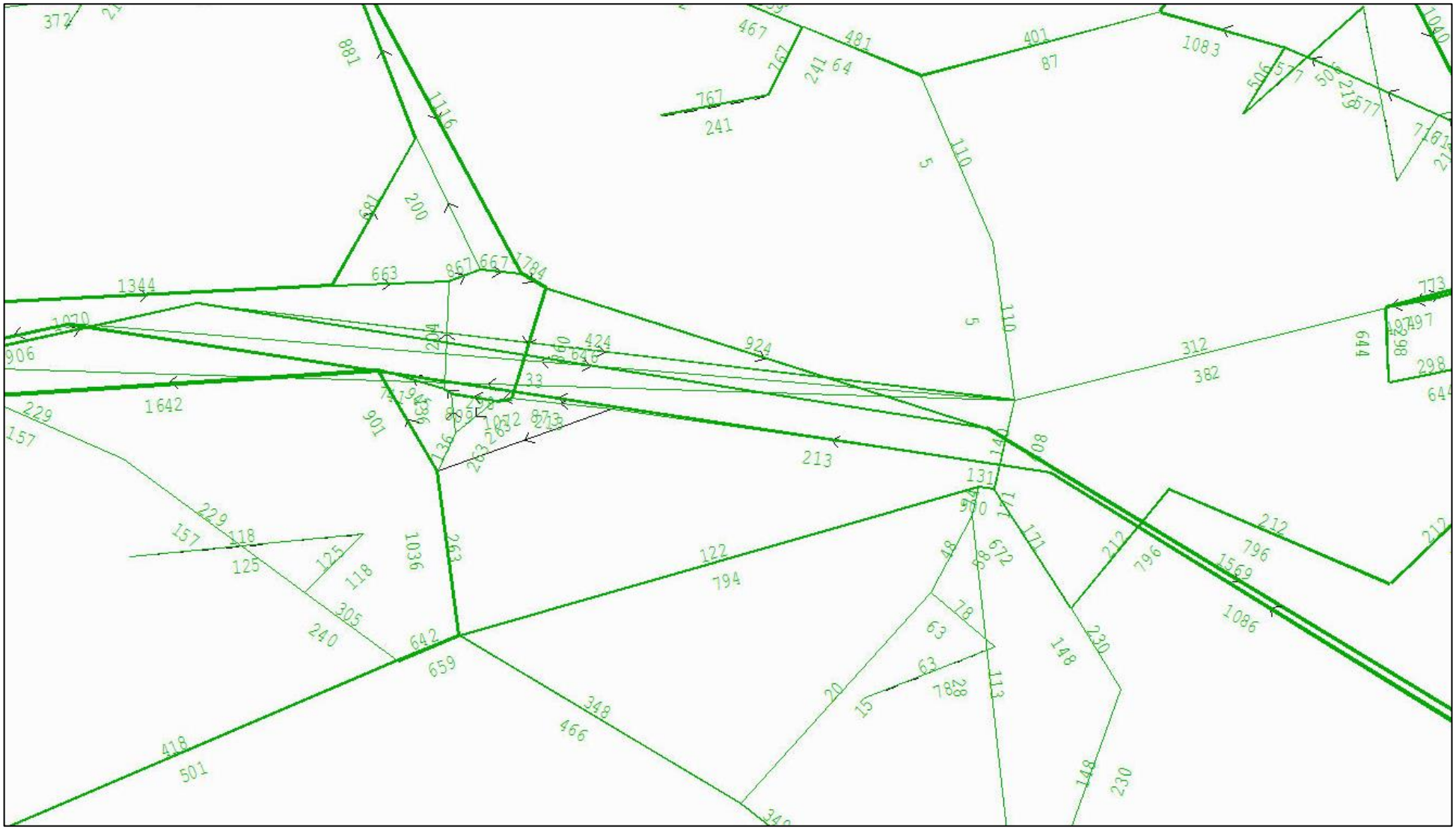


Figure 10: ERM SATURN Plot 2035 Do-Nothing PM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

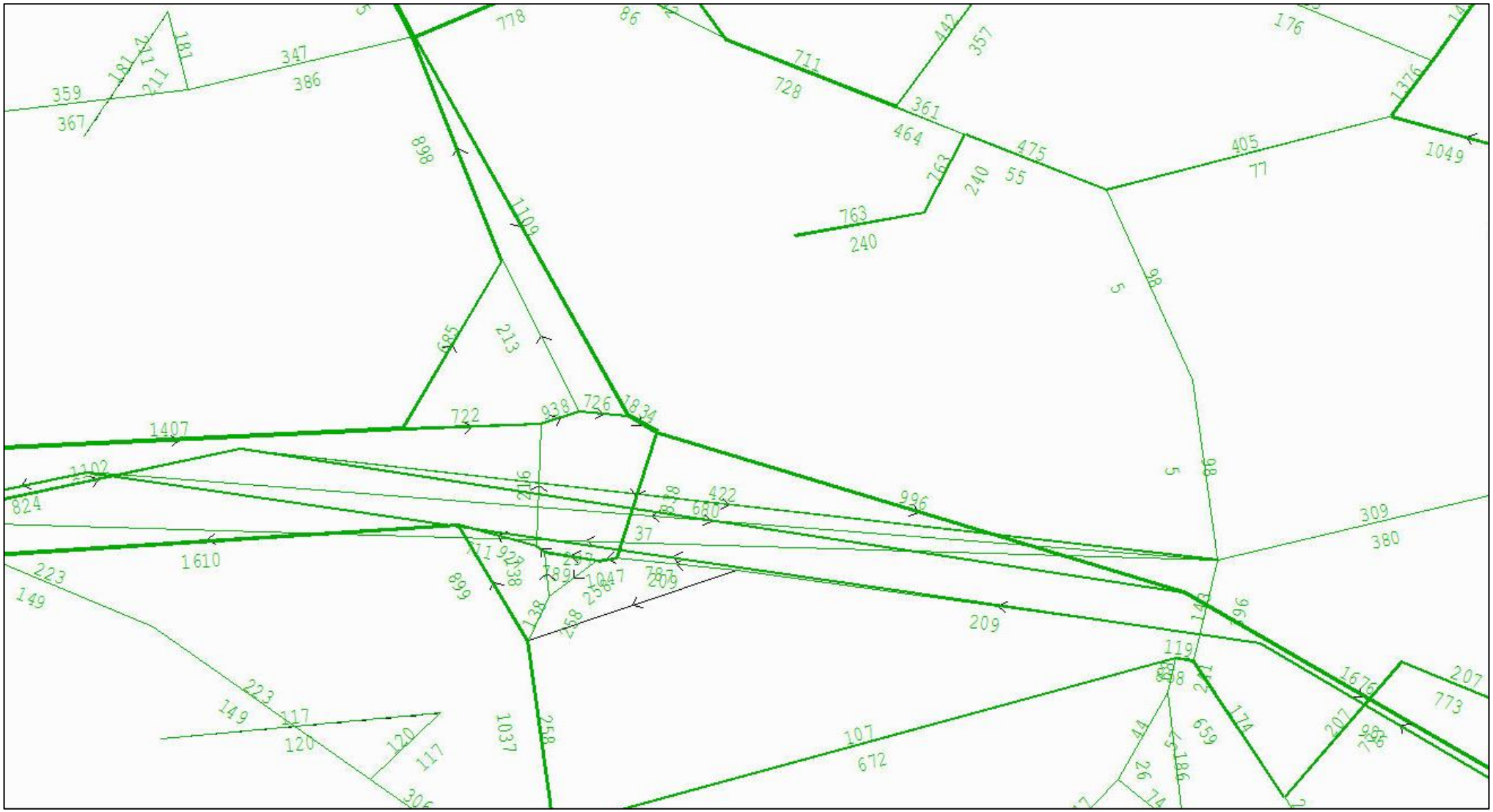


Figure 11: ERM SATURN Plot 2035 Do-Something PM Peak (Demand Flows)

M50 Junctions 13 & 14 – Demand Flow Plots

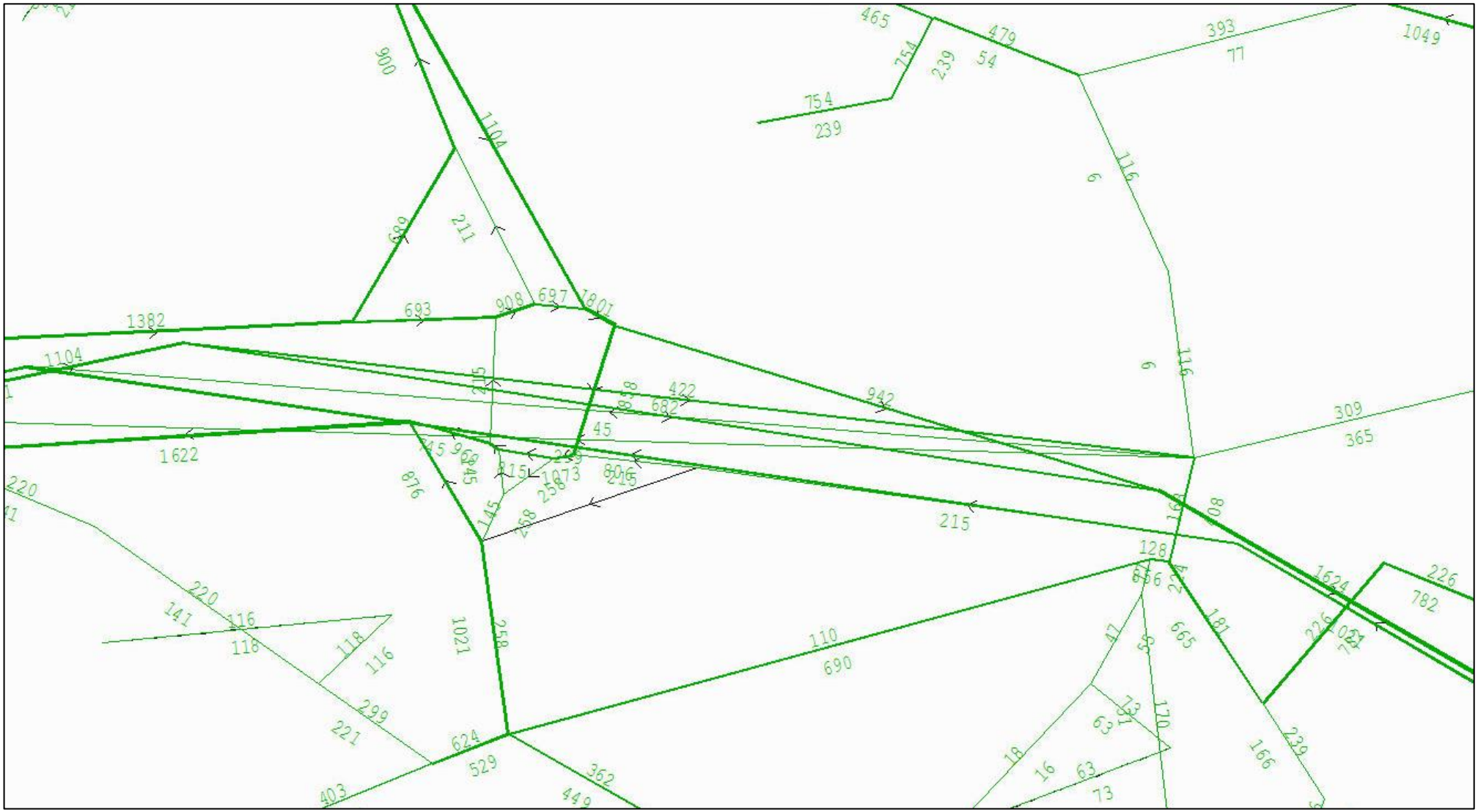


Figure 12: ERM SATURN Plot 2035 Do-Something with Complementary Measures PM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

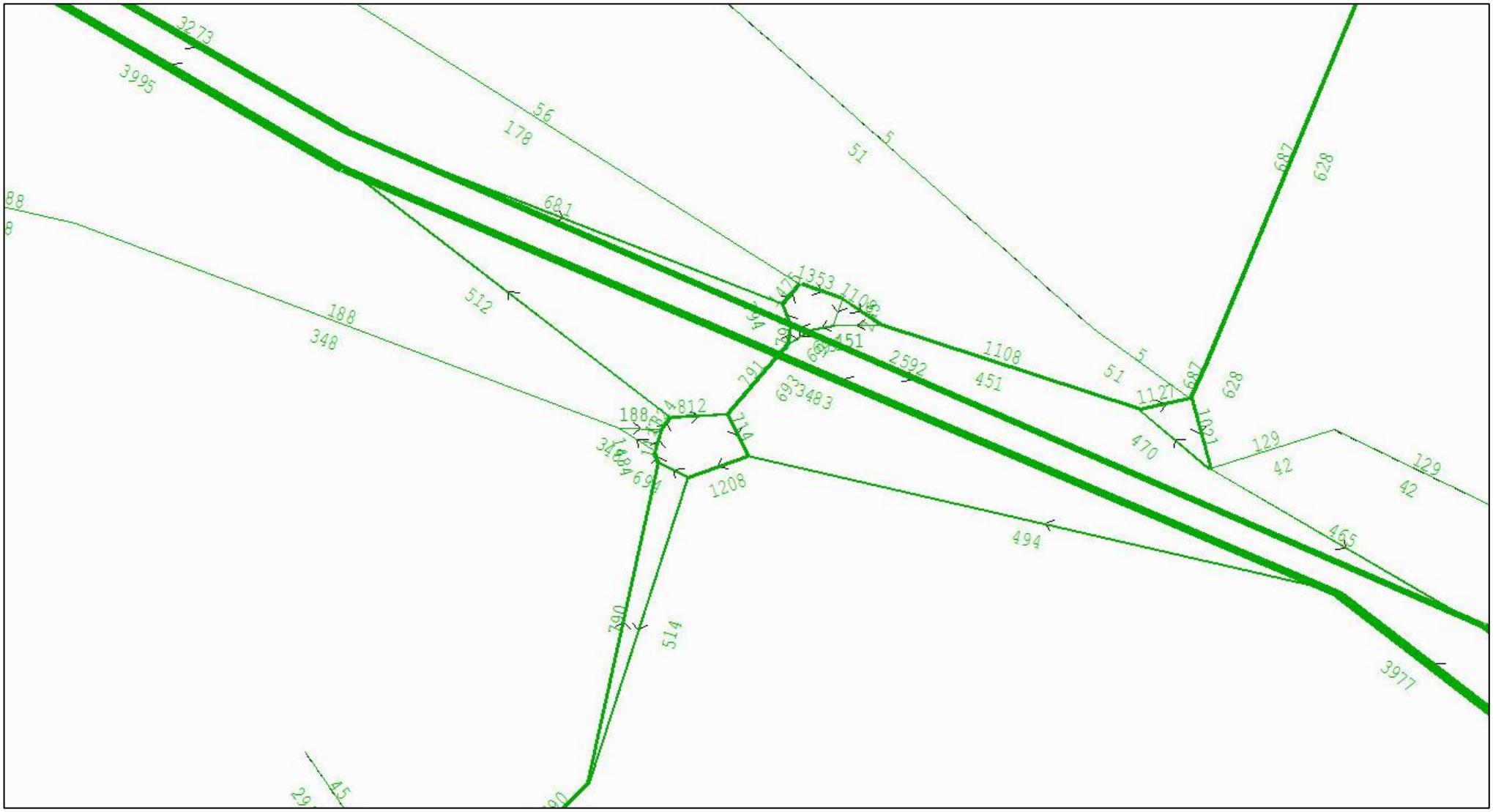


Figure 13: ERM SATURN Plot 2017 Base AM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

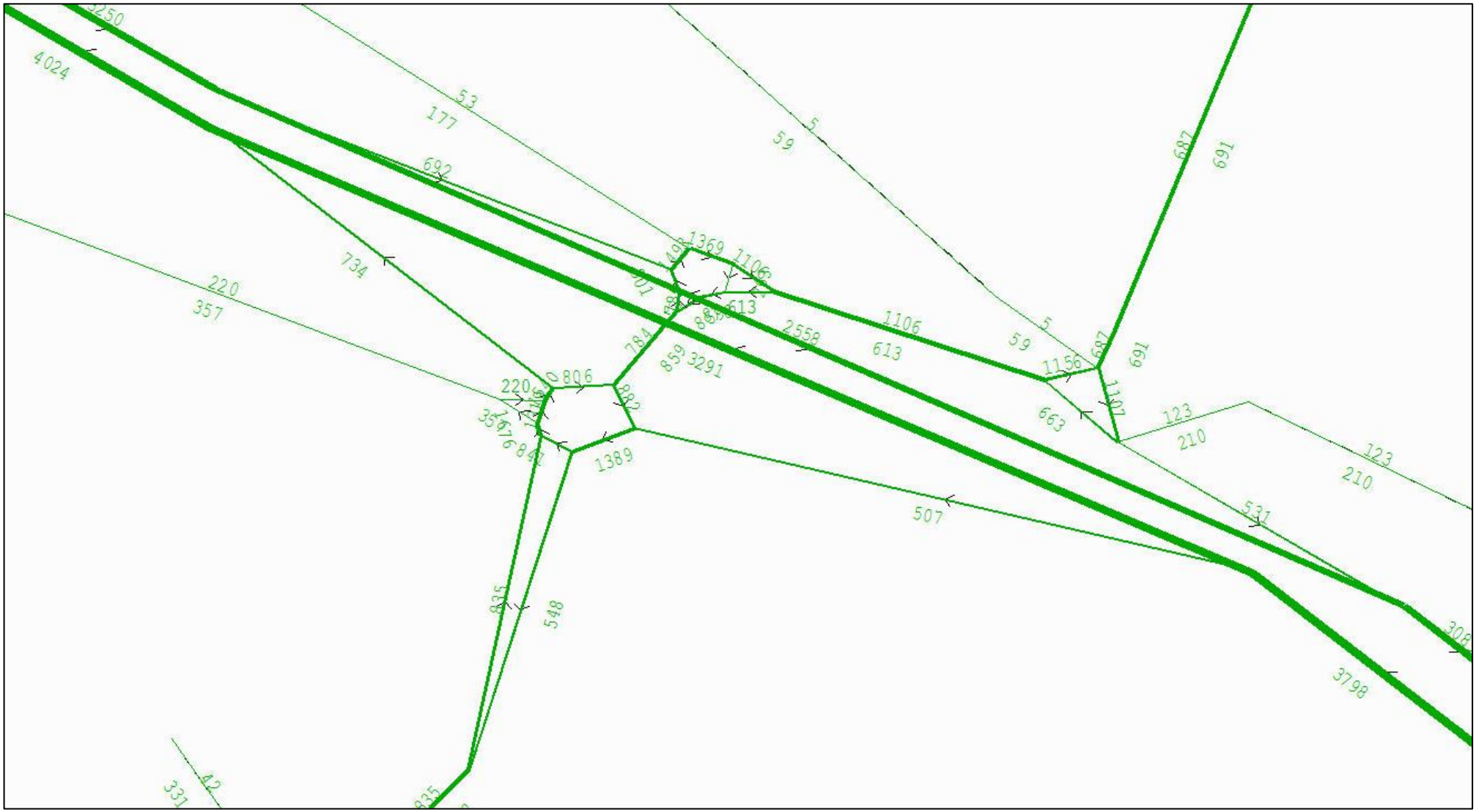


Figure 14: ERM SATURN Plot 2020 Do-Nothing AM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

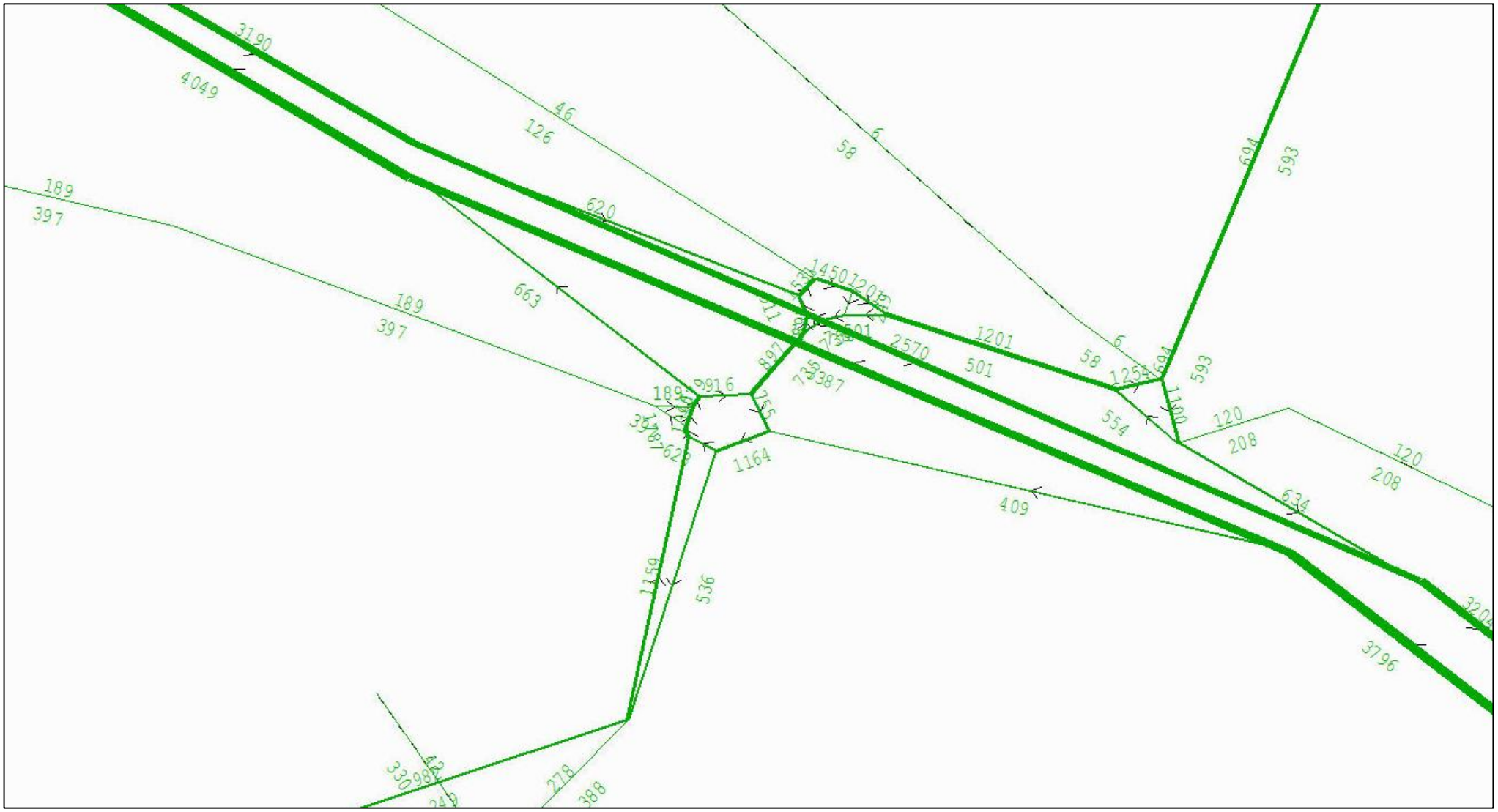


Figure 15: ERM SATURN Plot 2020 Do-Something AM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

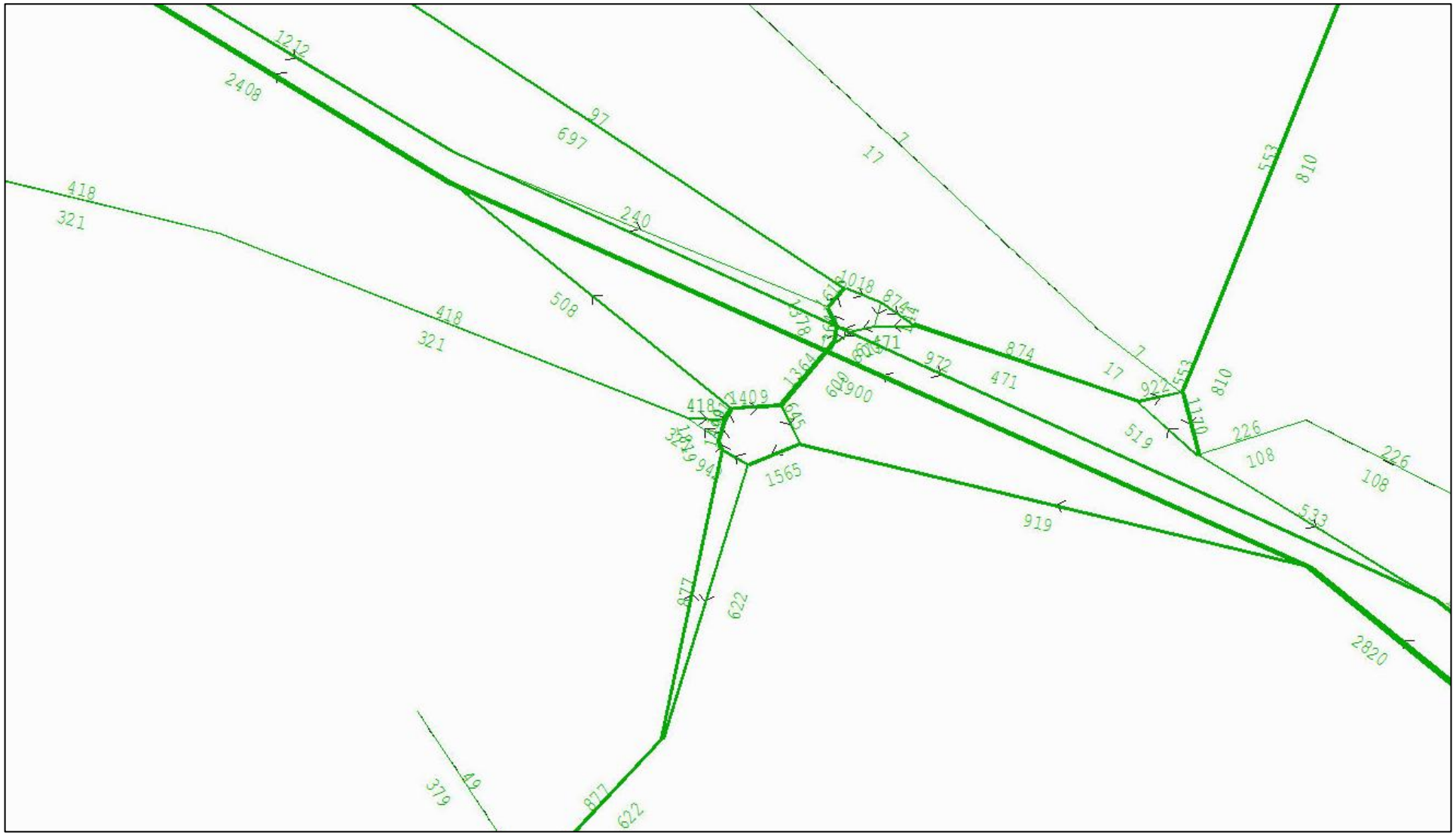


Figure 16: ERM SATURN Plot 2035 Do-Nothing AM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

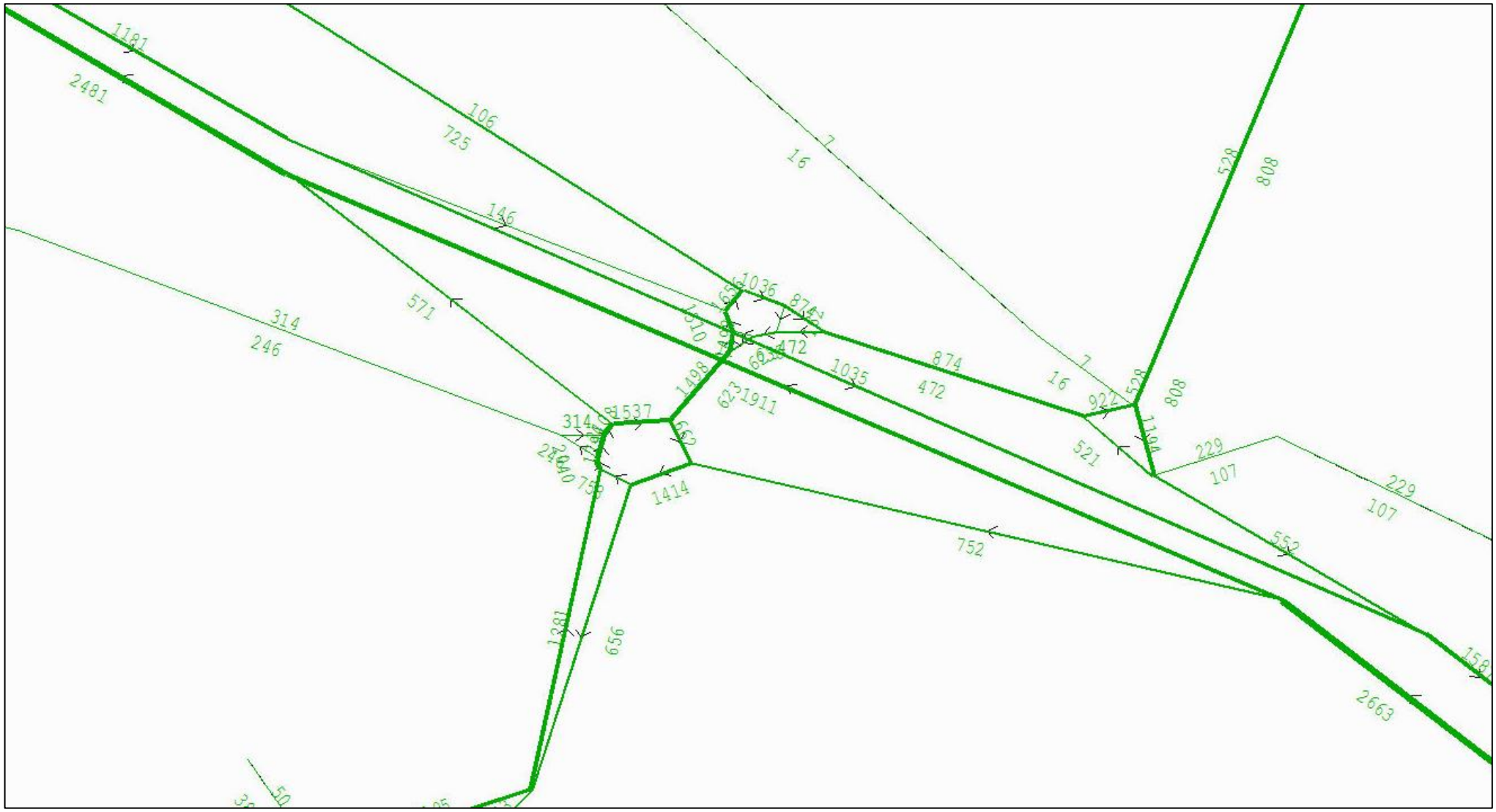


Figure 17: ERM SATURN Plot 2035 Do-Something AM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

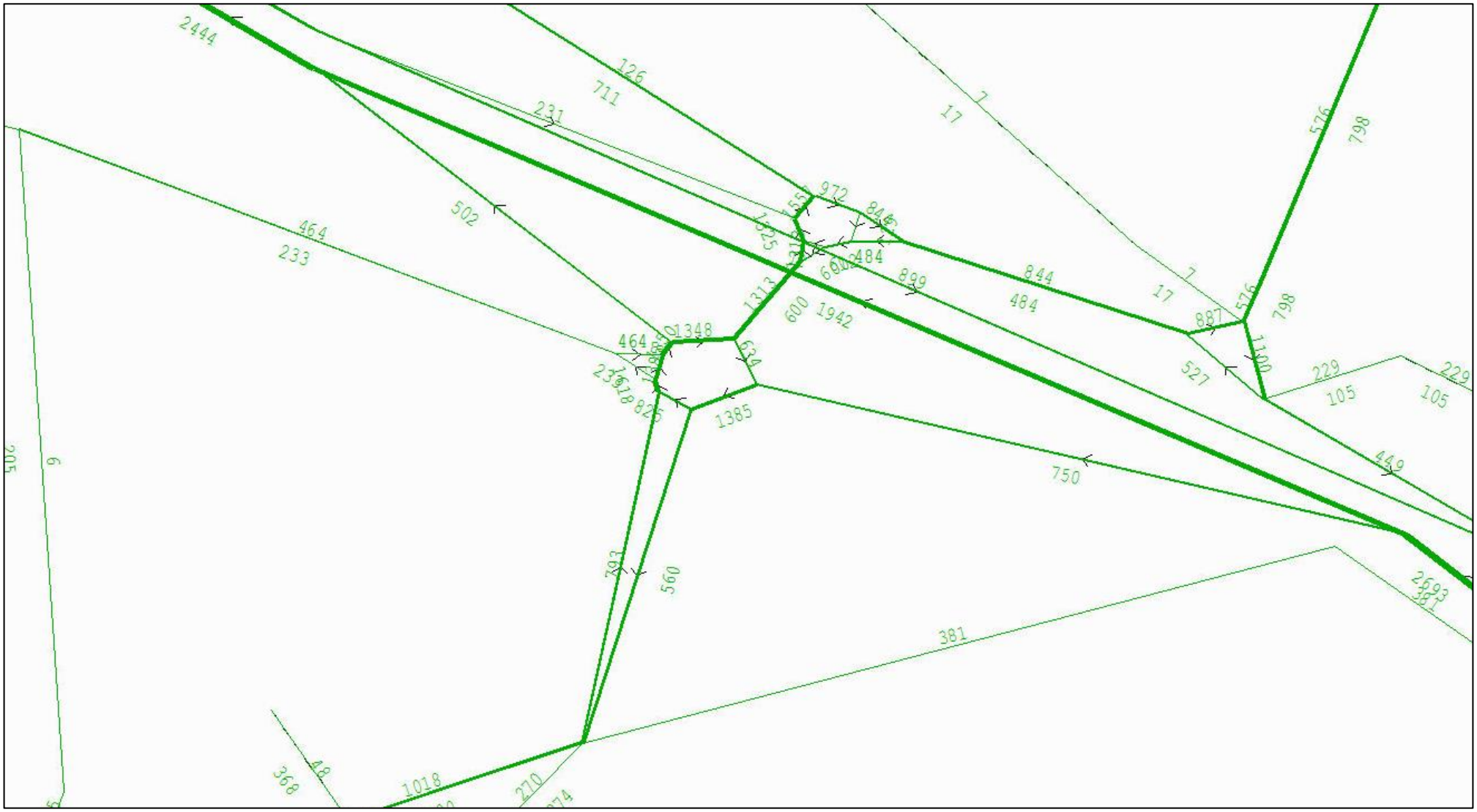


Figure 18: ERM SATURN Plot 2035 Do-Something with Complementary Measures AM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

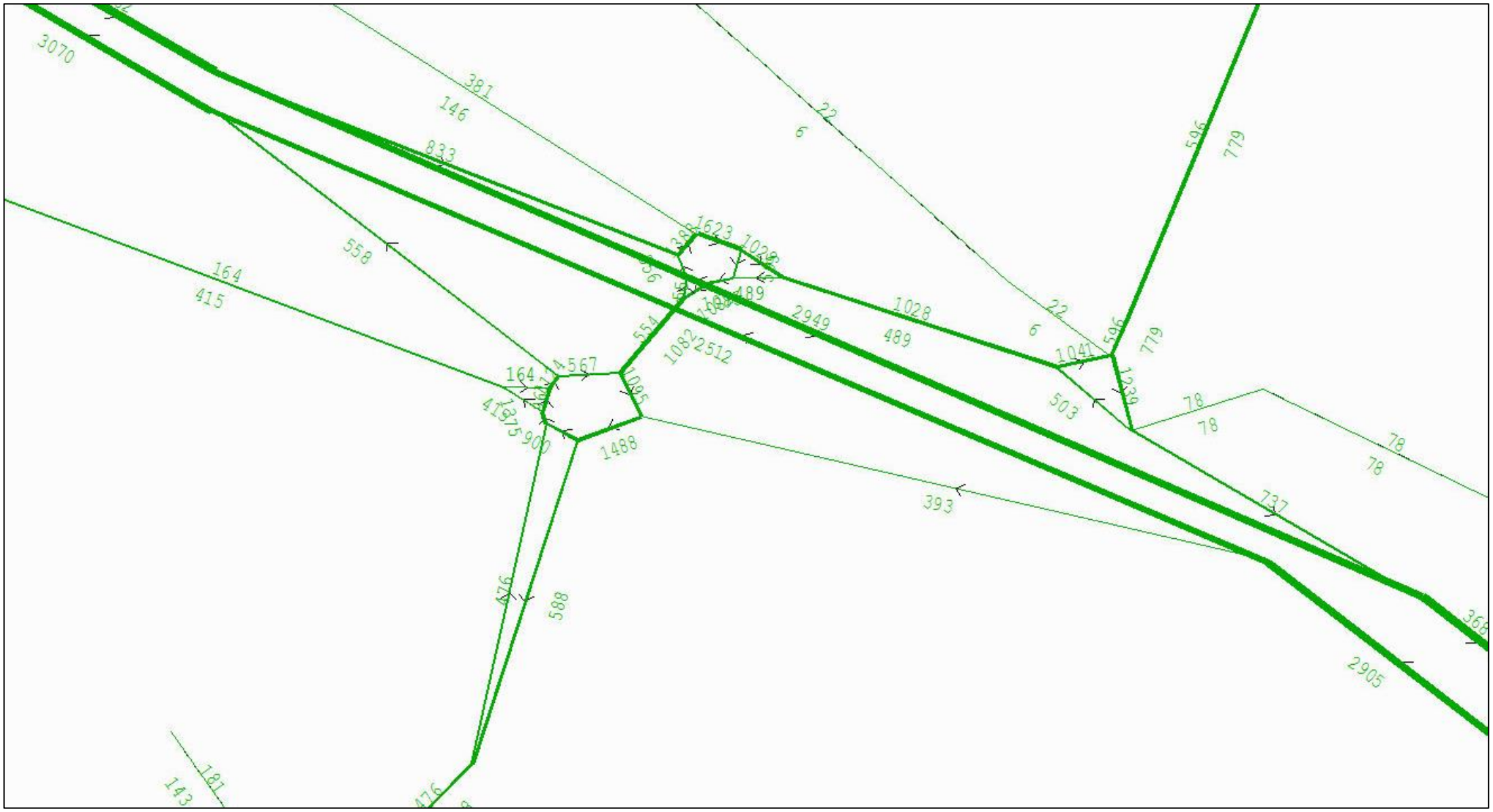


Figure 19: ERM SATURN Plot 2017 Base PM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

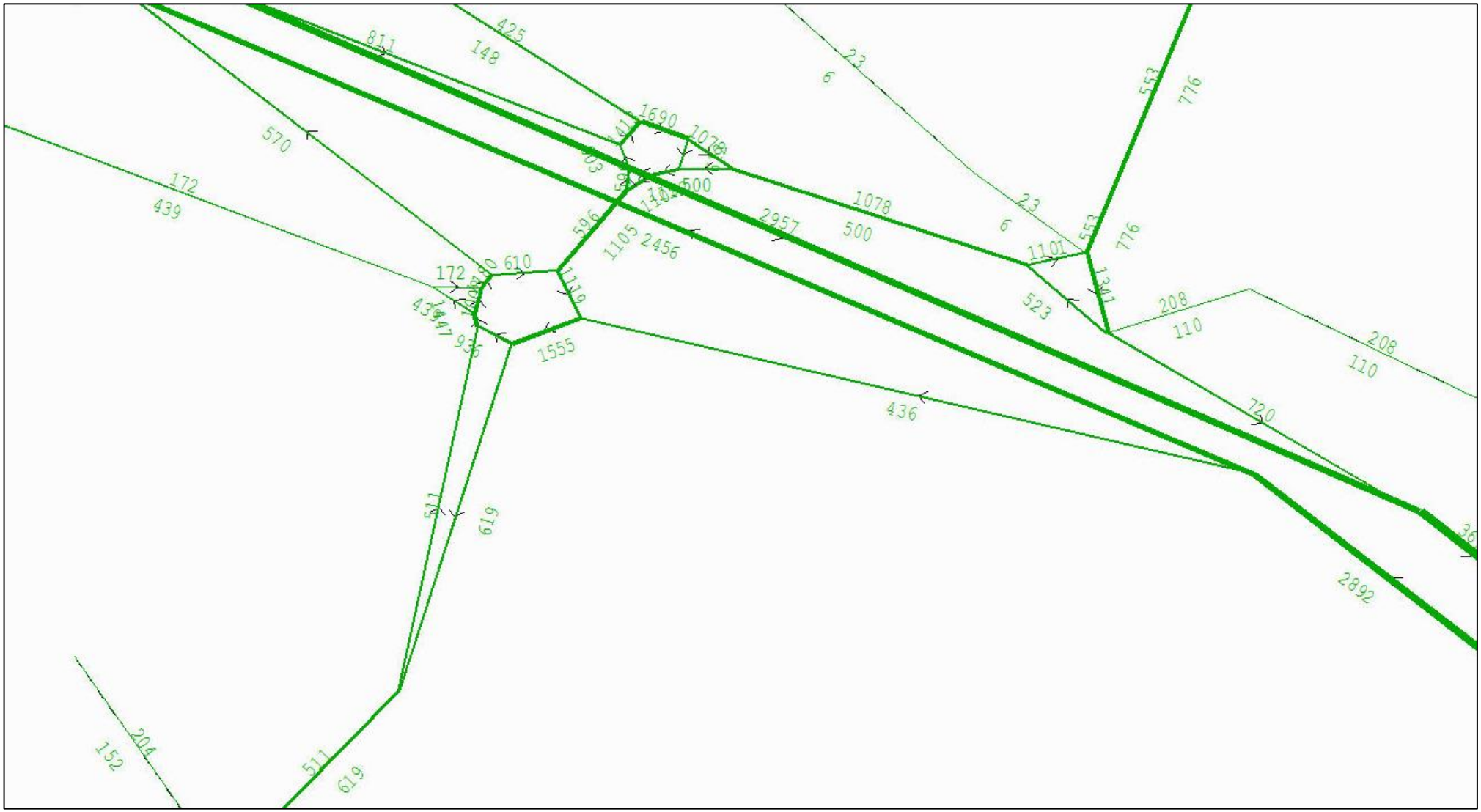


Figure 20: ERM SATURN Plot 2020 Do-Nothing PM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

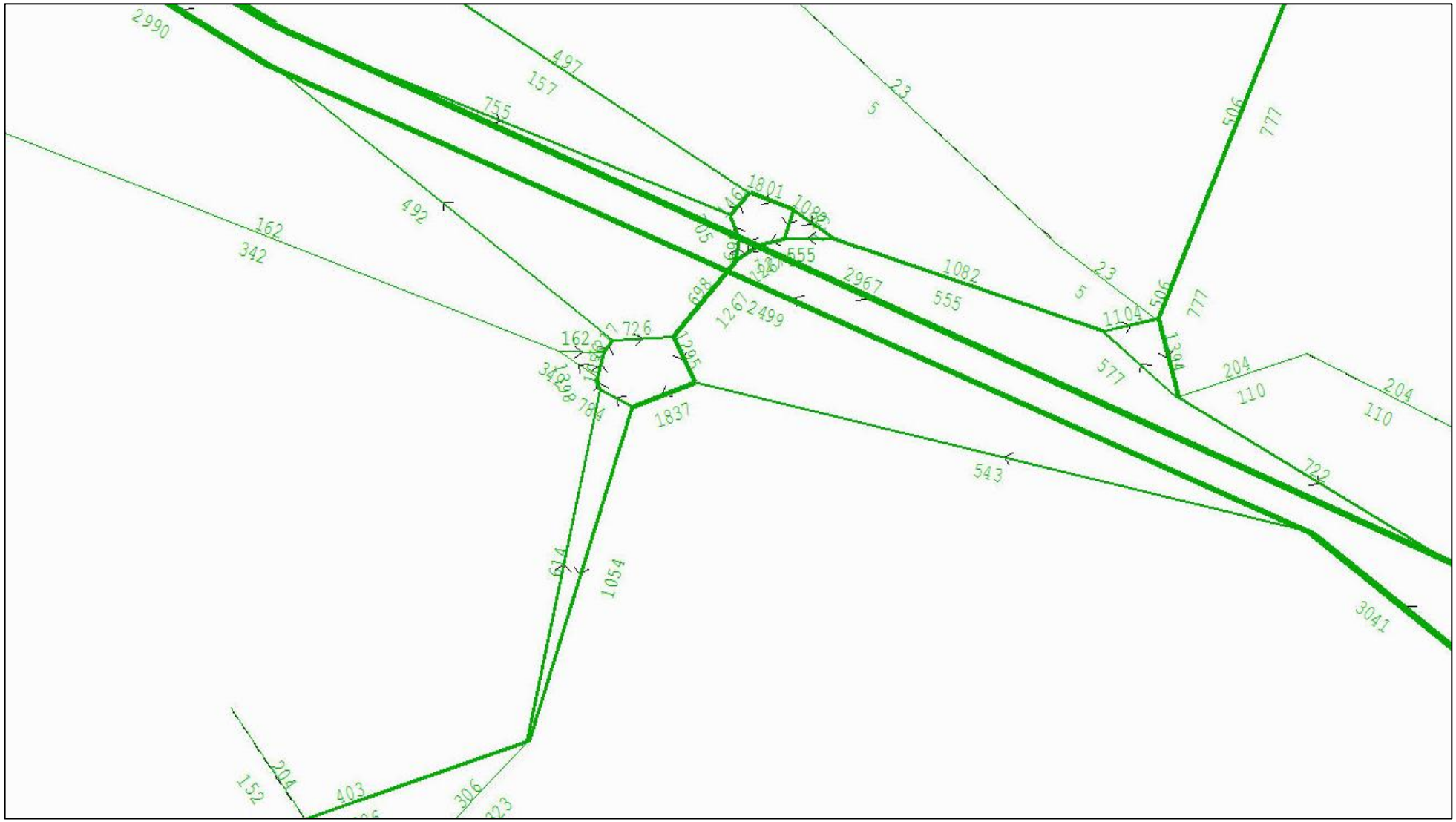


Figure 21: ERM SATURN Plot 2020 Do-Something PM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

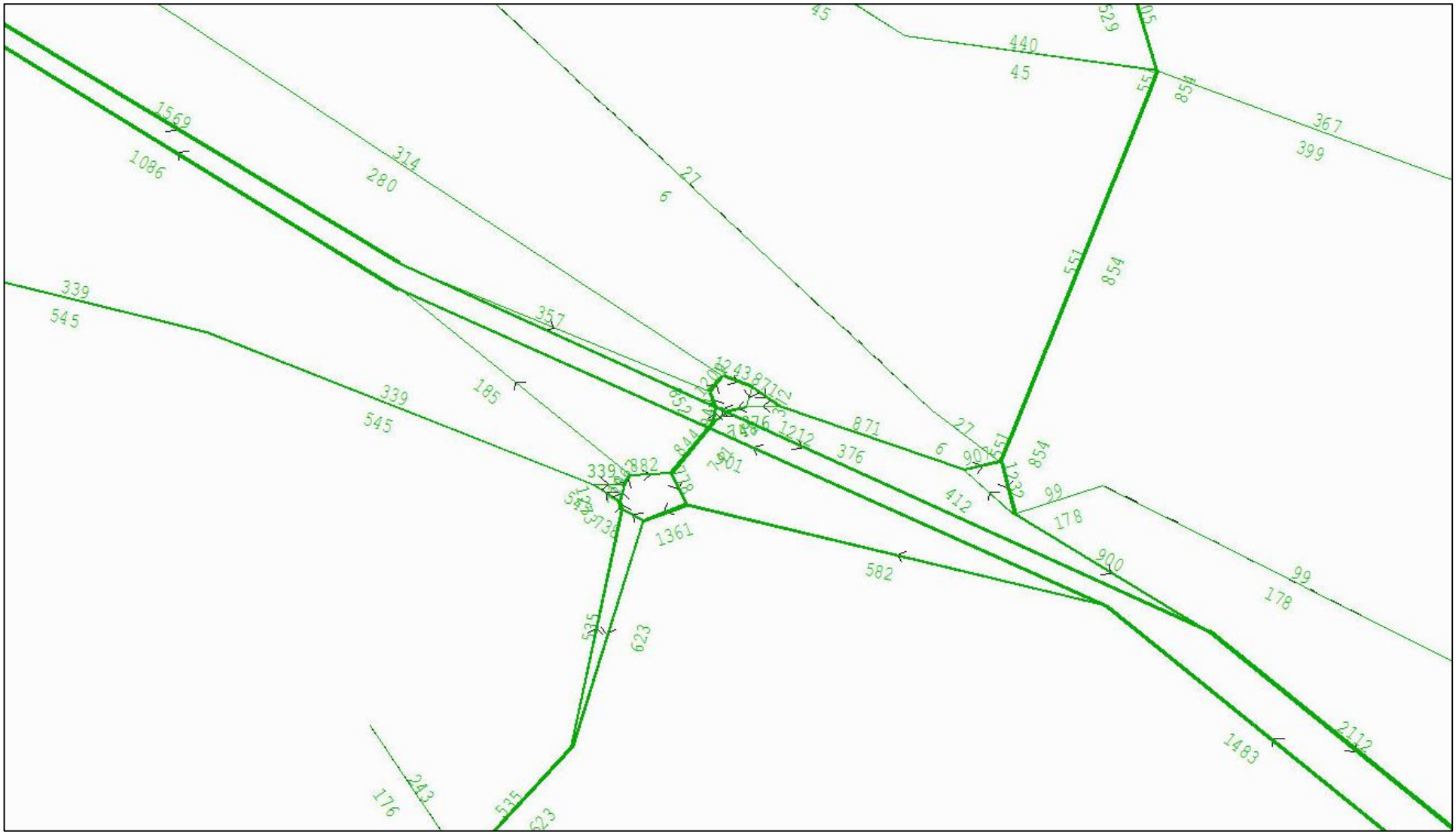


Figure 22: ERM SATURN Plot 2035 Do-Nothing PM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

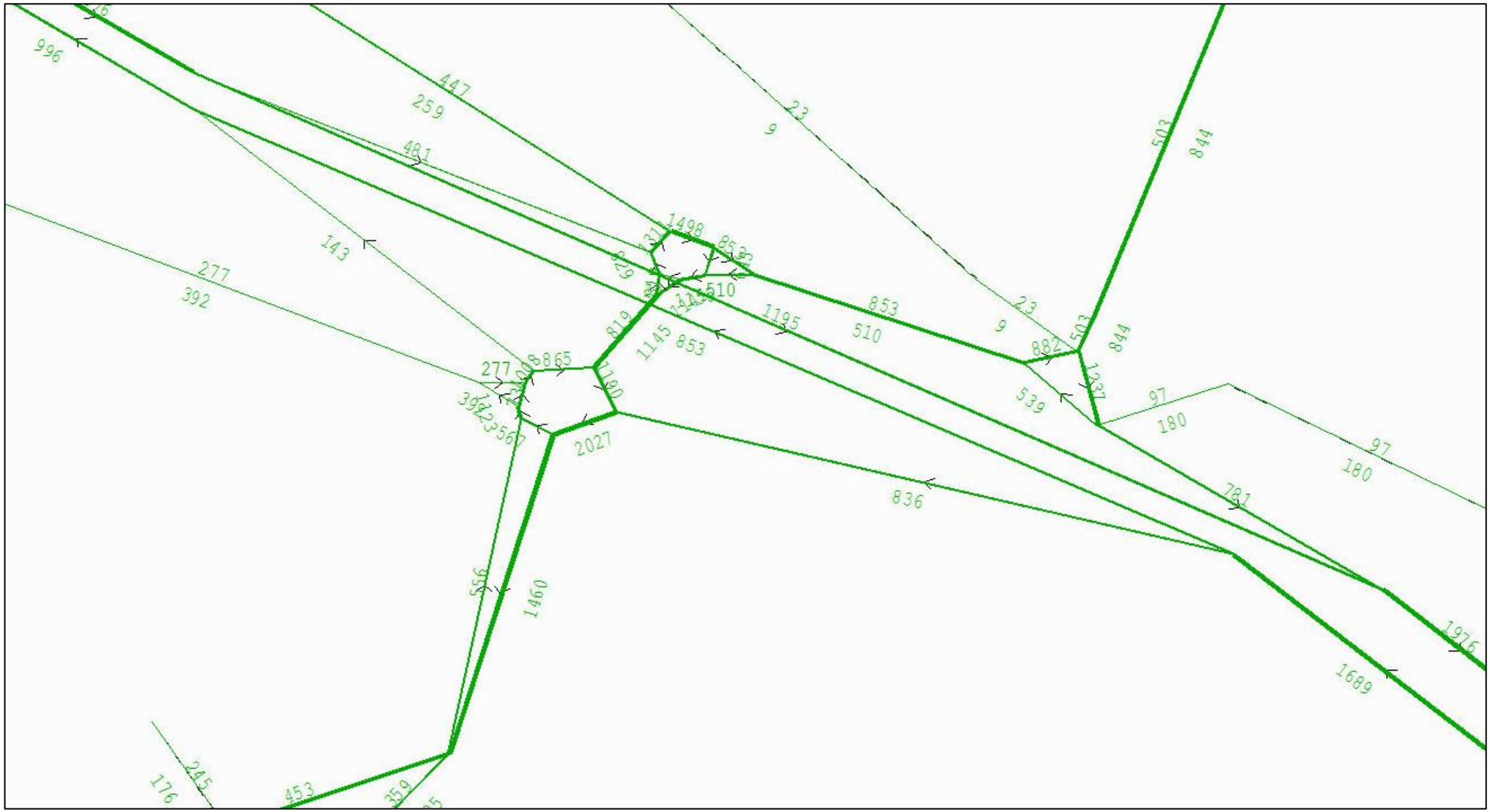


Figure 23: ERM SATURN Plot 2035 Do-Something PM Peak (Demand Flows)

M50 Junction 15 – Demand Flow Plots

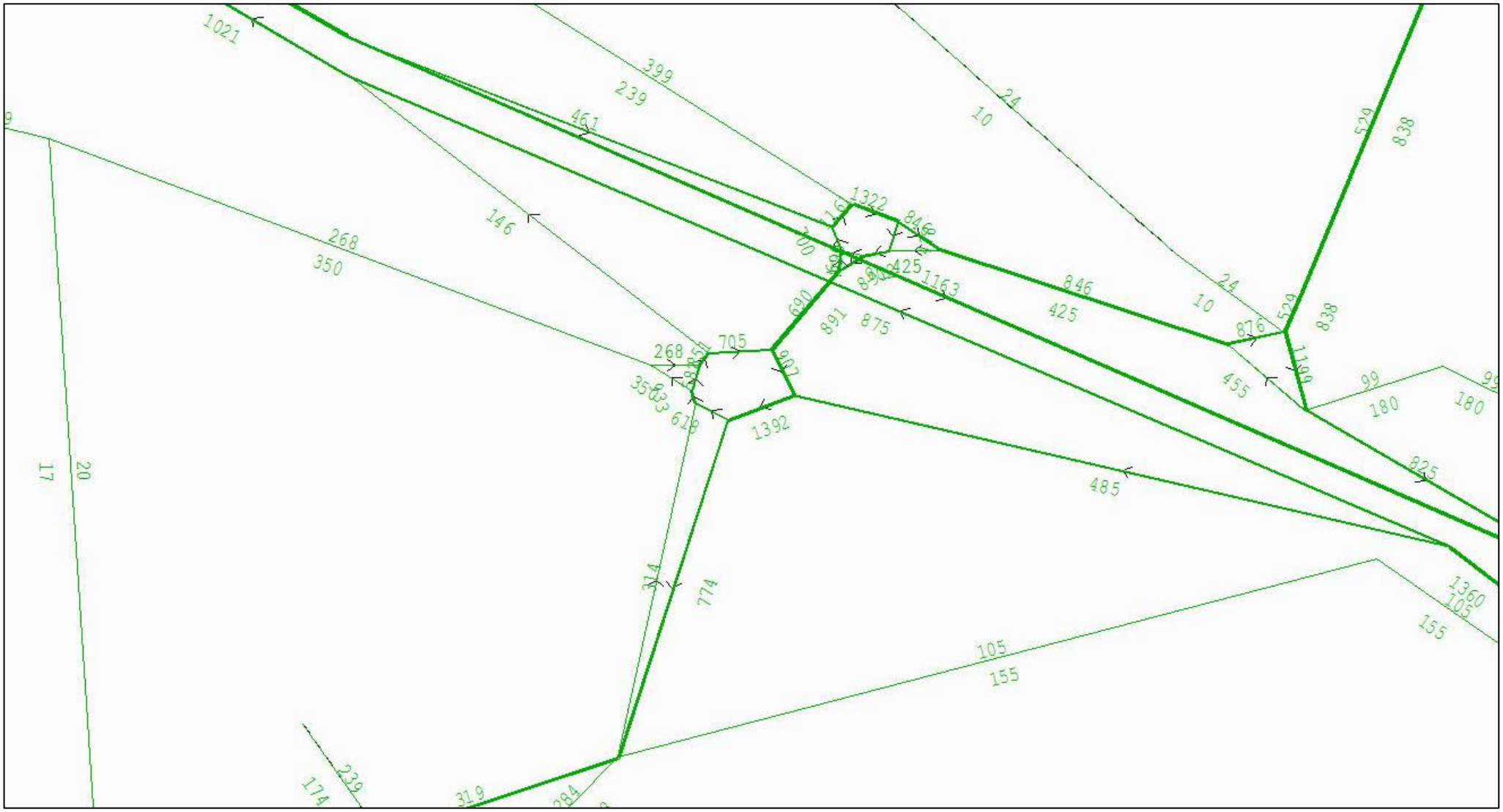


Figure 24: ERM SATURN Plot 2035 Do-Something with Complementary Measures PM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

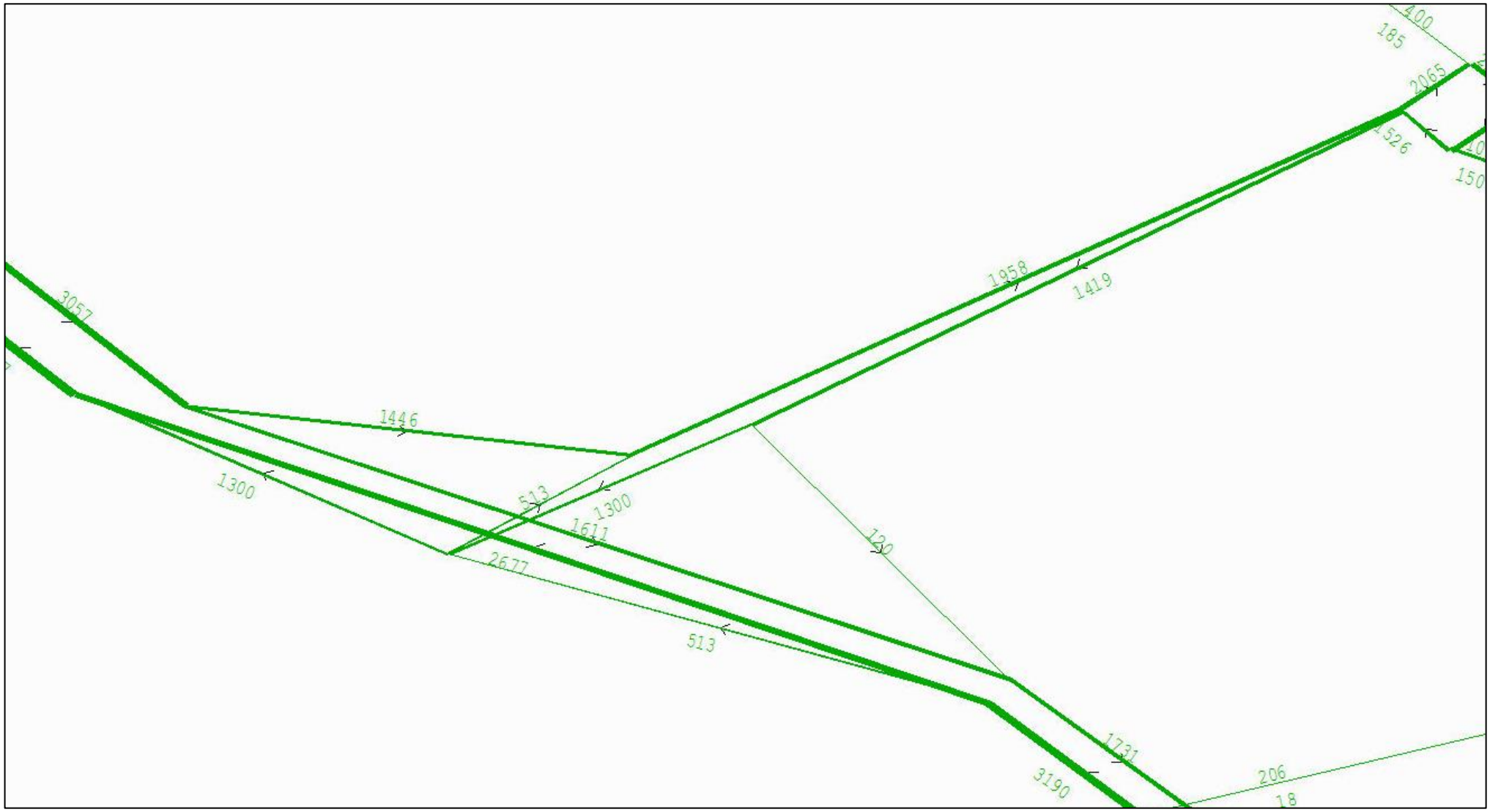


Figure 25: ERM SATURN Plot 2017 Base AM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

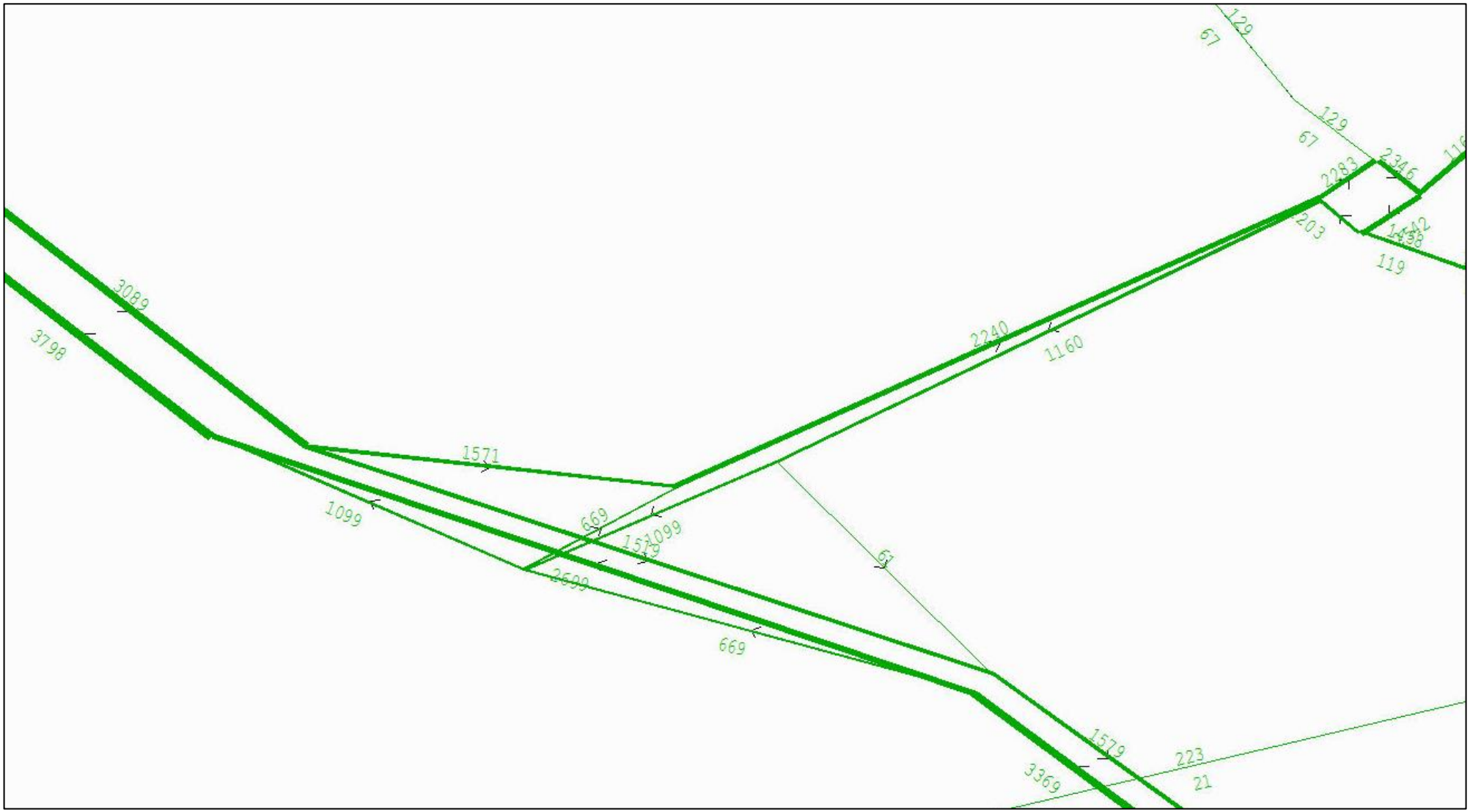


Figure 26: ERM SATURN Plot 2020 Do-Nothing AM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

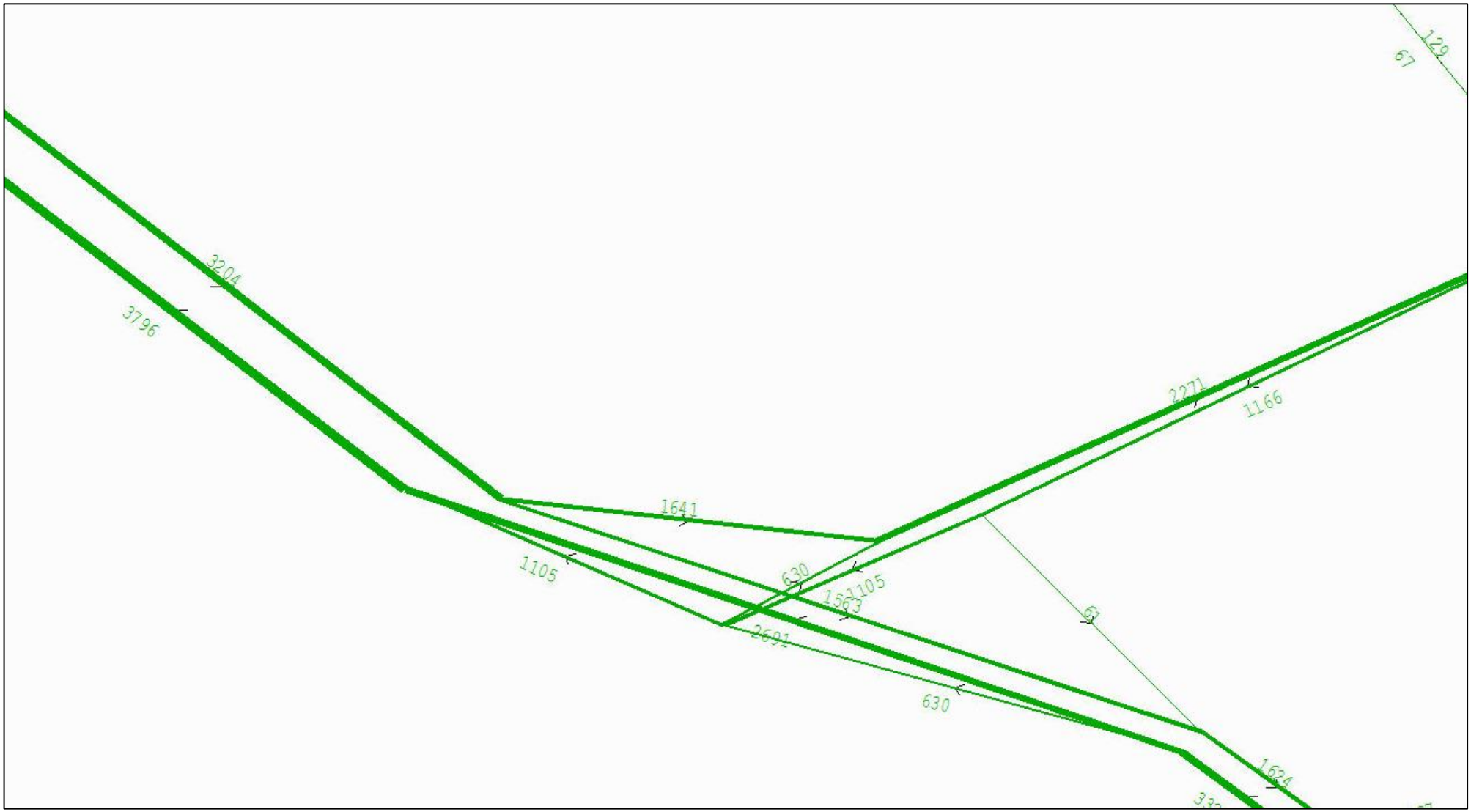


Figure 27: ERM SATURN Plot 2020 Do-Something AM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

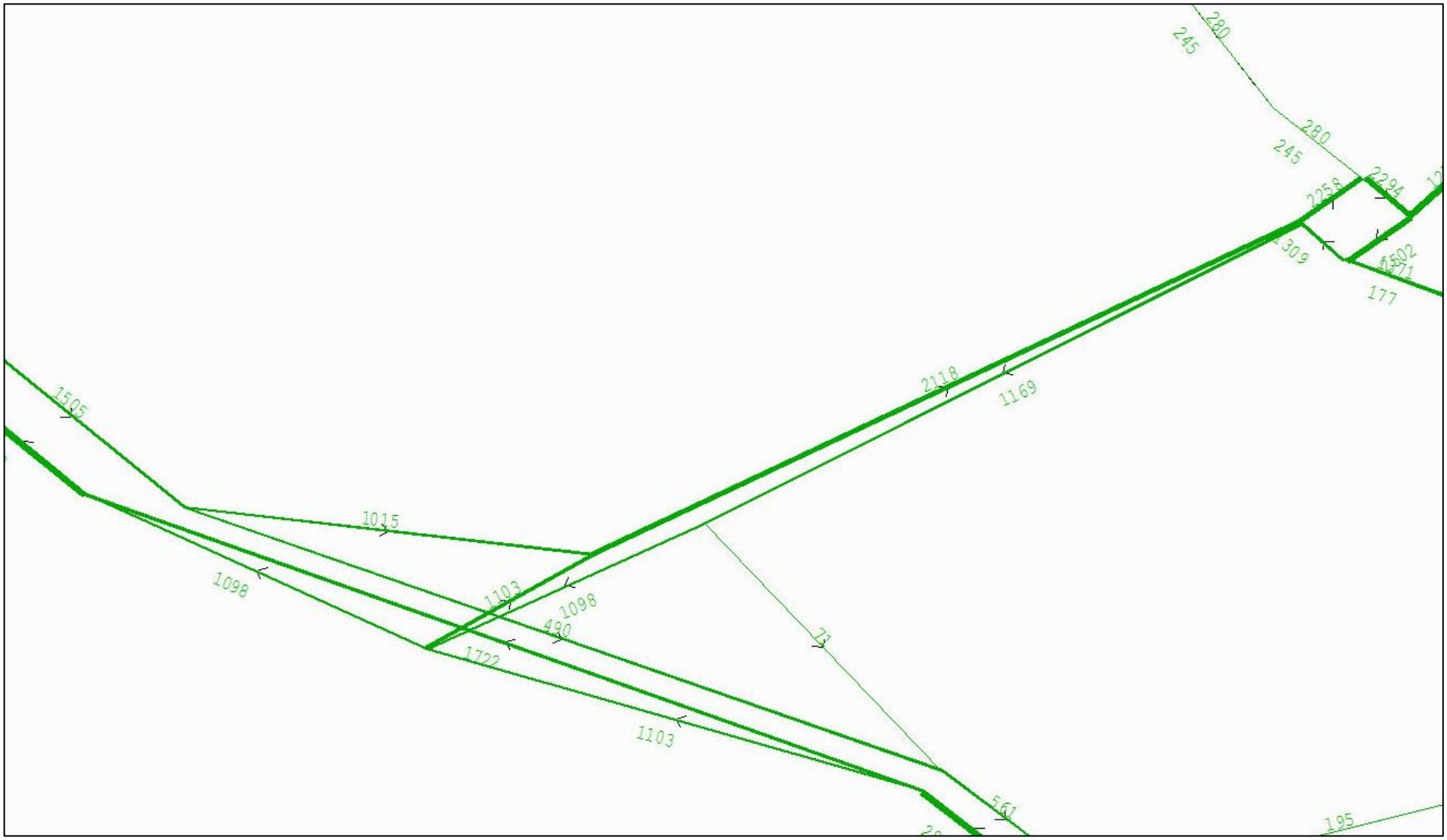


Figure 28: ERM SATURN Plot 2035 Do-Nothing AM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

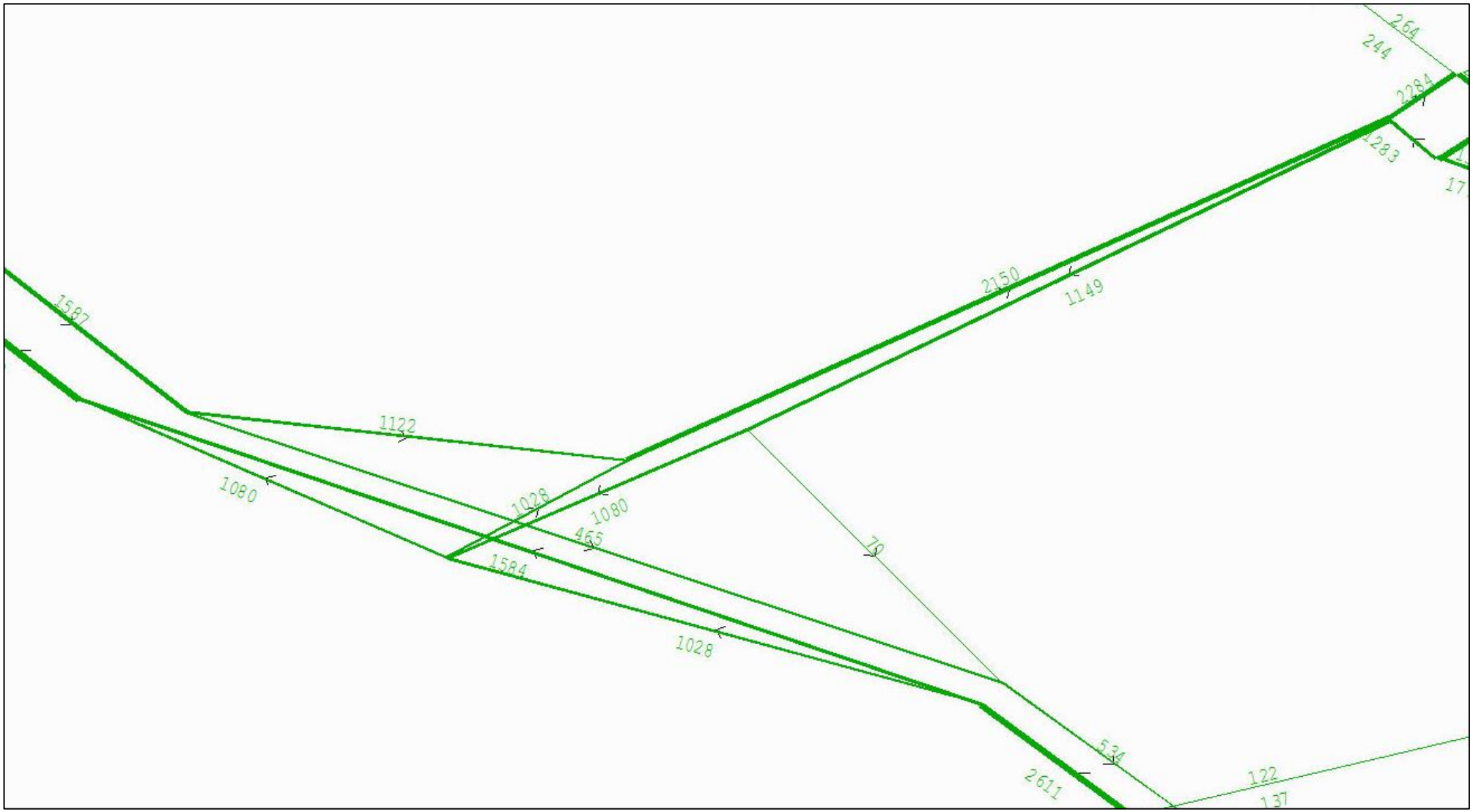


Figure 29: ERM SATURN Plot 2035 Do-Something AM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

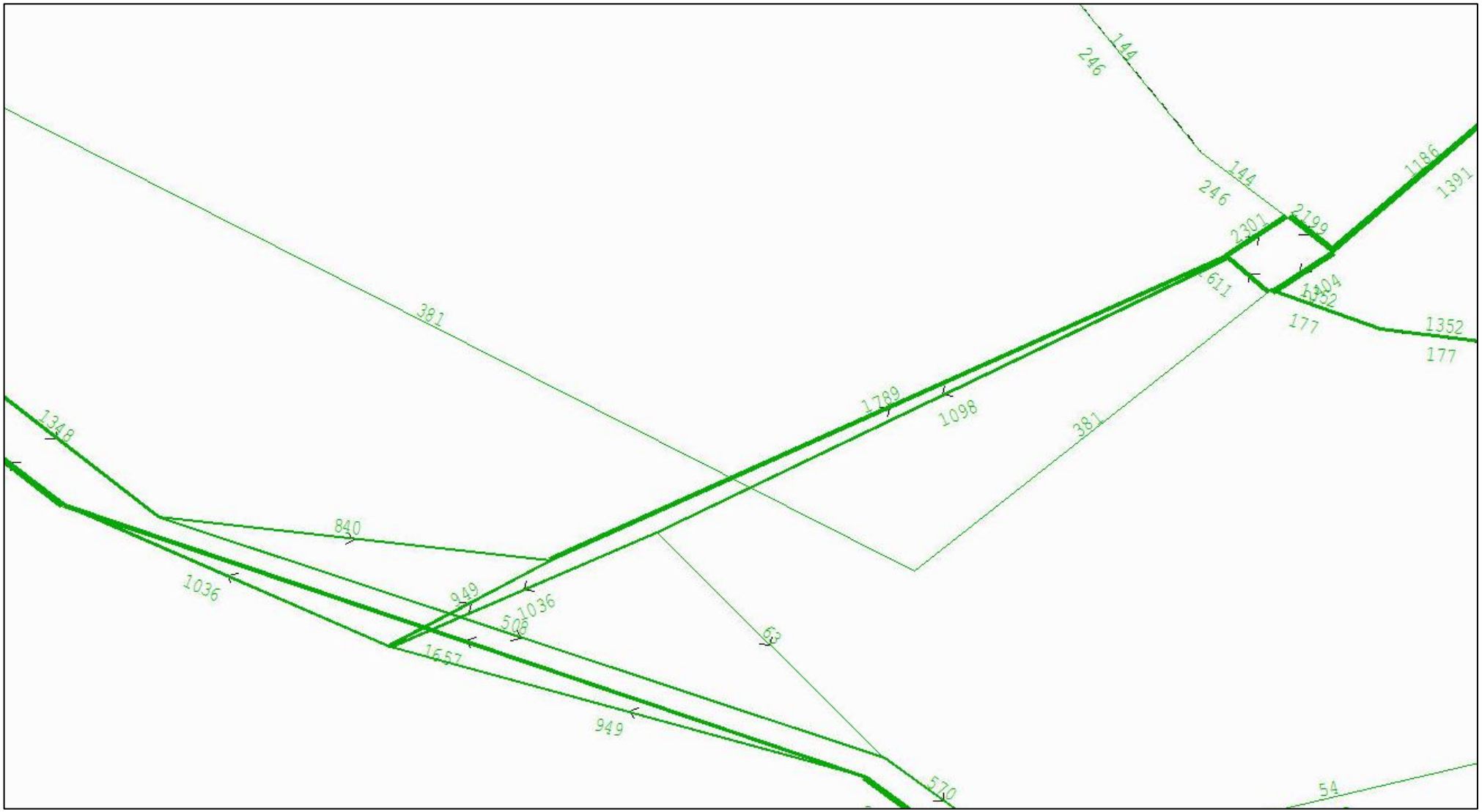


Figure 30: ERM SATURN Plot 2035 Do-Something with Complementary Measures AM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

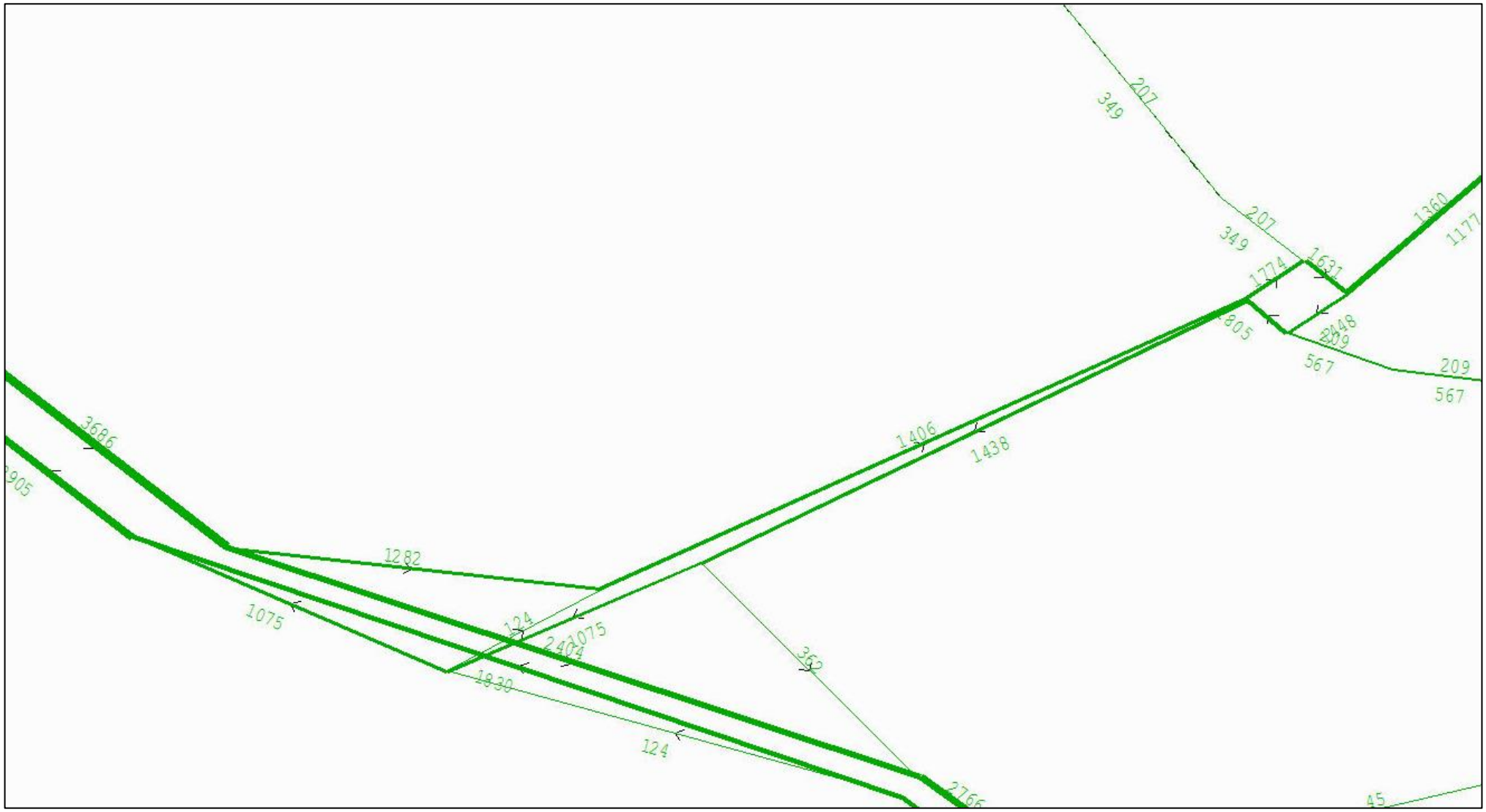


Figure 31: ERM SATURN Plot 2017 Base PM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

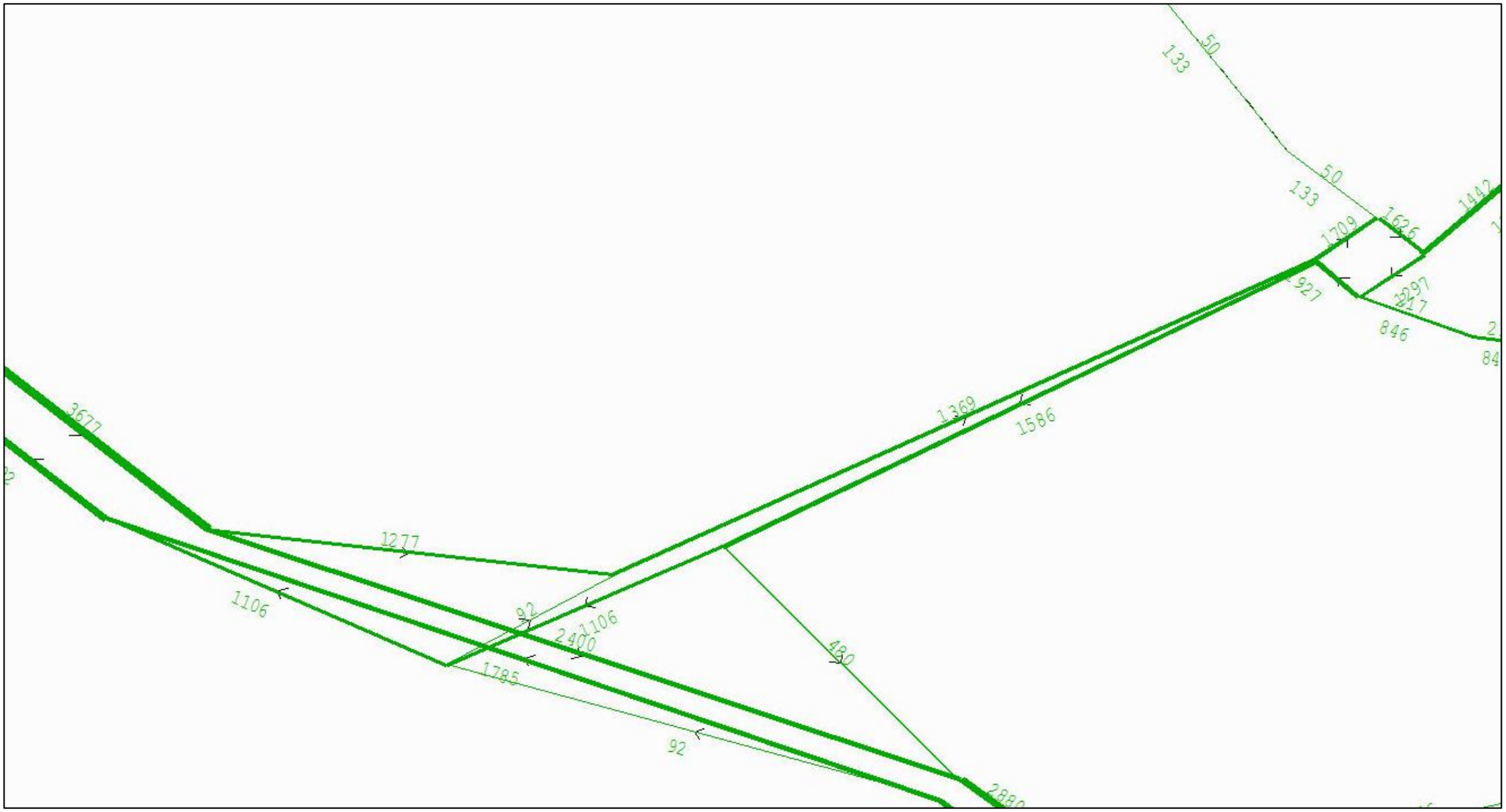


Figure 32: ERM SATURN Plot 2020 Do-Nothing PM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

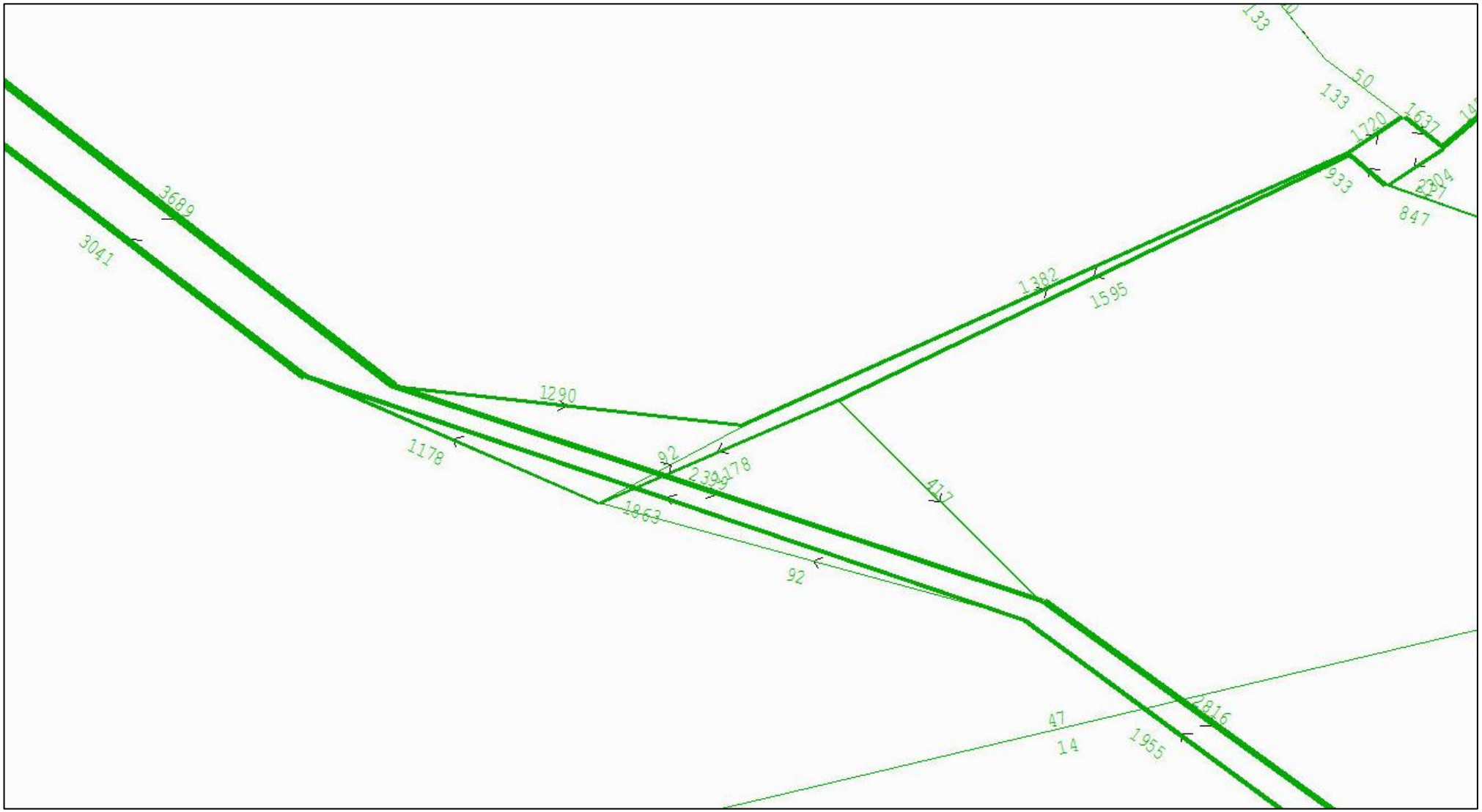


Figure 33: ERM SATURN Plot 2020 Do-Something PM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

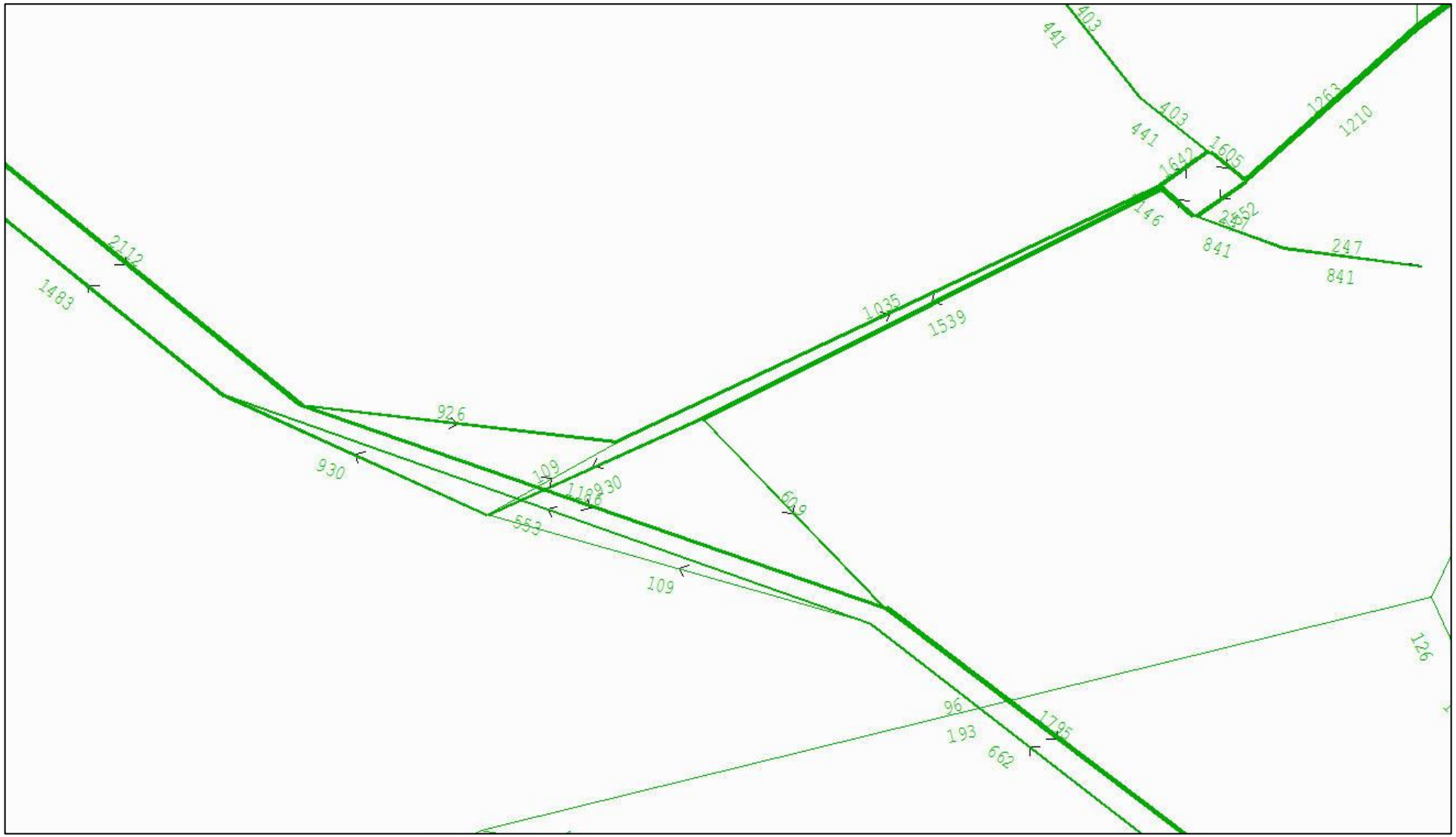


Figure 34: ERM SATURN Plot 2035 Do-Nothing PM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

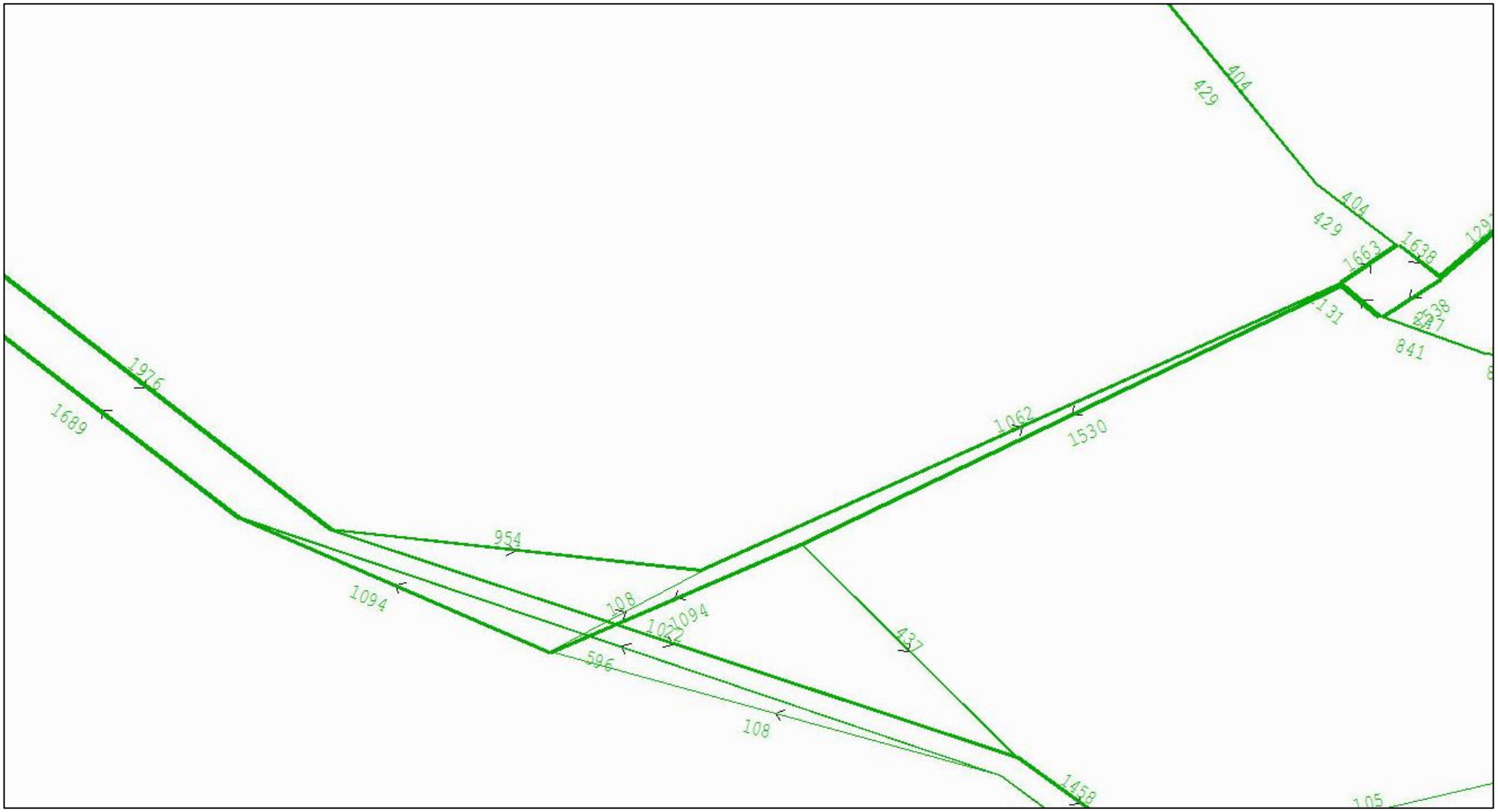


Figure 35: ERM SATURN Plot 2035 Do-Something PM Peak (Demand Flows)

M50 Junction 16 – Demand Flow Plots

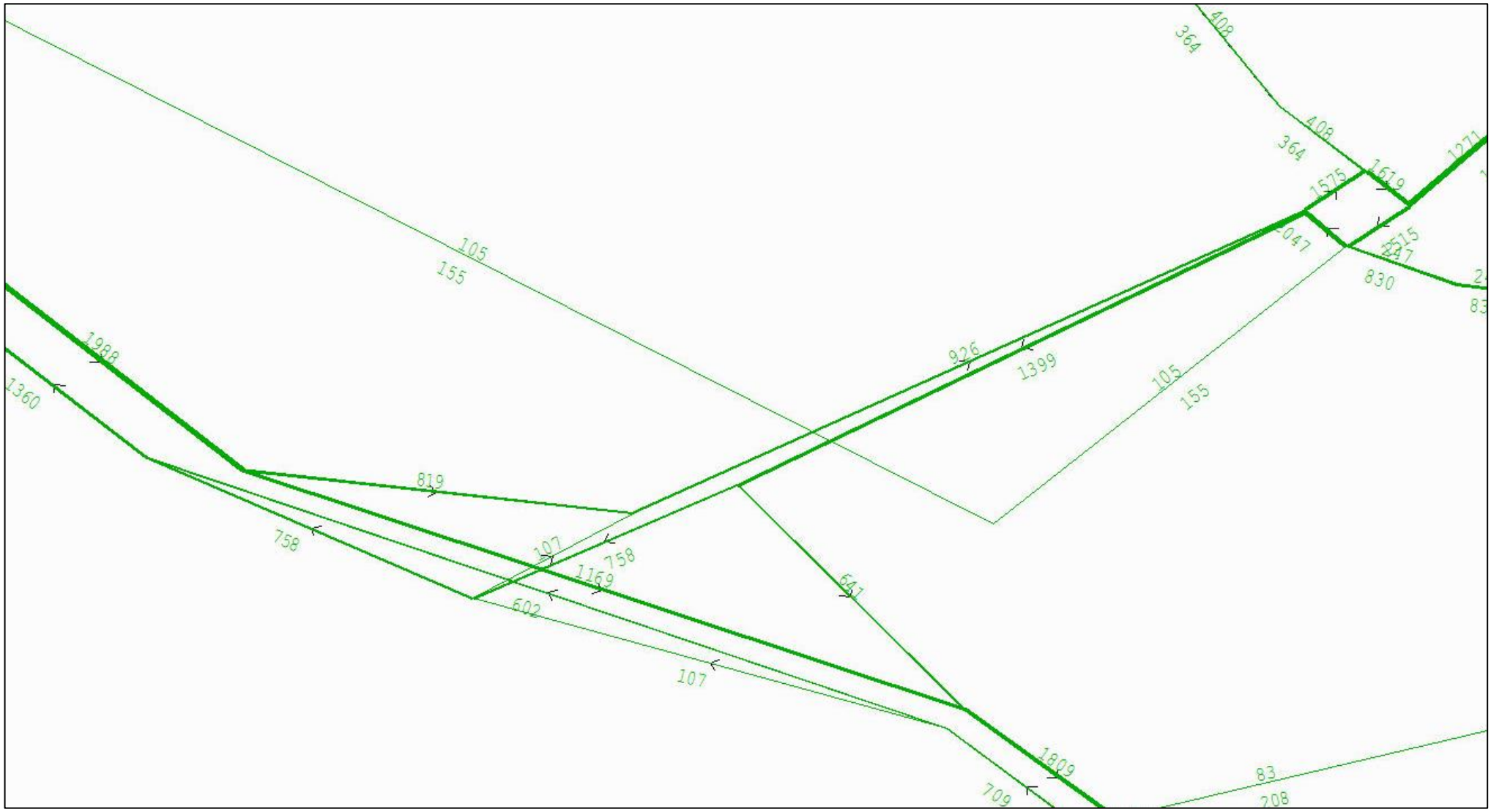


Figure 36: ERM SATURN Plot 2035 Do-Something with Complementary Measures PM Peak (Demand Flows)

M50 Junctions 13 & 14 – Average Queue Length Plots

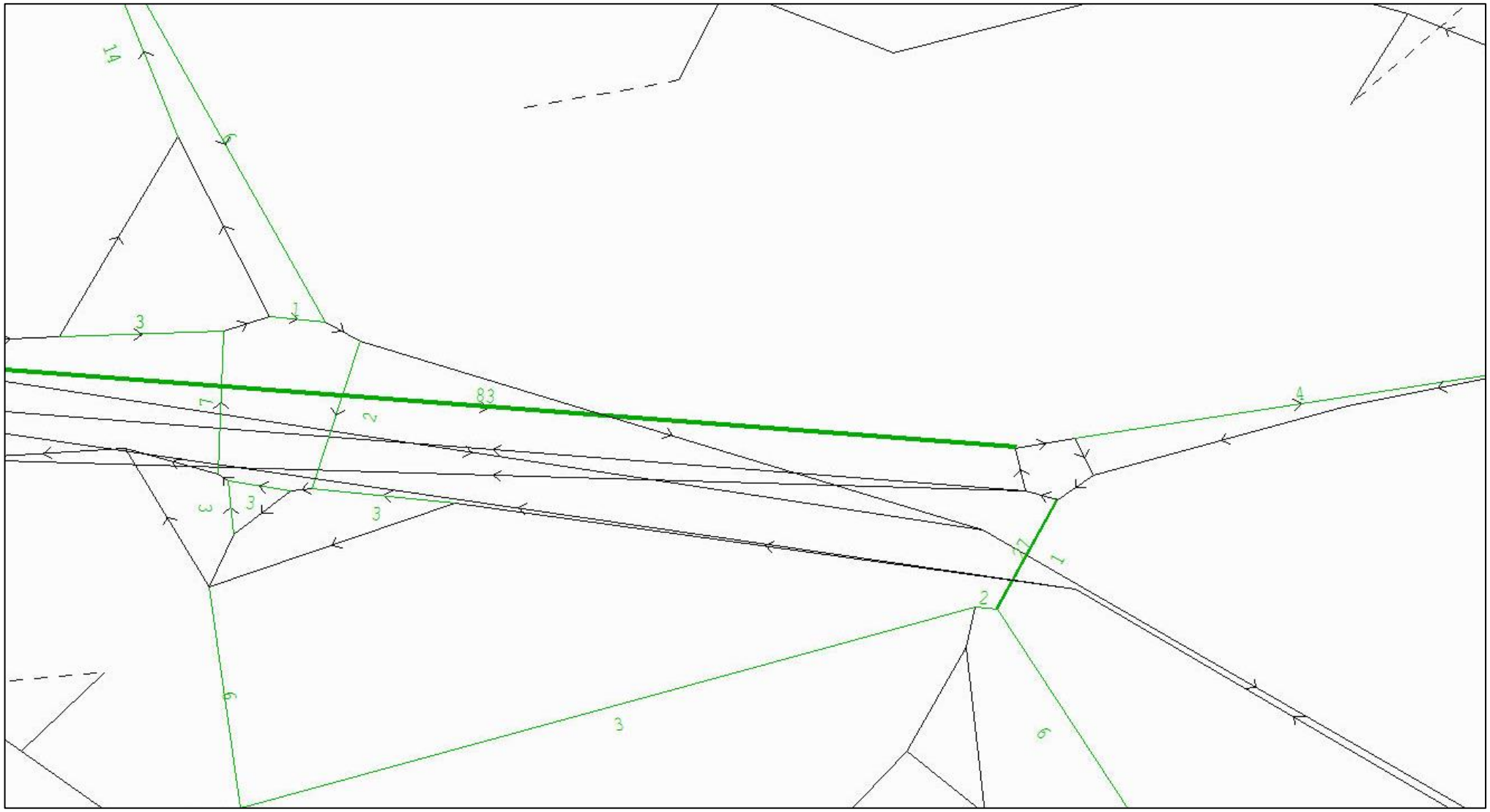


Figure 37: ERM SATURN Plot 2017 Base AM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

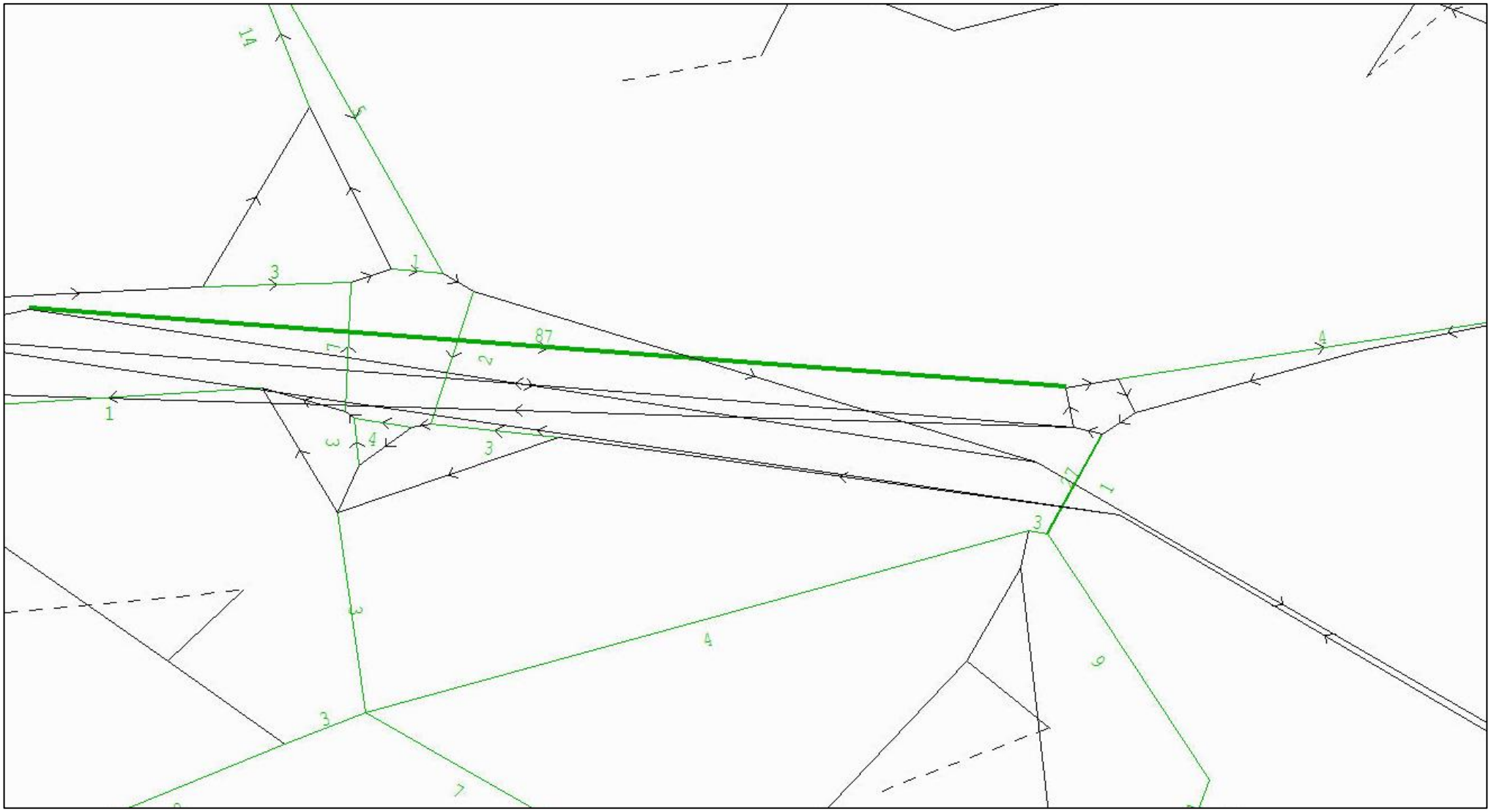


Figure 38: ERM SATURN Plot 2020 Do-Nothing AM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

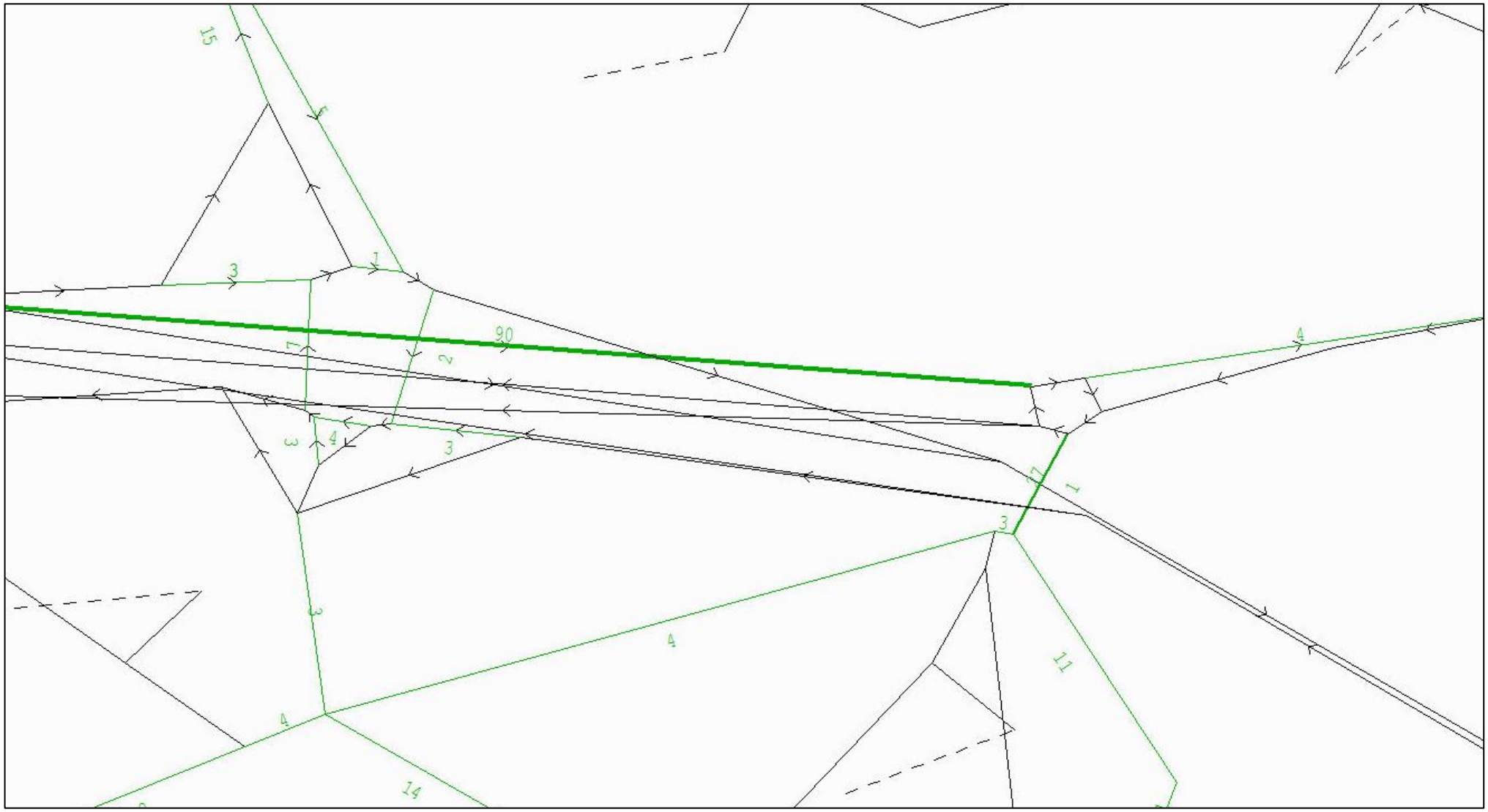


Figure 39: ERM SATURN Plot 2020 Do-Something AM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

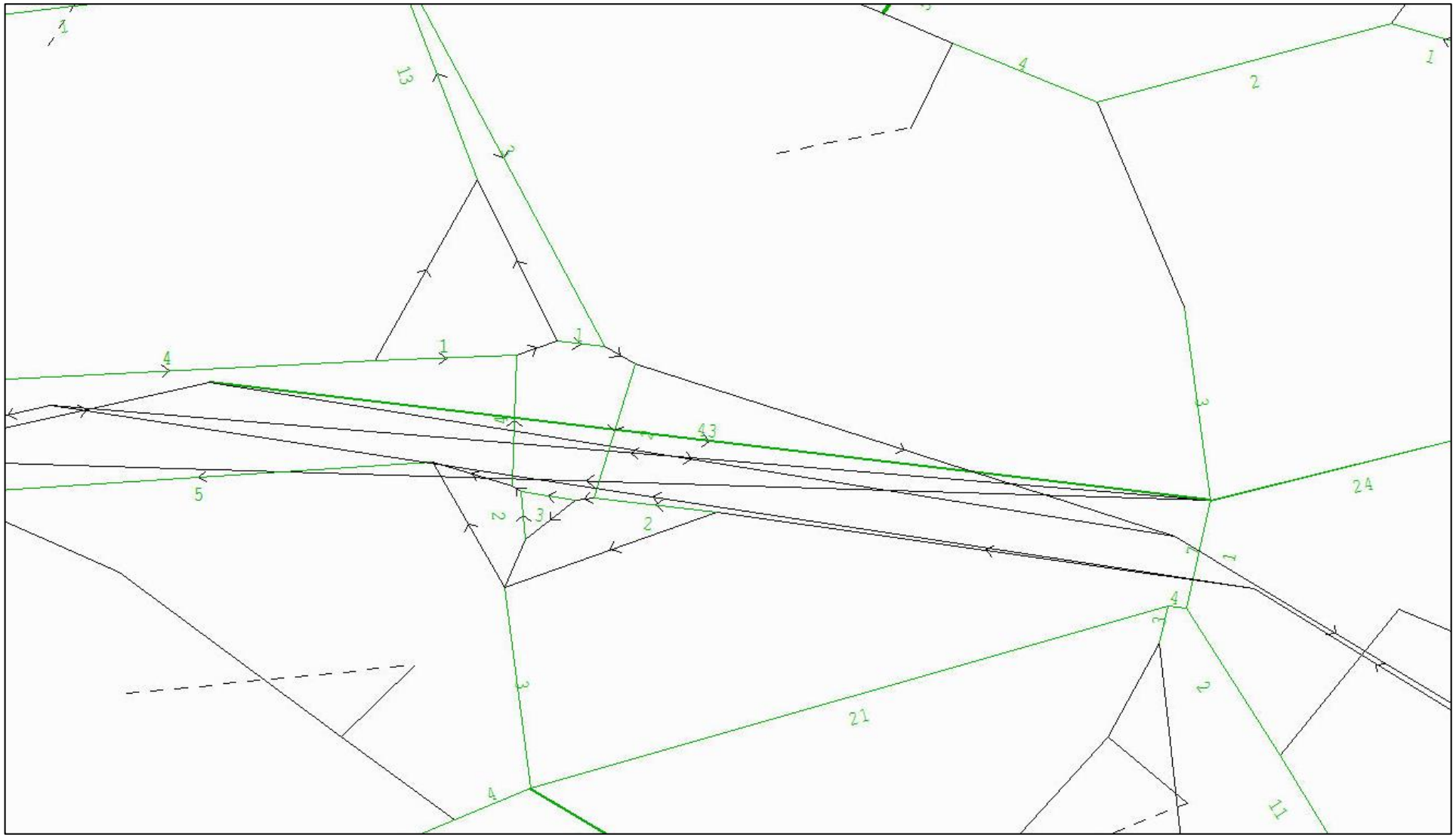


Figure 40: ERM SATURN Plot 2035 Do-Nothing AM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

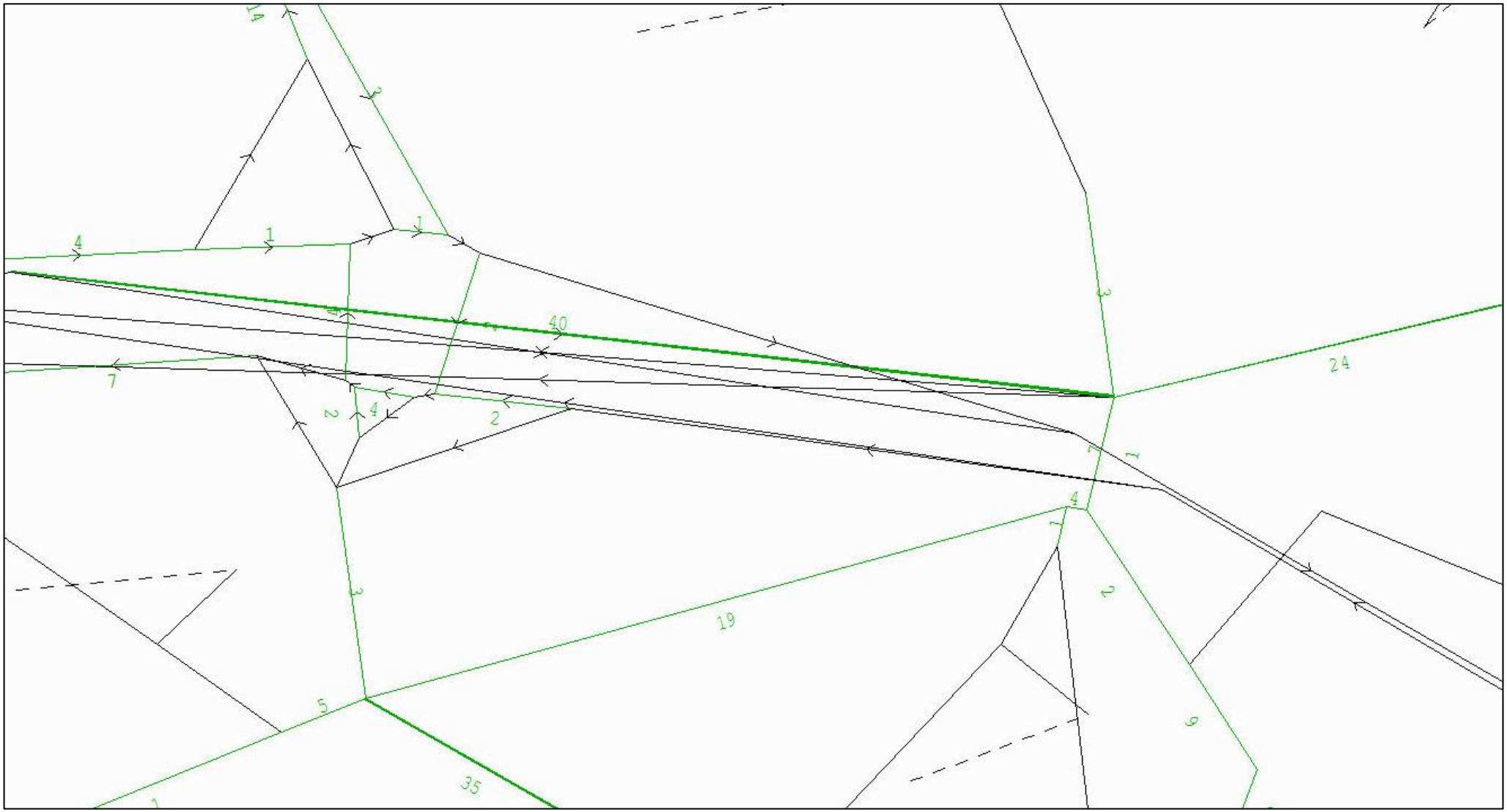


Figure 41: ERM SATURN Plot 2035 Do-Something AM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

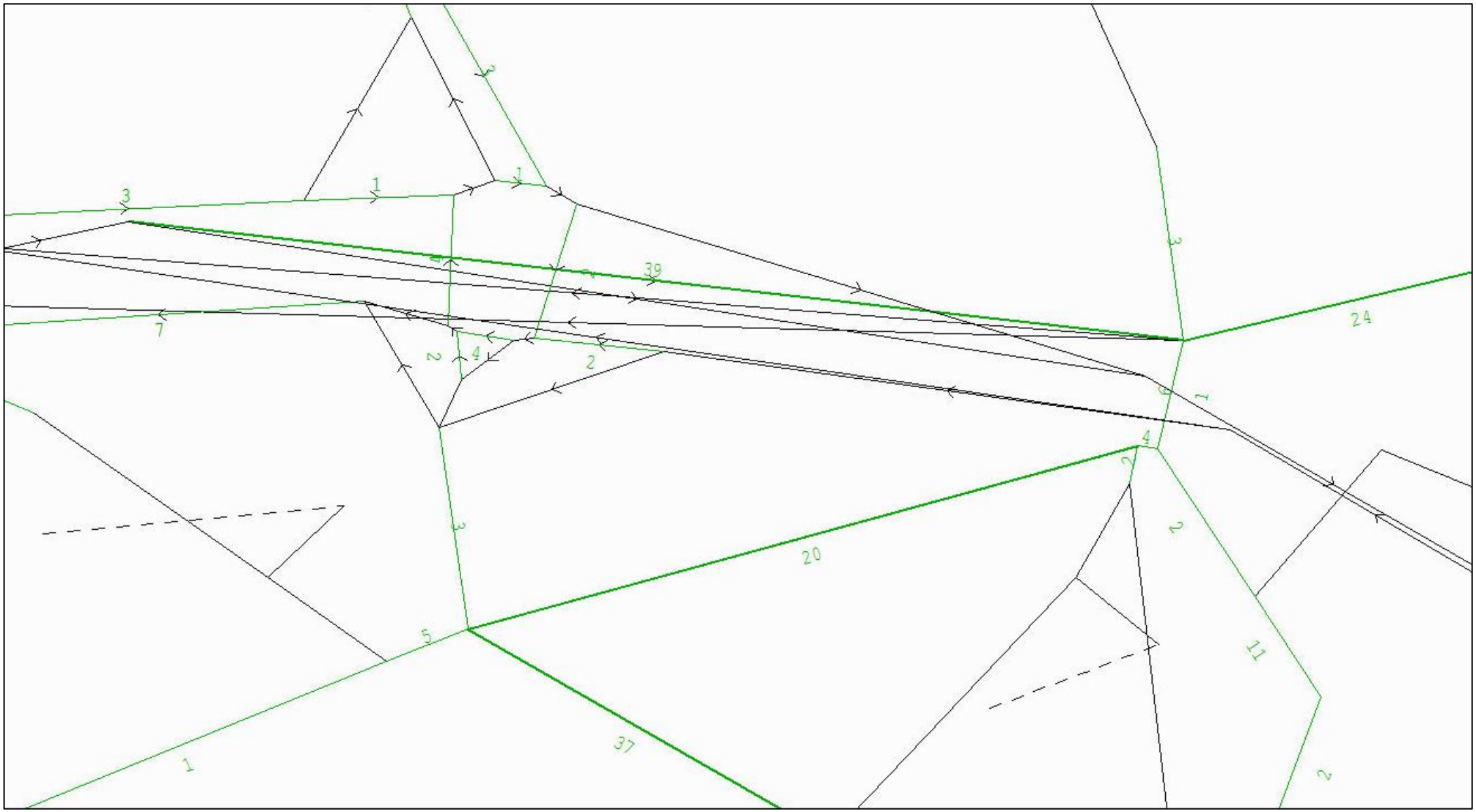


Figure 42: ERM SATURN Plot 2035 Do-Something with Complementary Measures AM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

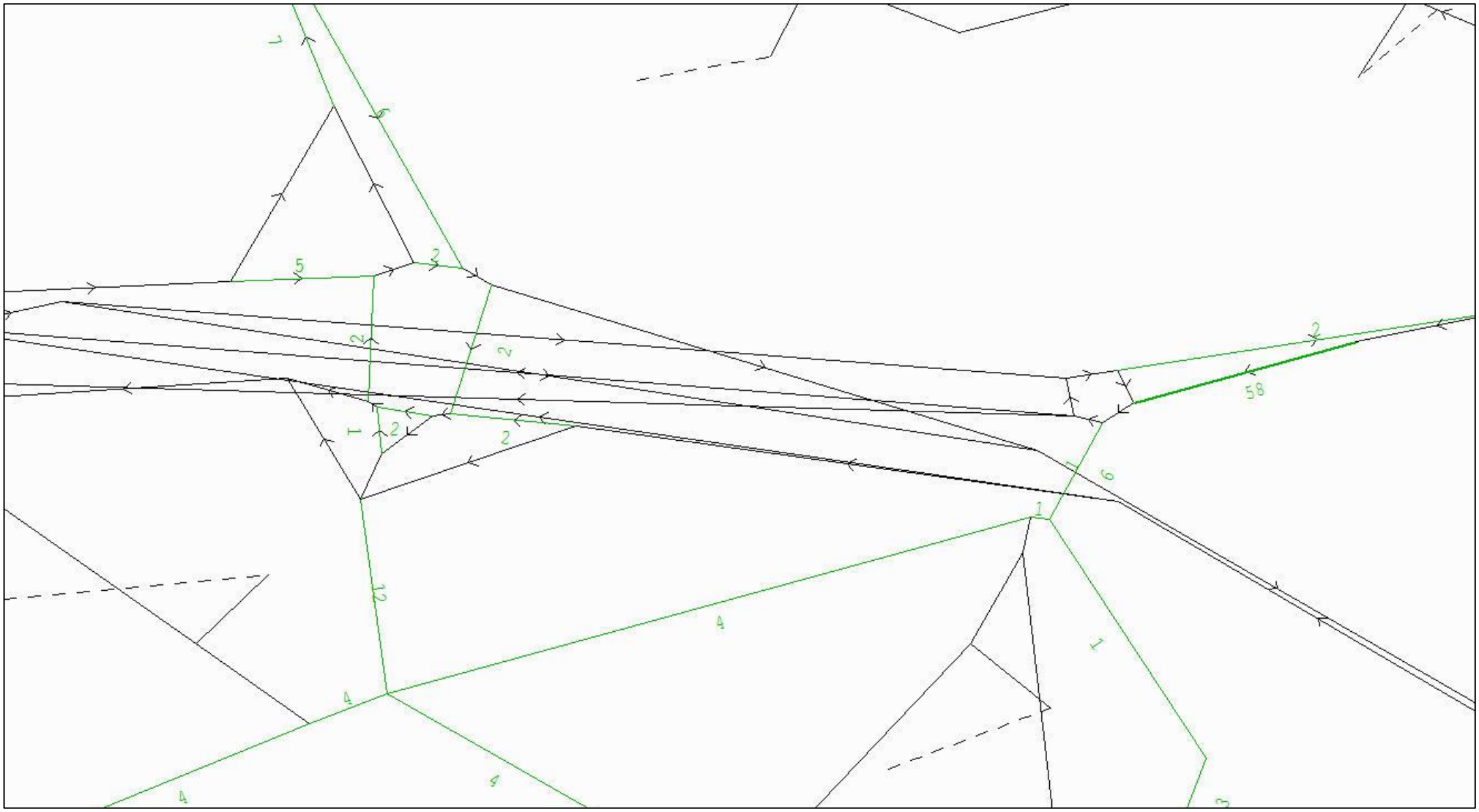


Figure 43: ERM SATURN Plot 2017 Base PM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

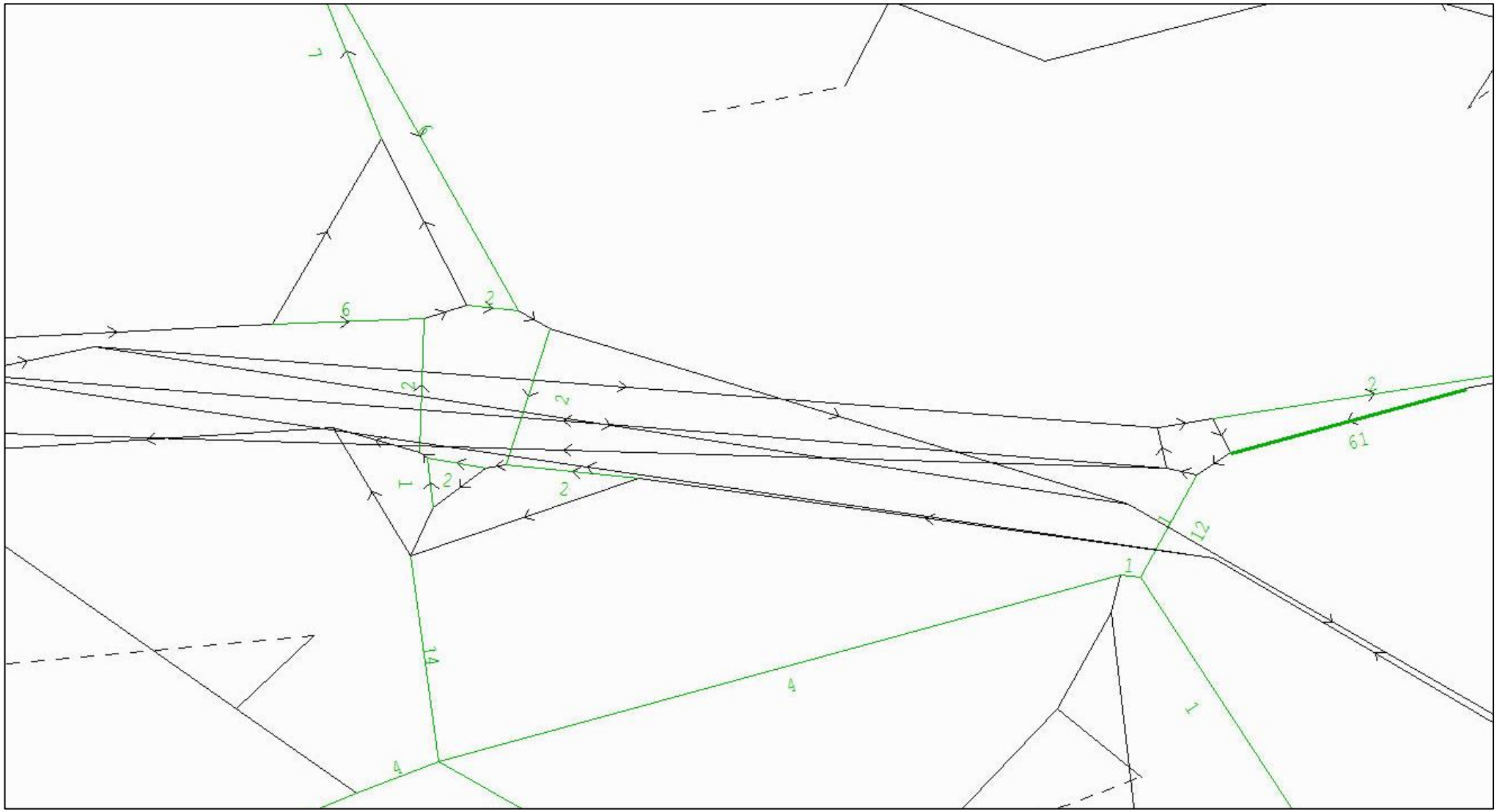


Figure 44: ERM SATURN Plot 2020 Do-Nothing PM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

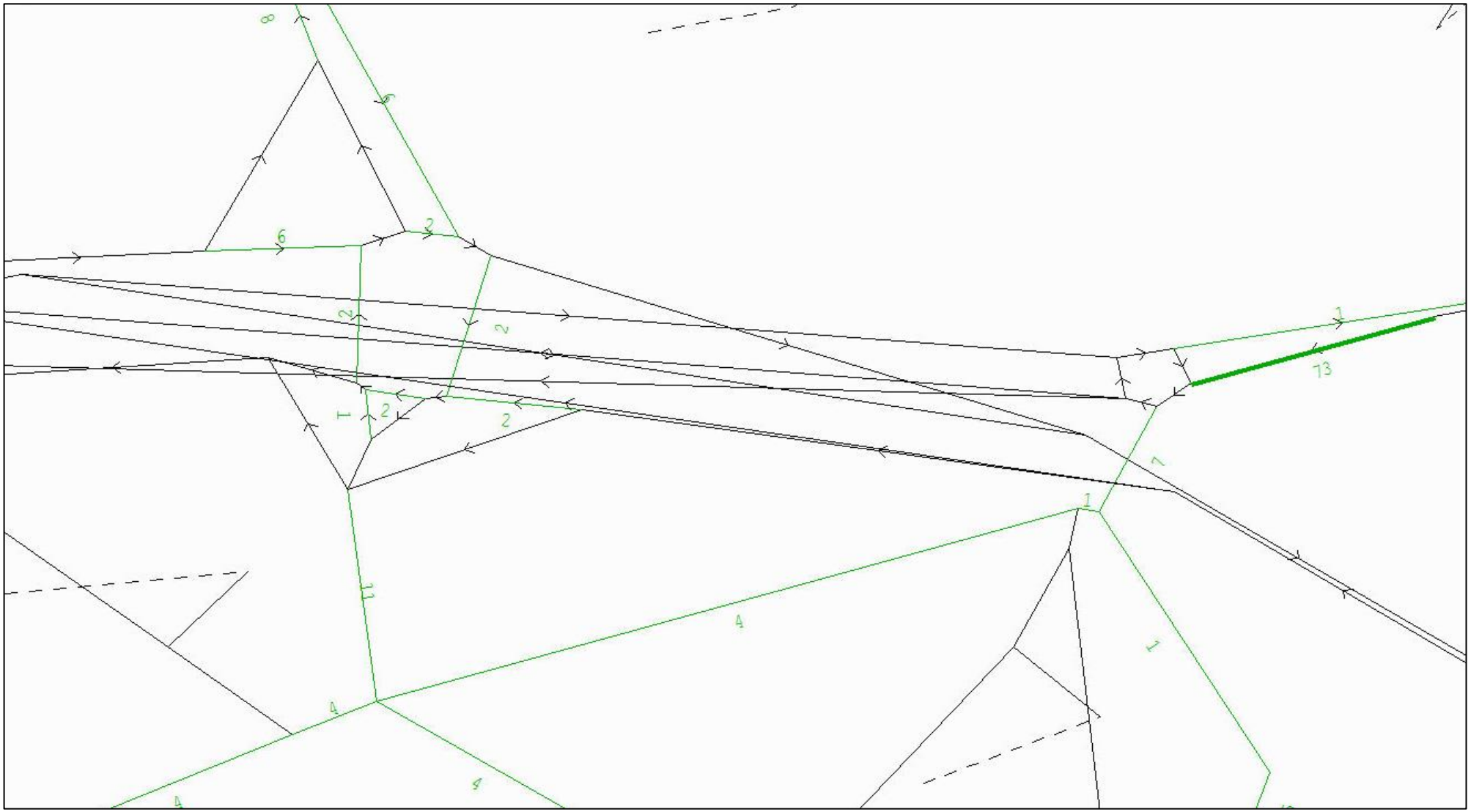


Figure 45: ERM SATURN Plot 2020 Do-Something PM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

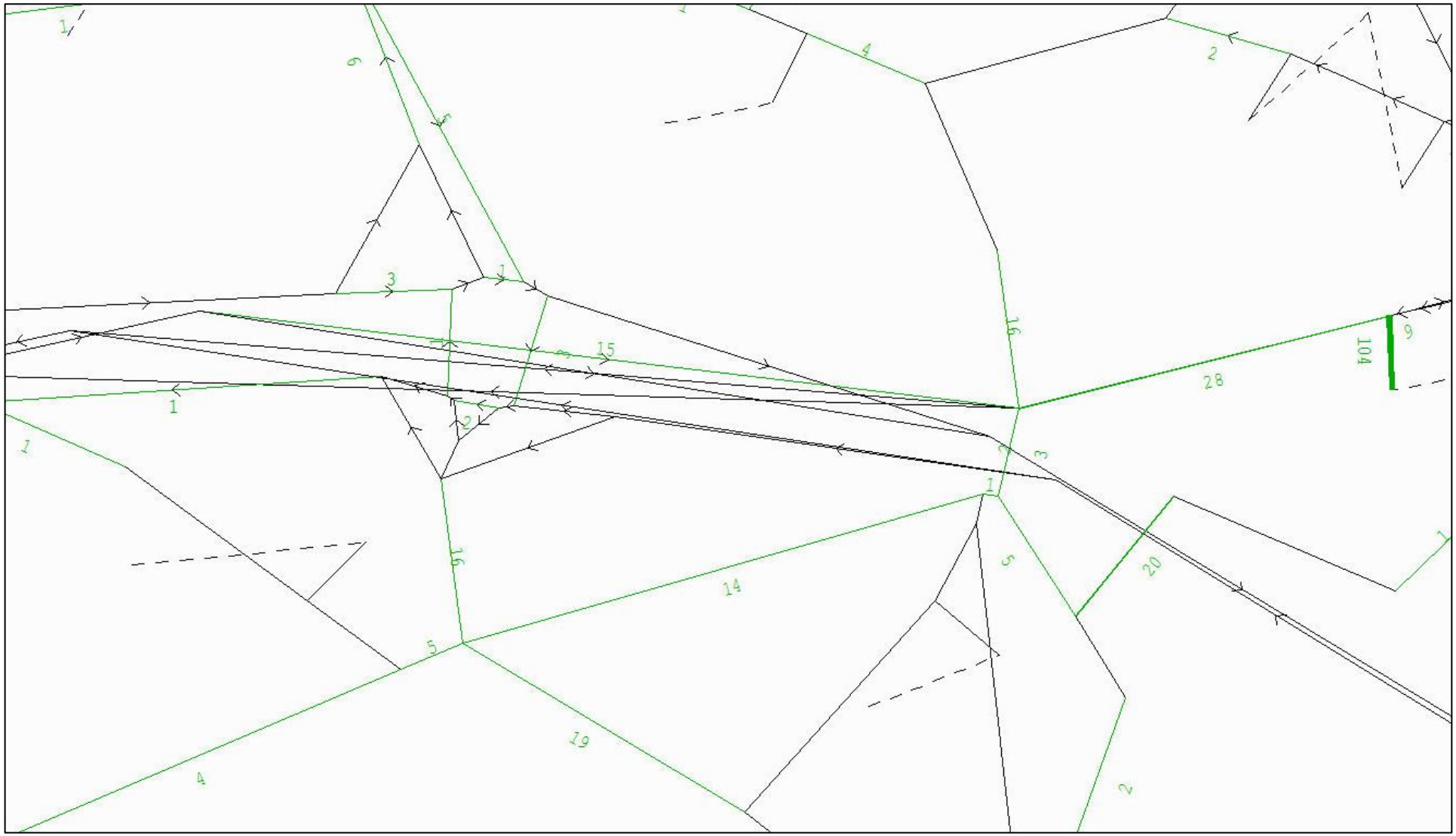


Figure 46: ERM SATURN Plot 2035 Do-Nothing PM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

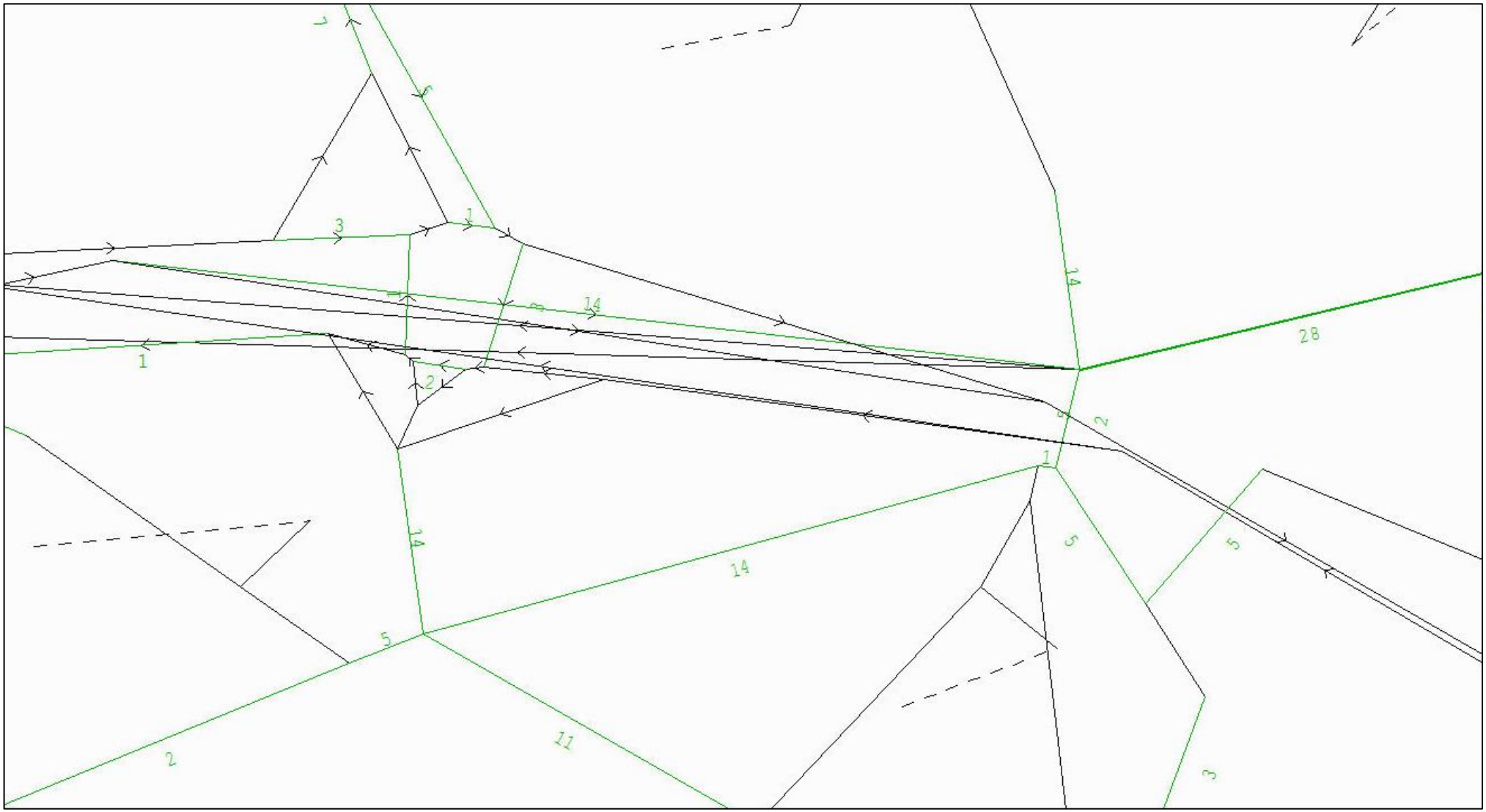


Figure 47: ERM SATURN Plot 2035 Do-Something PM Peak (Average Queue Length)

M50 Junctions 13 & 14 – Average Queue Length Plots

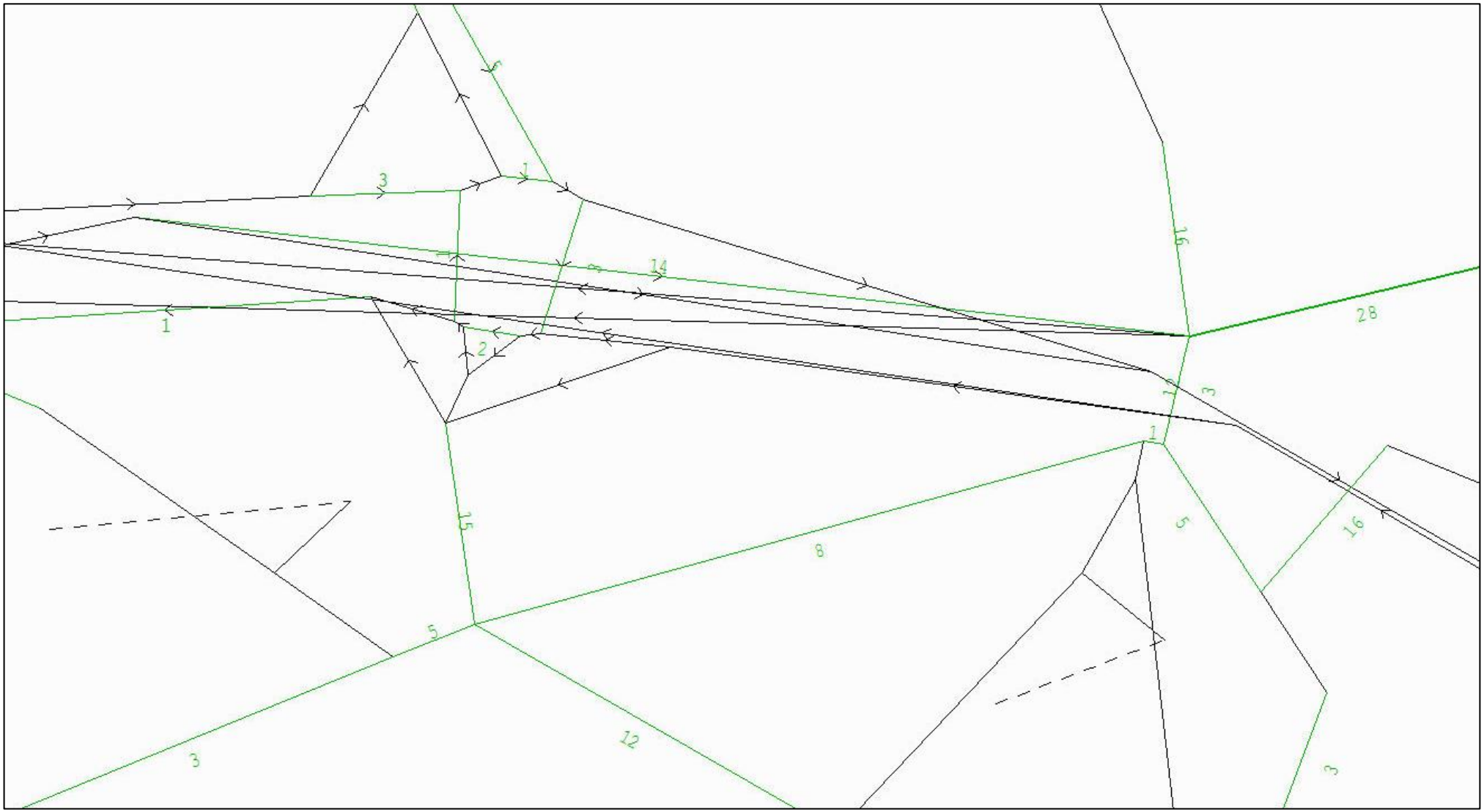


Figure 48: ERM SATURN Plot 2035 Do-Something with Complementary Measures PM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

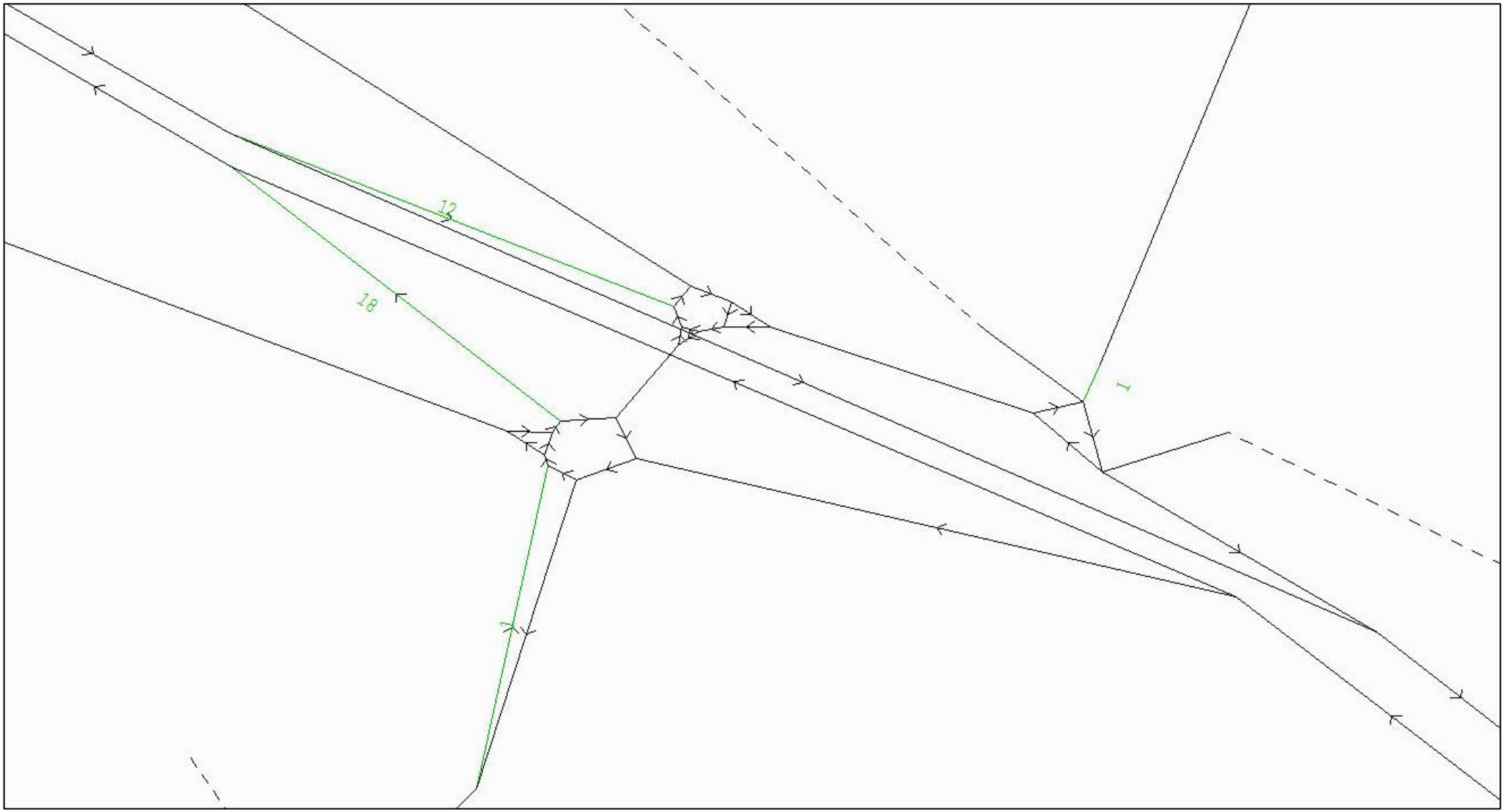


Figure 49: ERM SATURN Plot 2017 Base AM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

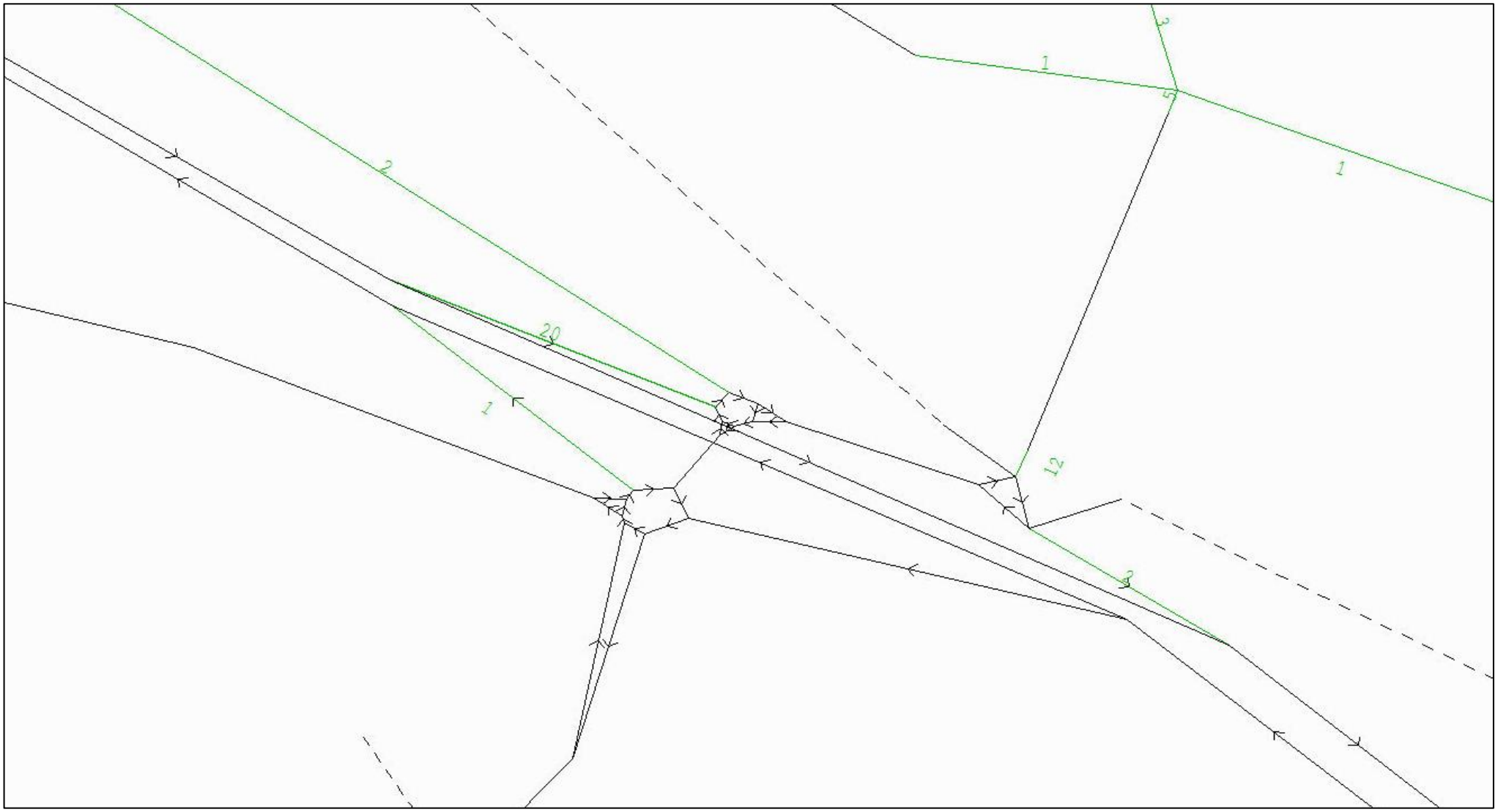


Figure 50: ERM SATURN Plot 2020 Do-Nothing AM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

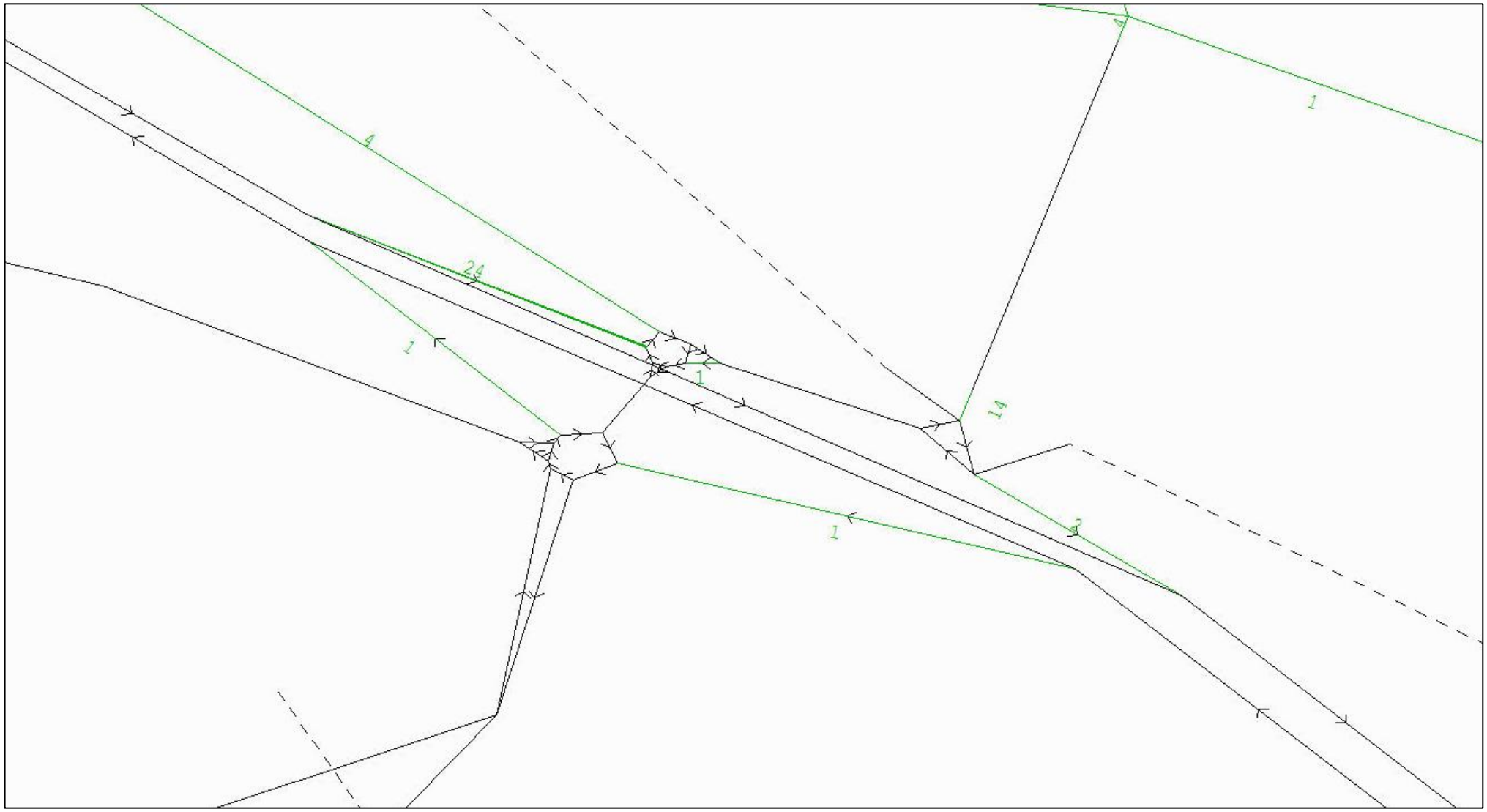


Figure 51: ERM SATURN Plot 2020 Do-Something AM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

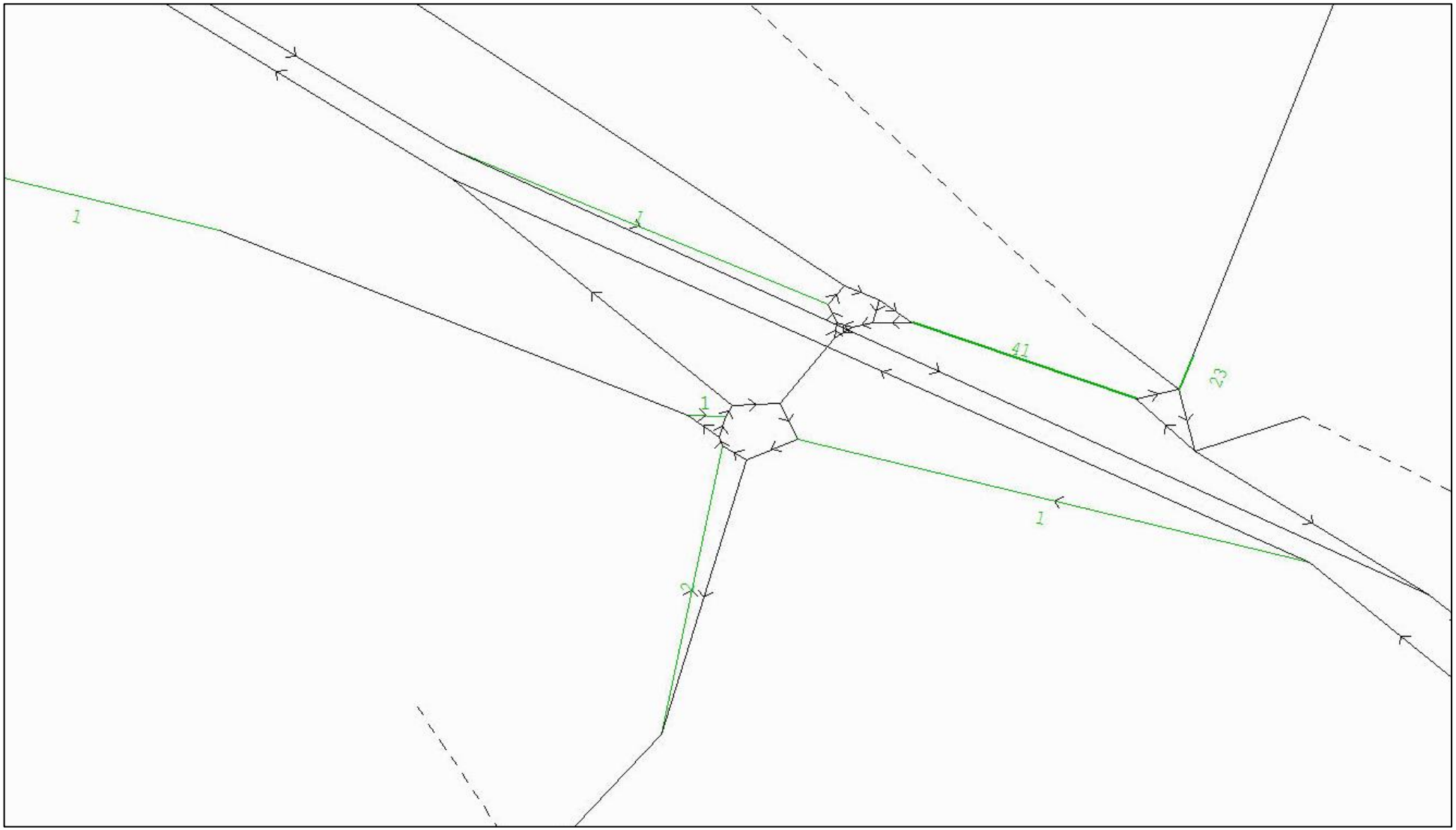


Figure 52: ERM SATURN Plot 2035 Do-Nothing AM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

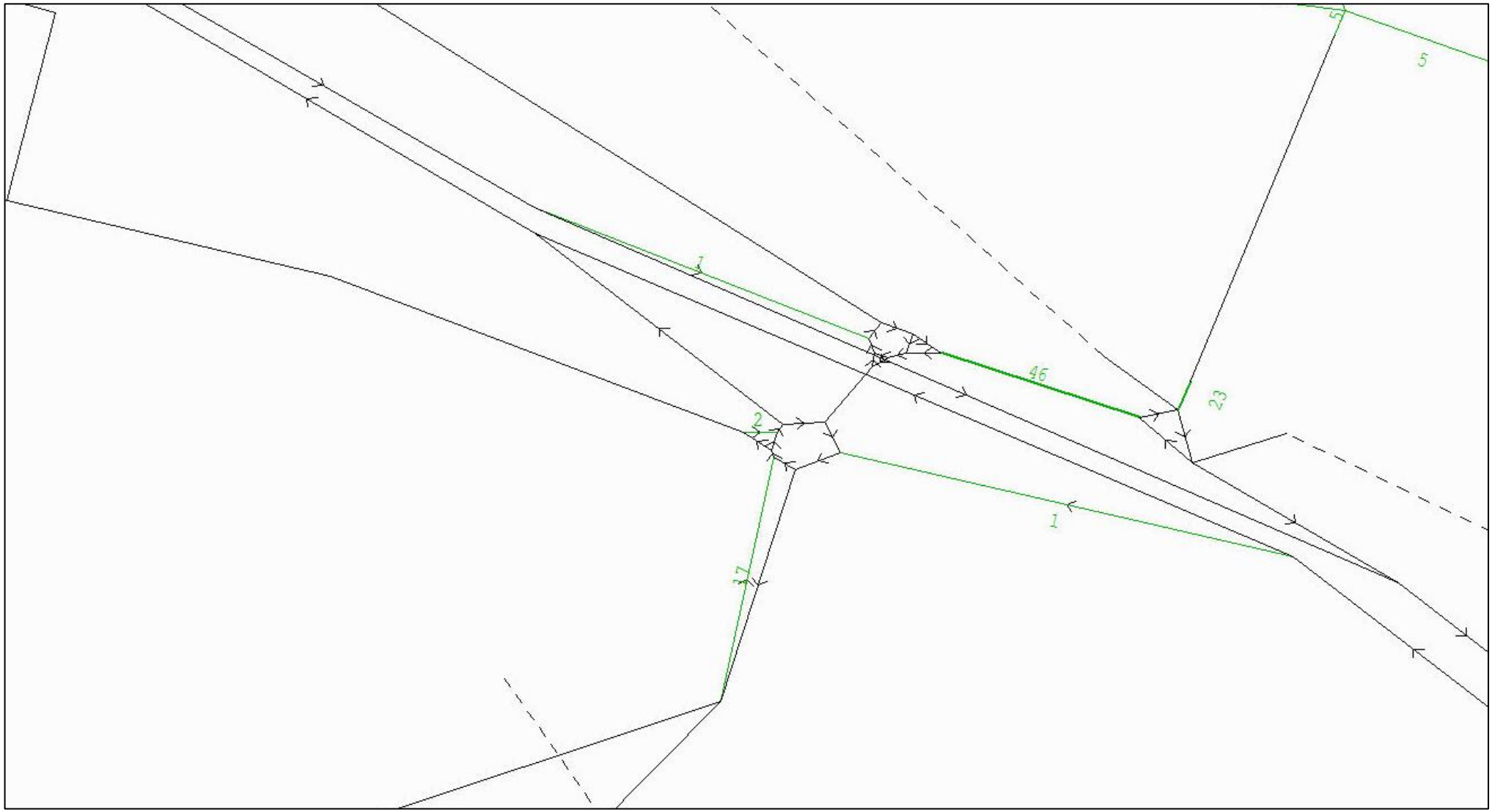


Figure 53: ERM SATURN Plot 2035 Do-Something AM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

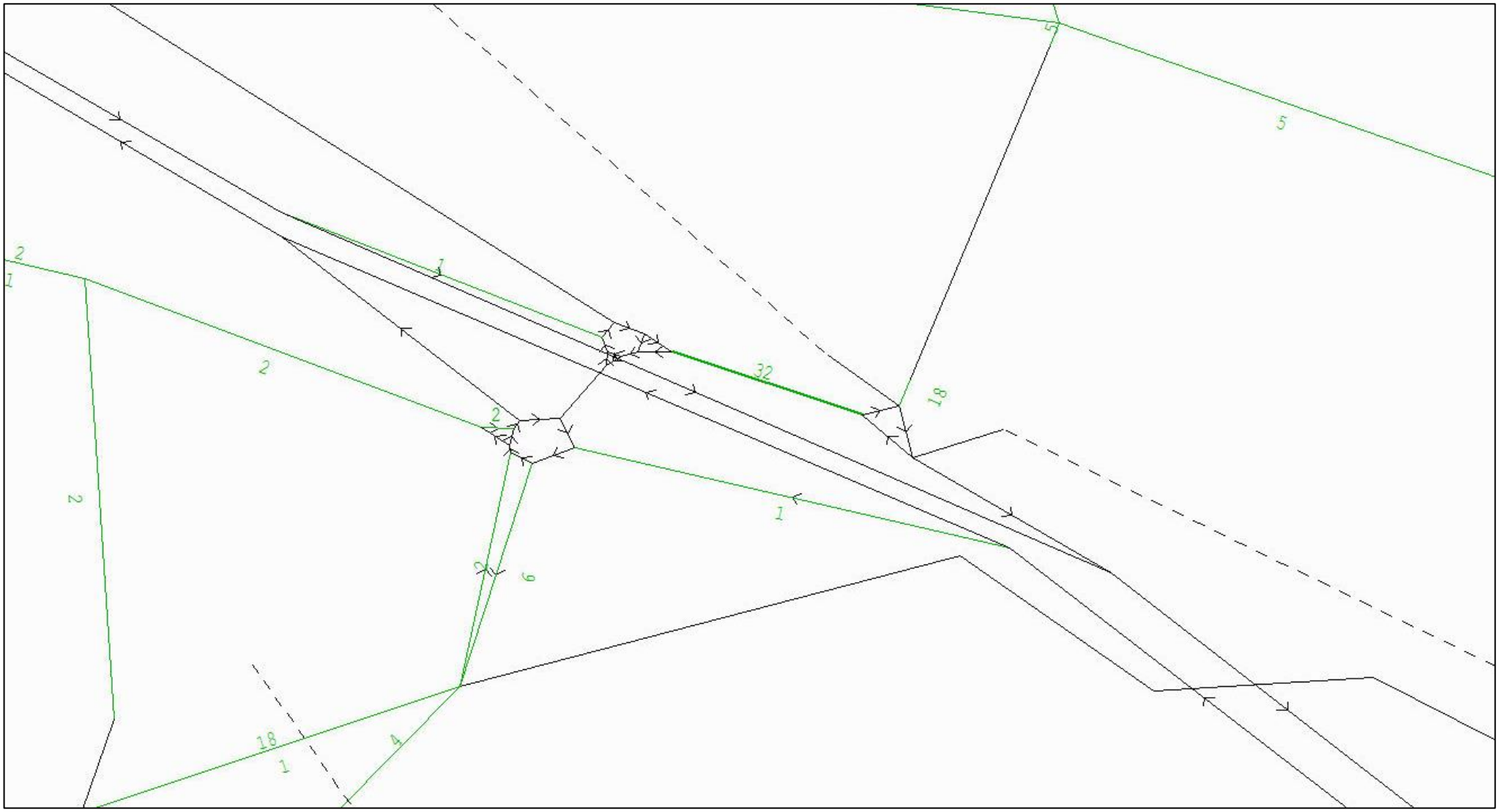


Figure 54: ERM SATURN Plot 2035 Do-Something with Complementary Measures AM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

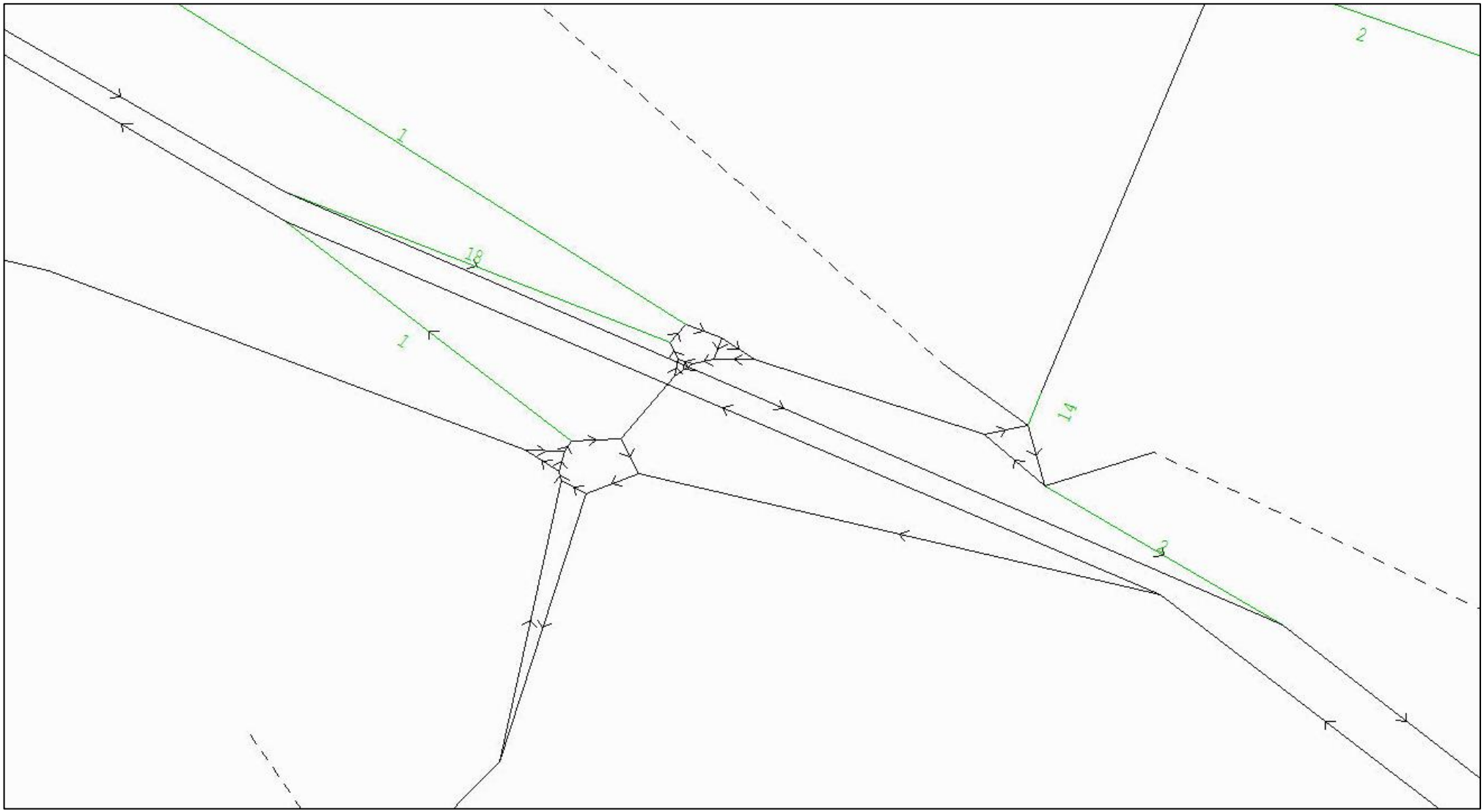


Figure 55: ERM SATURN Plot 2017 Base PM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

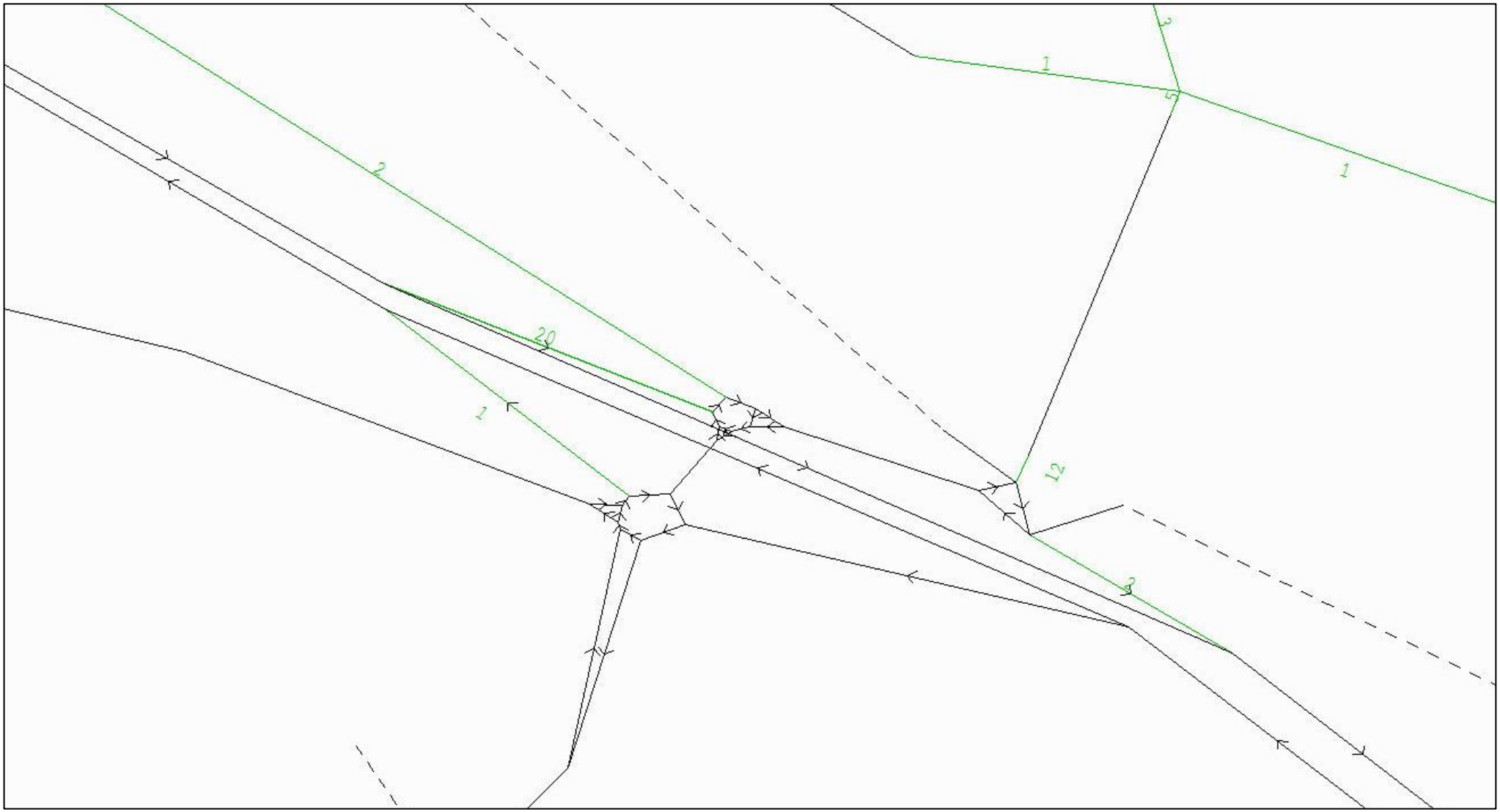


Figure 56: ERM SATURN Plot 2020 Do-Nothing PM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

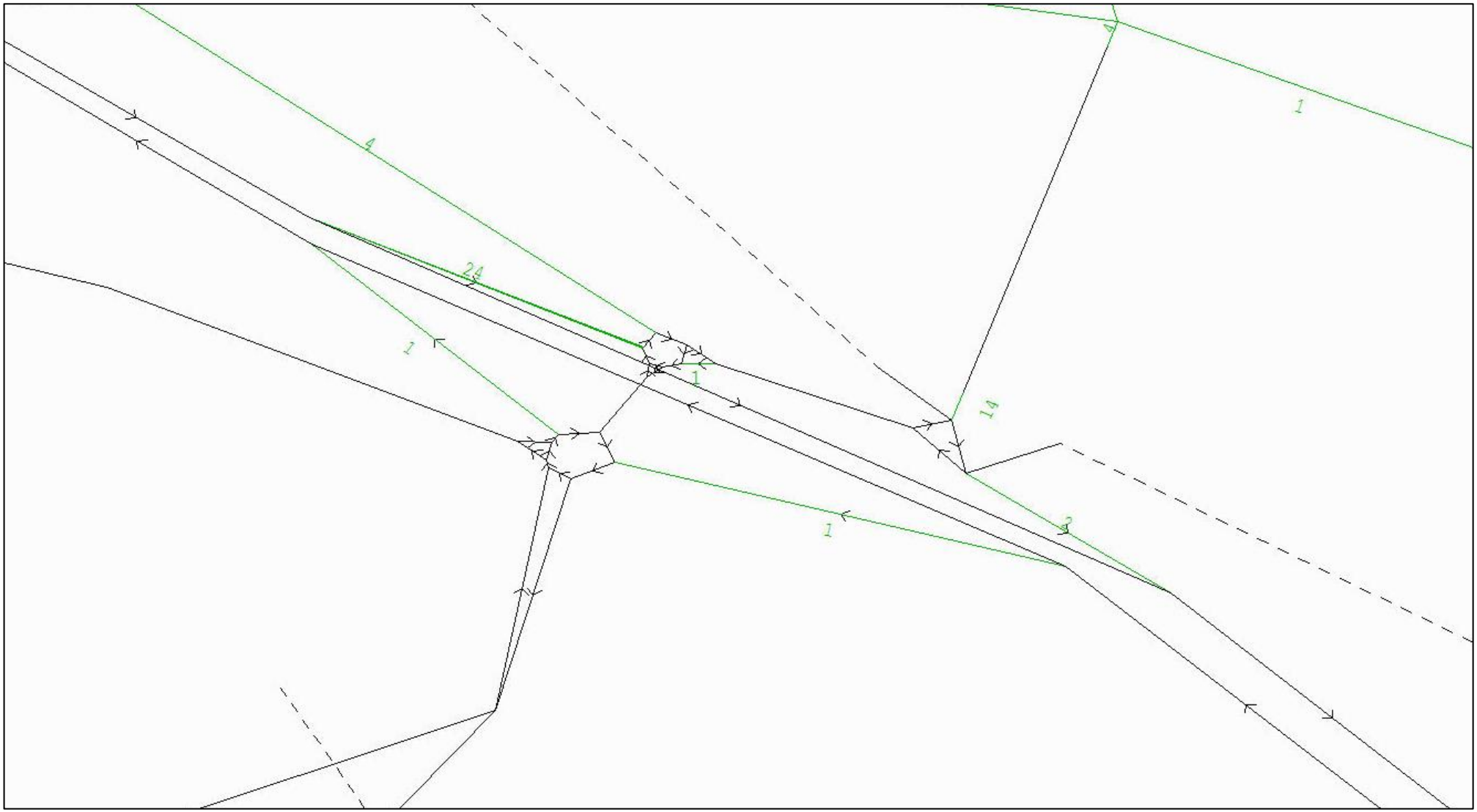


Figure 57: ERM SATURN Plot 2020 Do-Something PM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

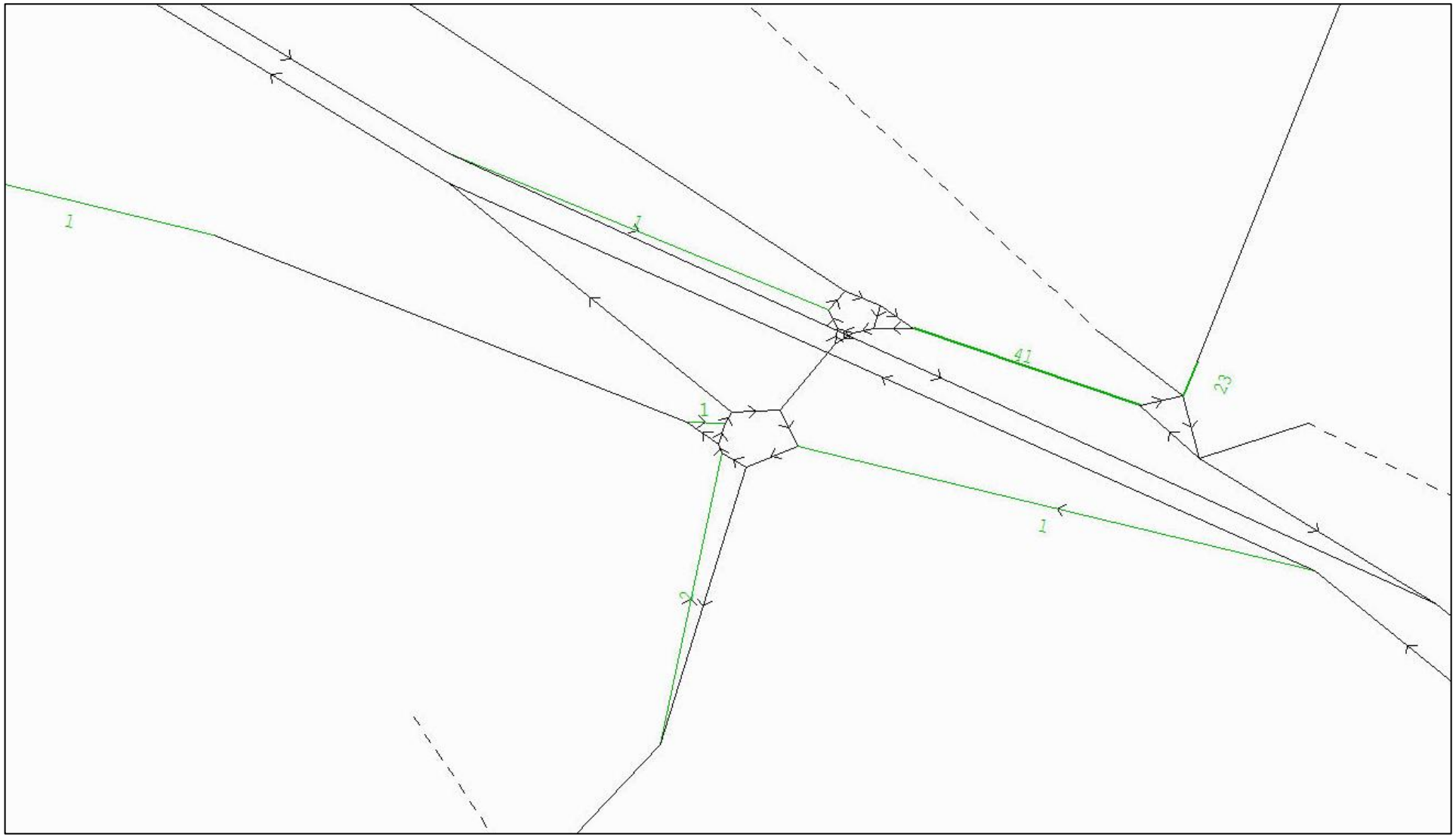


Figure 58: ERM SATURN Plot 2035 Do-Nothing PM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

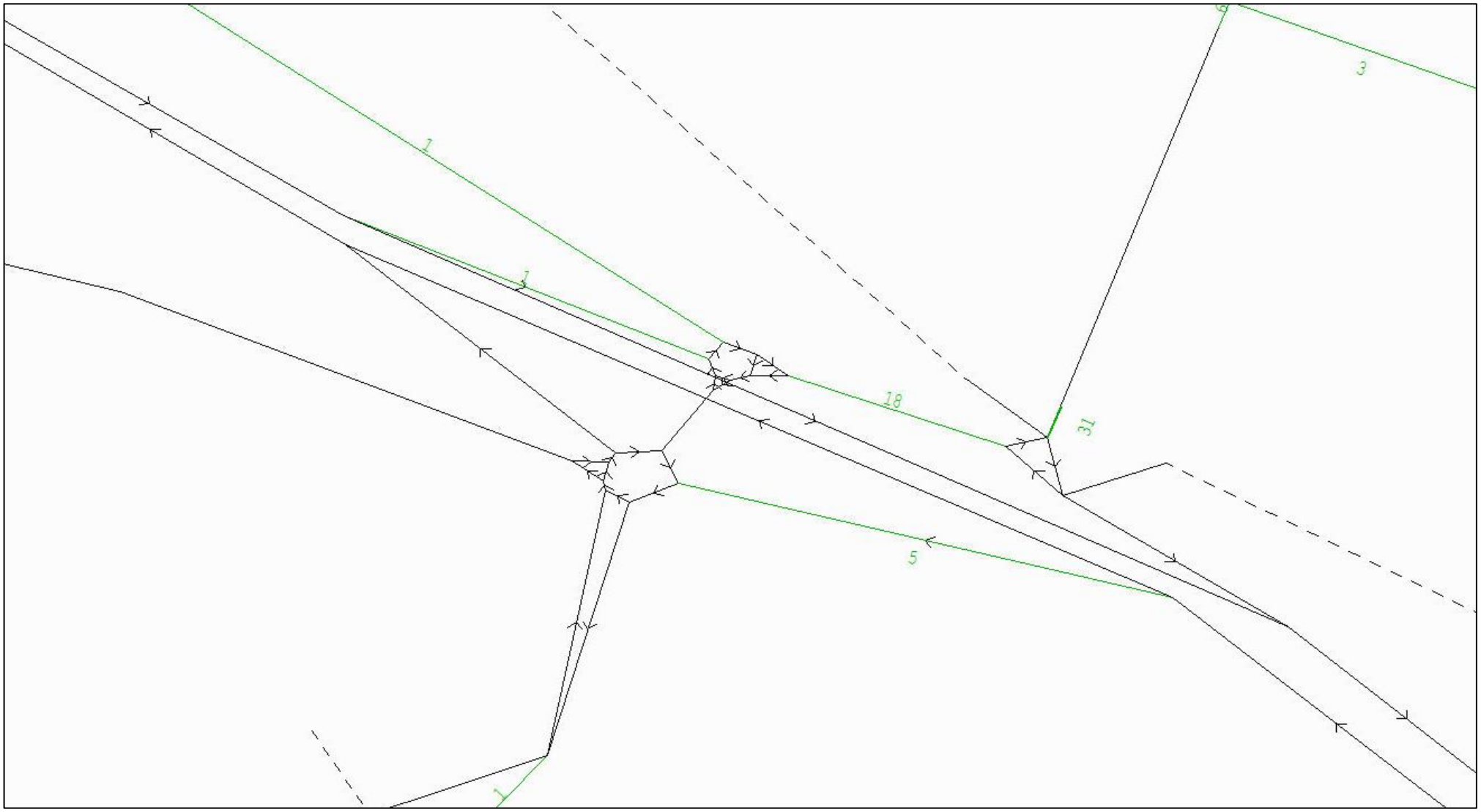


Figure 59: ERM SATURN Plot 2035 Do-Something PM Peak (Average Queue Length)

M50 Junction 15 – Average Queue Length Plots

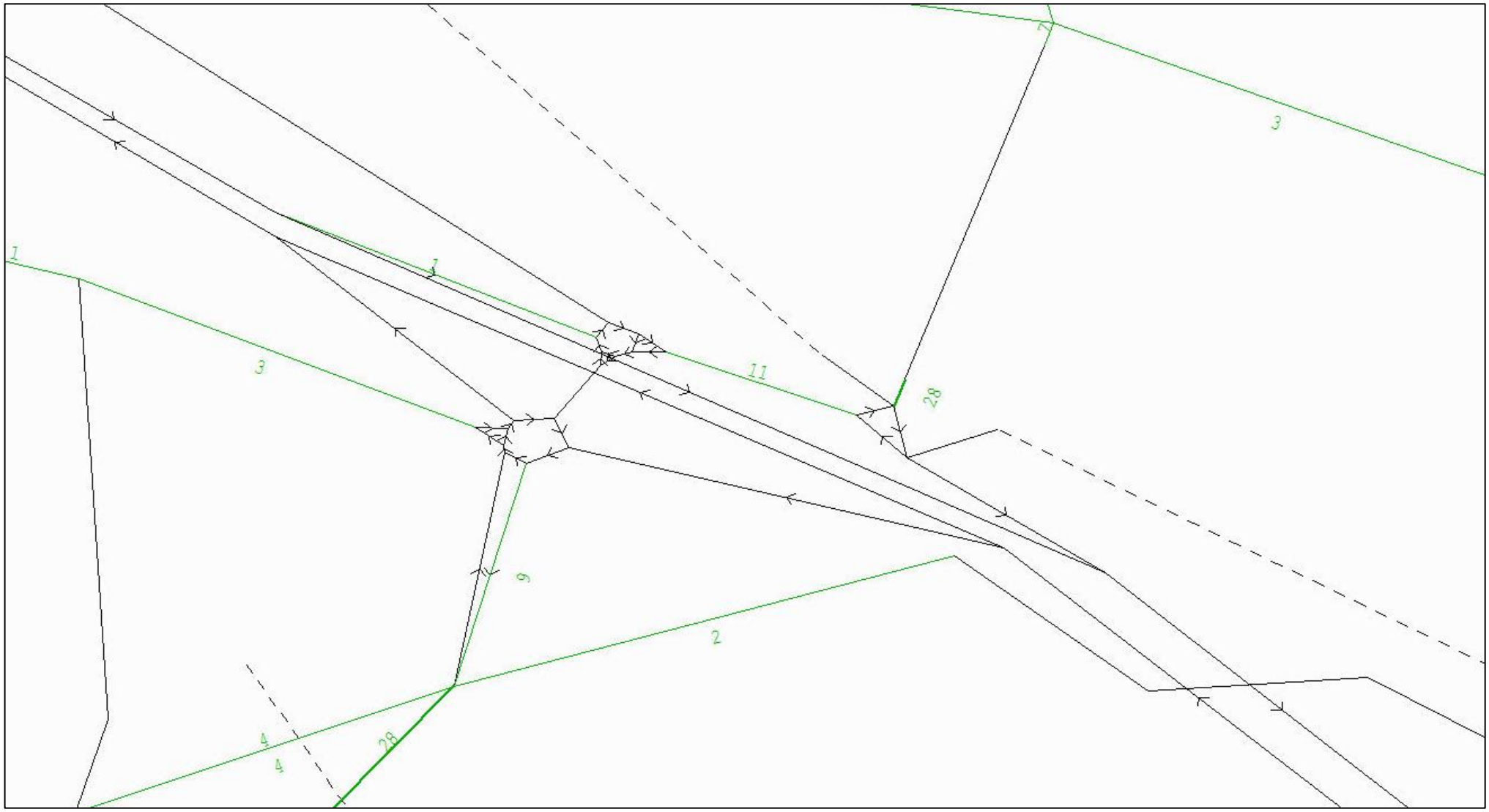


Figure 60: ERM SATURN Plot 2035 Do-Something with Complementary Measures PM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

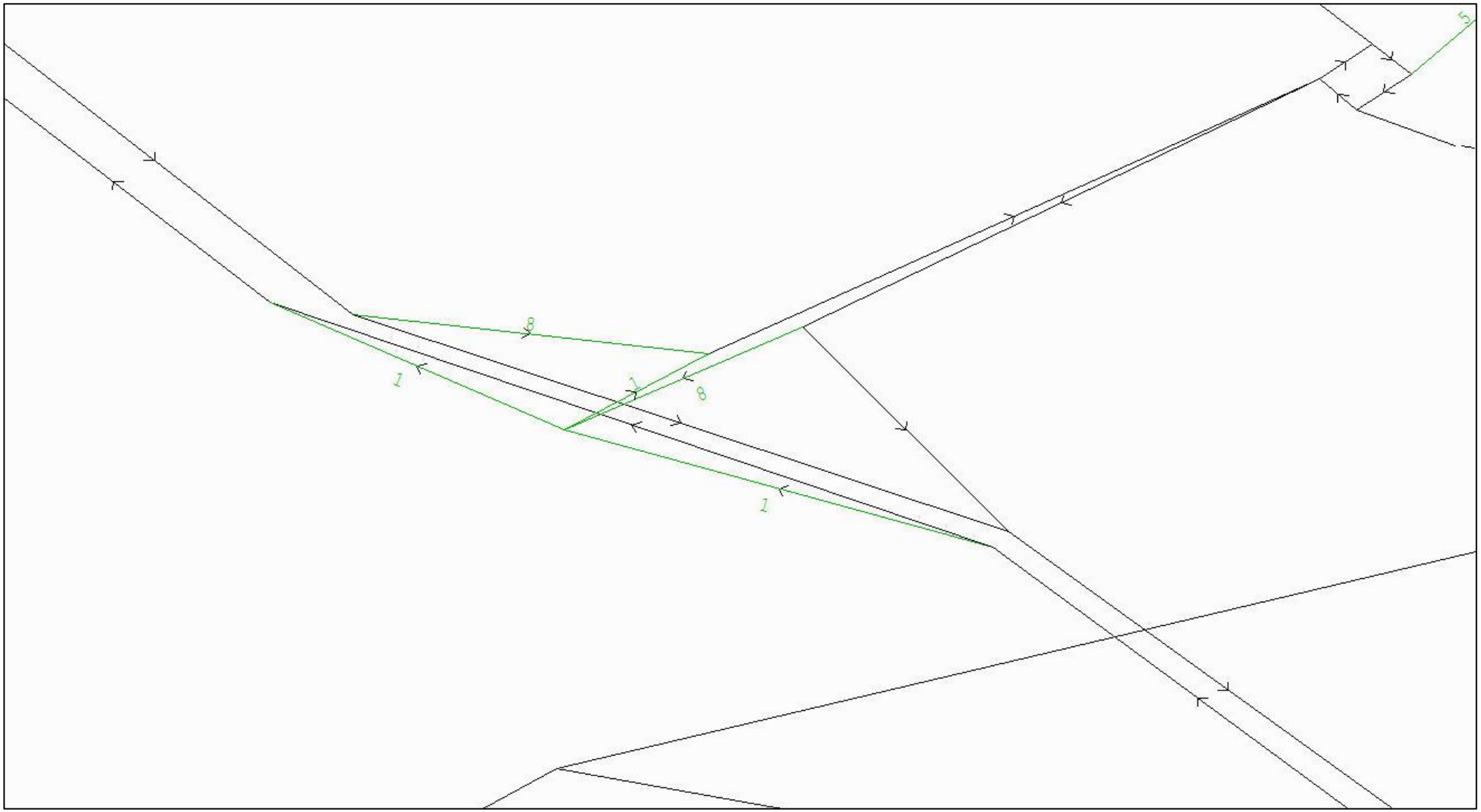


Figure 61: ERM SATURN Plot 2017 Base AM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

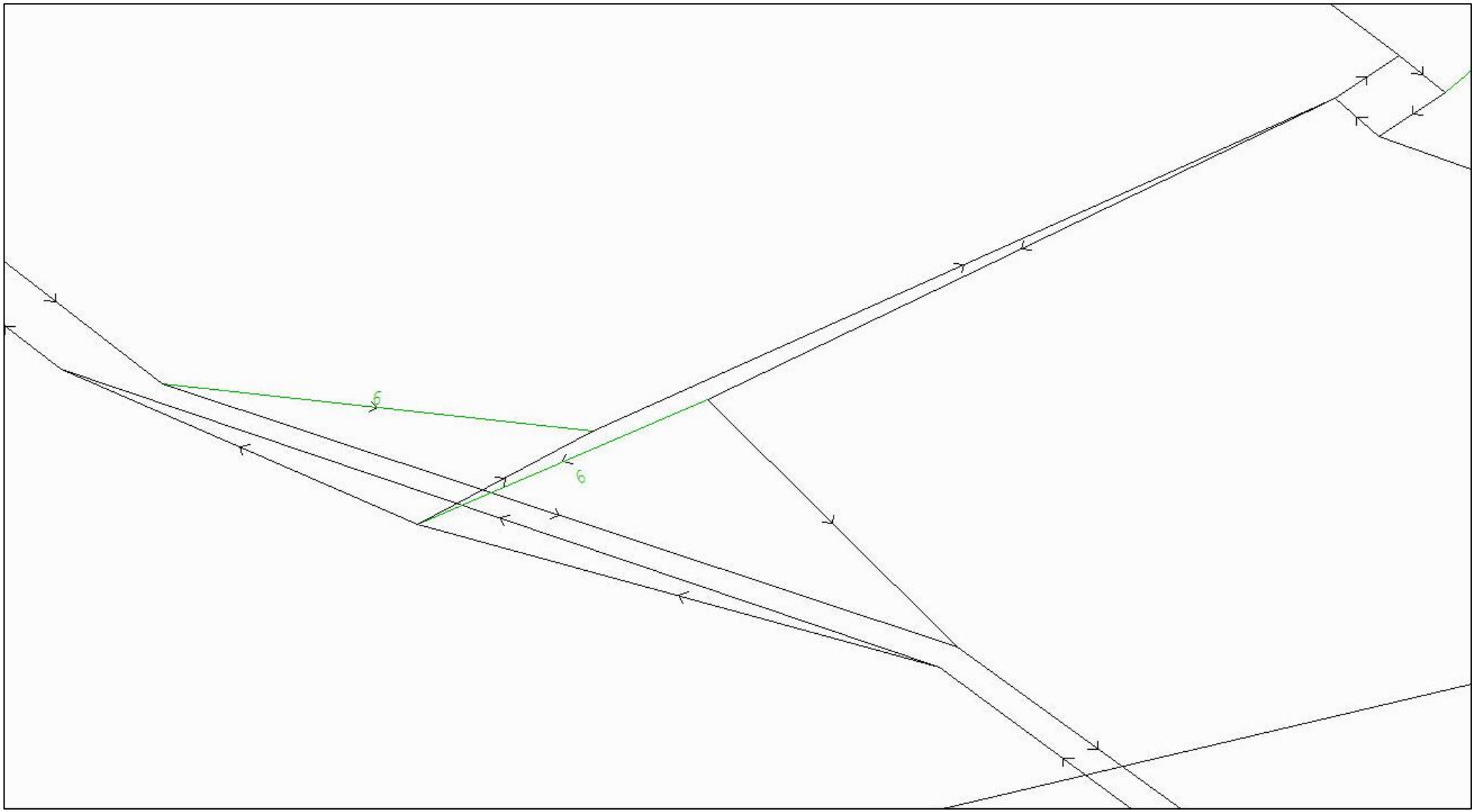


Figure 62: ERM SATURN Plot 2020 Do-Nothing AM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

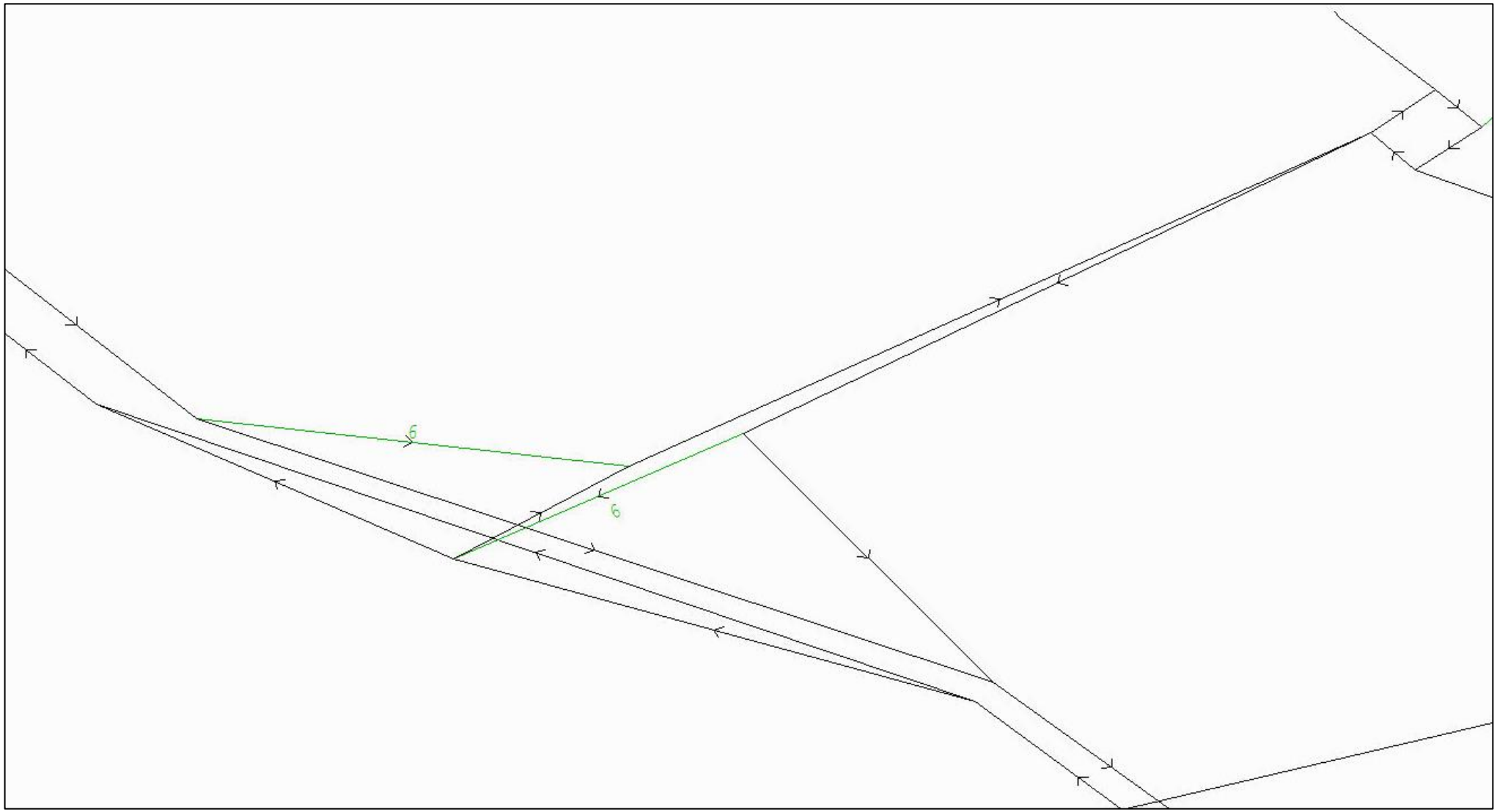


Figure 63: ERM SATURN Plot 2020 Do-Something AM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

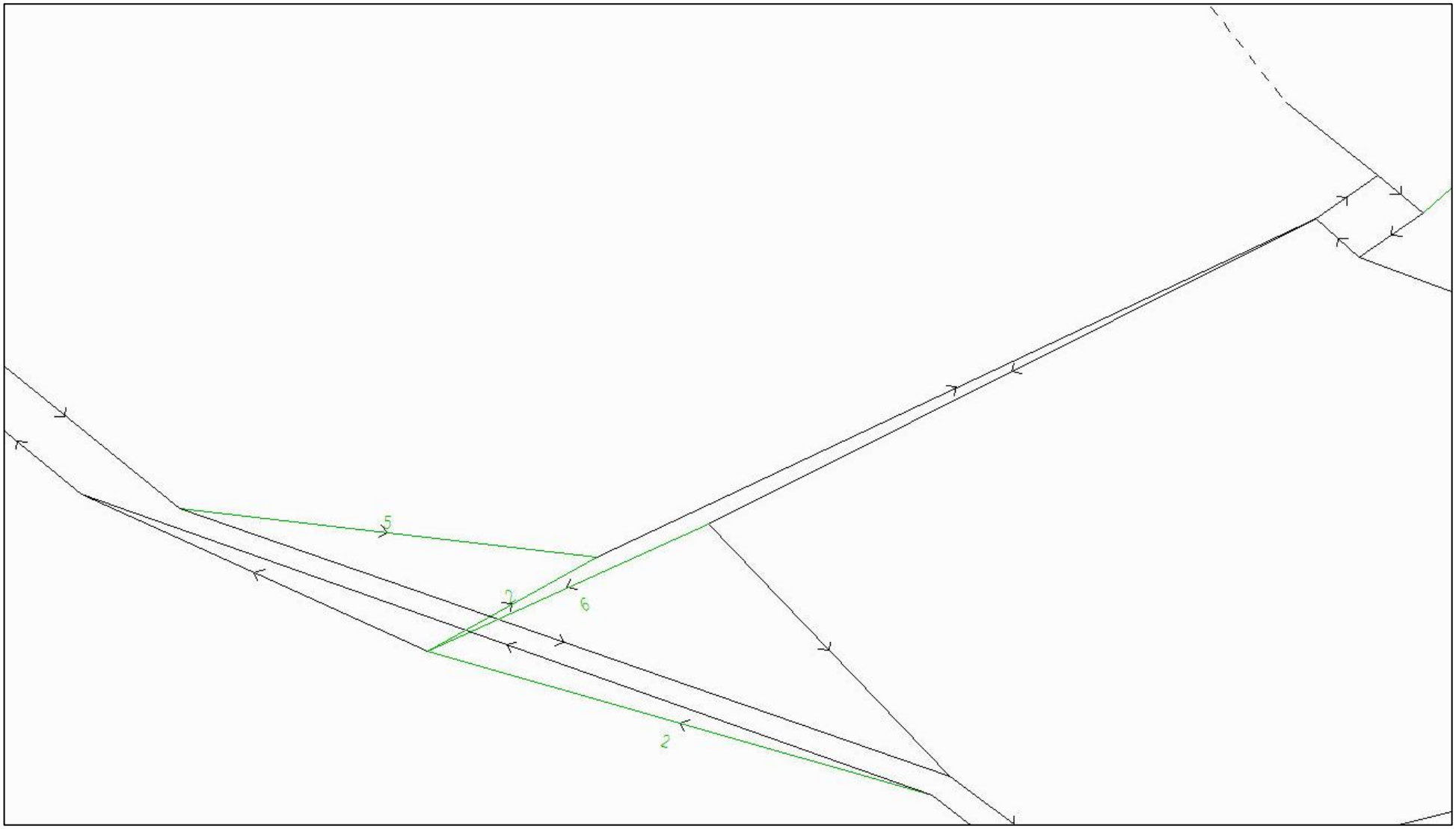


Figure 64: ERM SATURN Plot 2035 Do-Nothing AM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

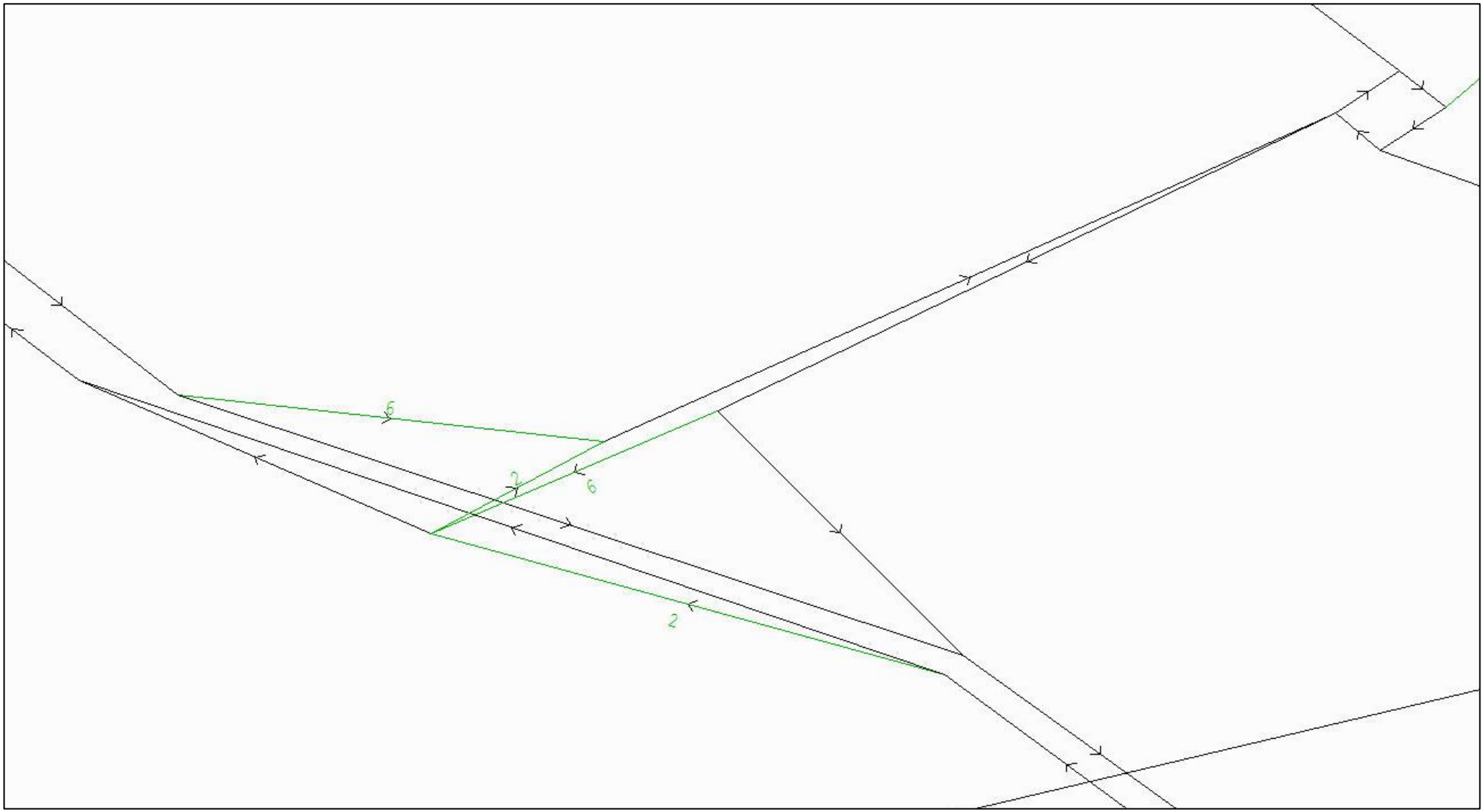


Figure 65: ERM SATURN Plot 2035 Do-Something AM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

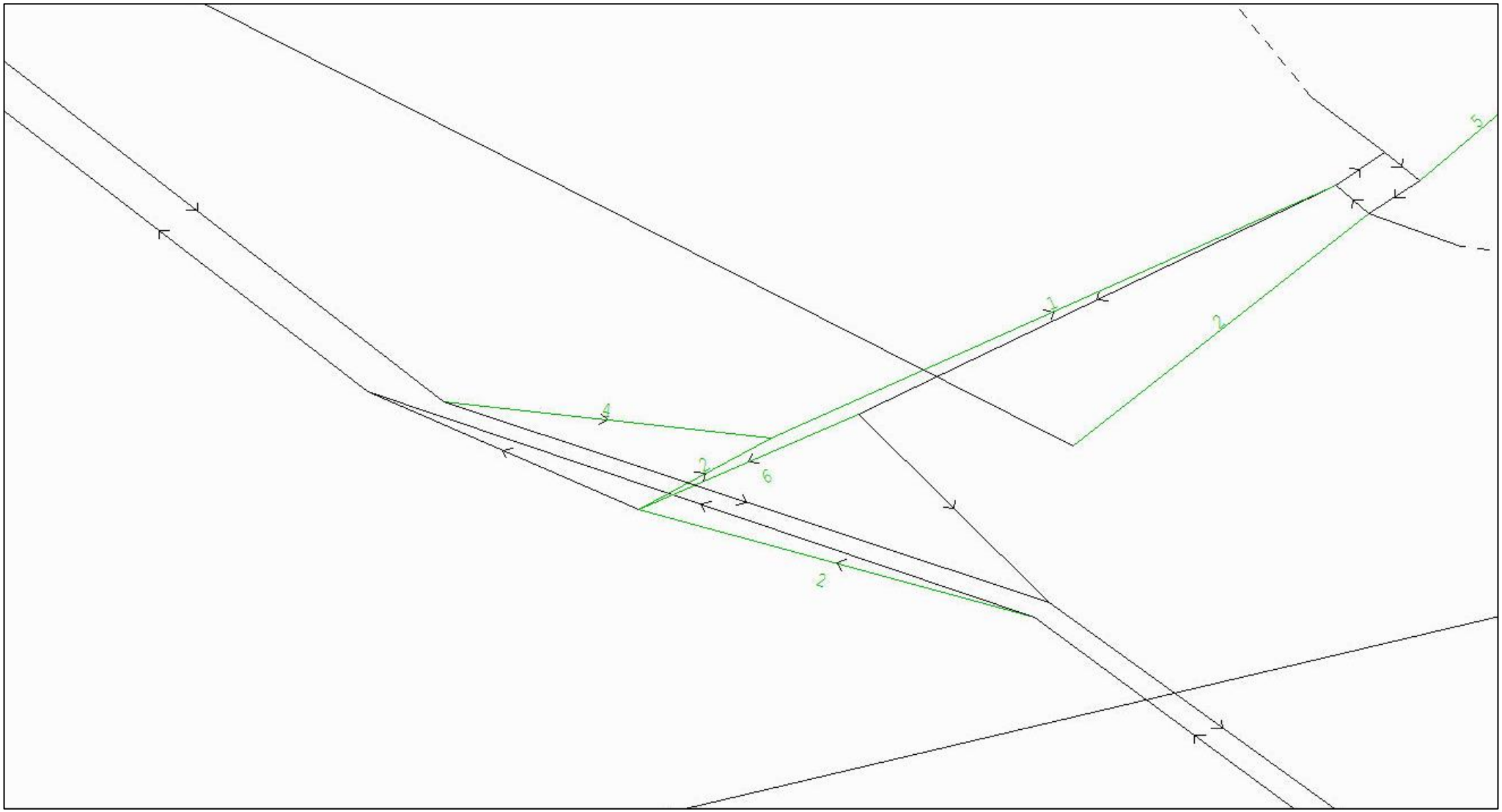


Figure 66: ERM SATURN Plot 2035 Do-Something with Complementary Measure AM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

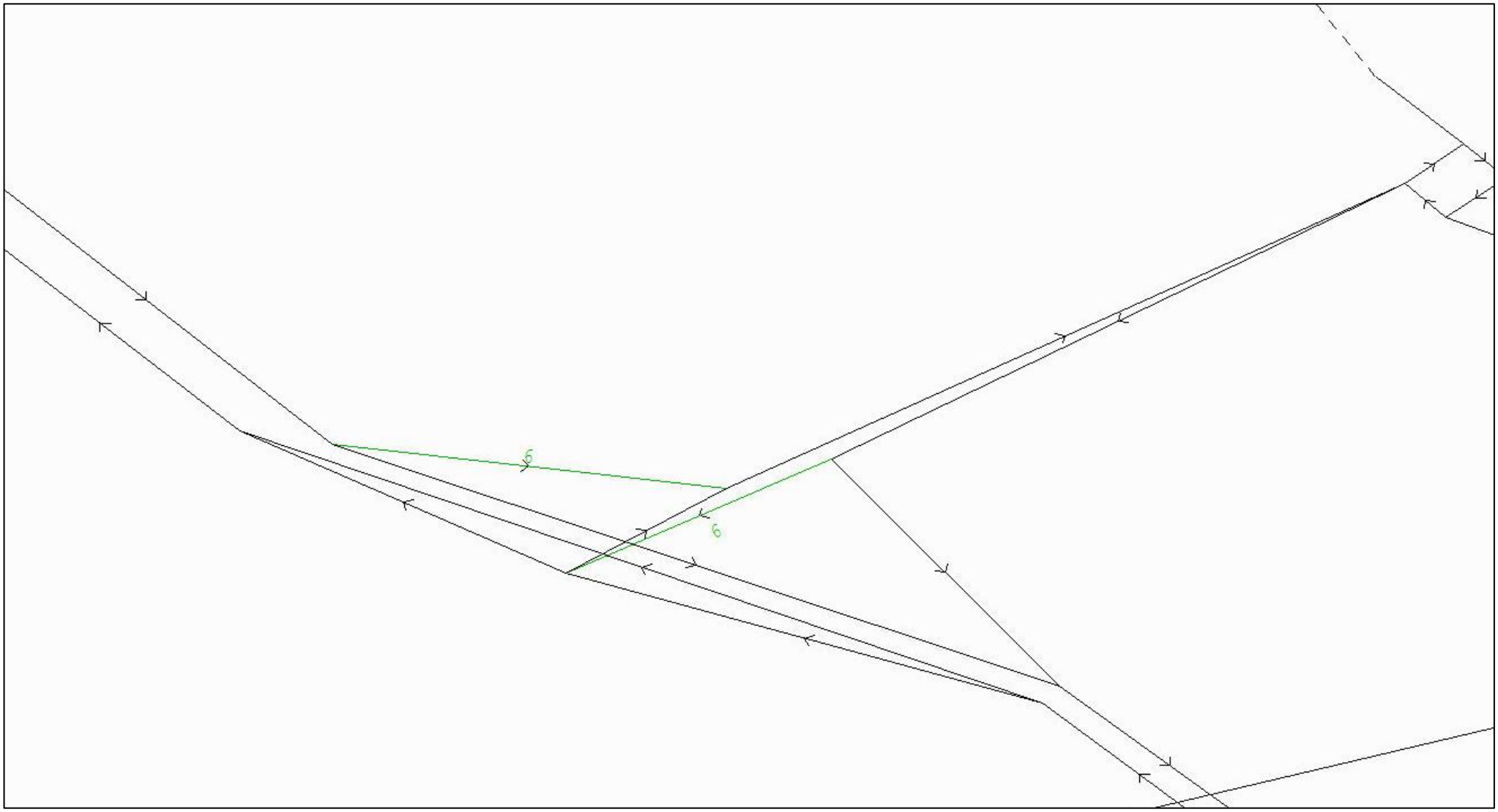


Figure 67: ERM SATURN Plot 2017 Base PM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

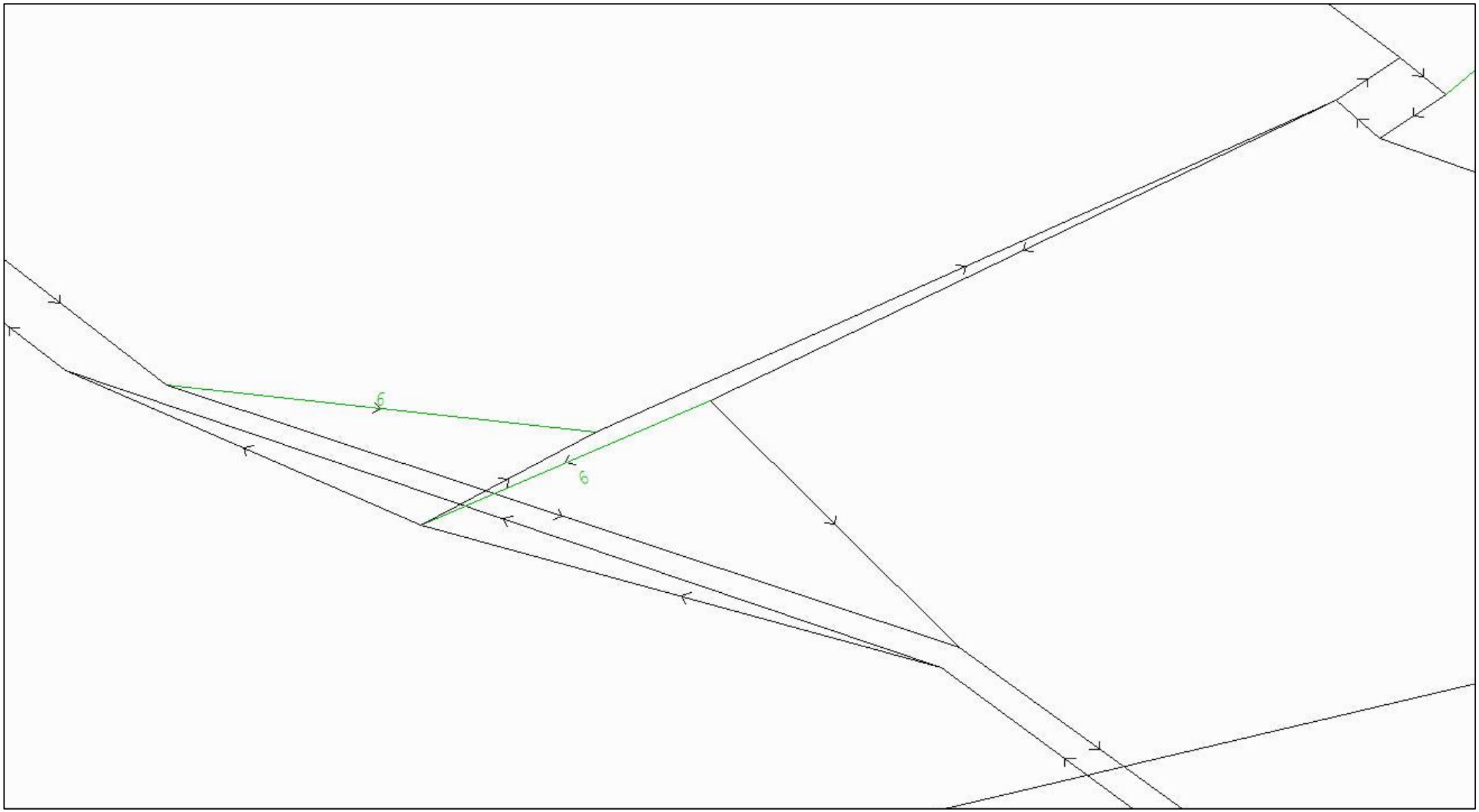


Figure 68: ERM SATURN Plot 2020 Do-Nothing PM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

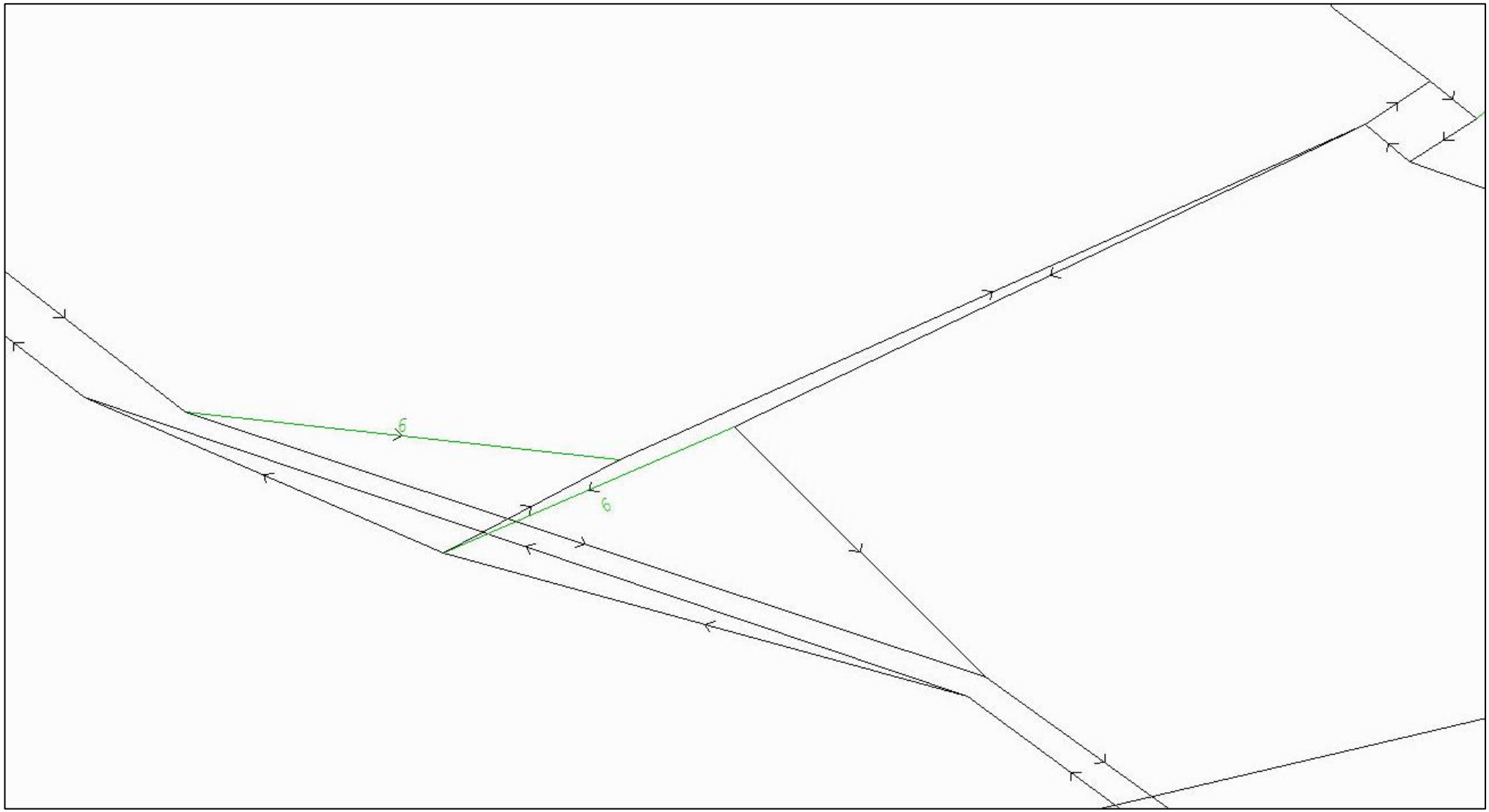


Figure 69: ERM SATURN Plot 2020 Do-Something PM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

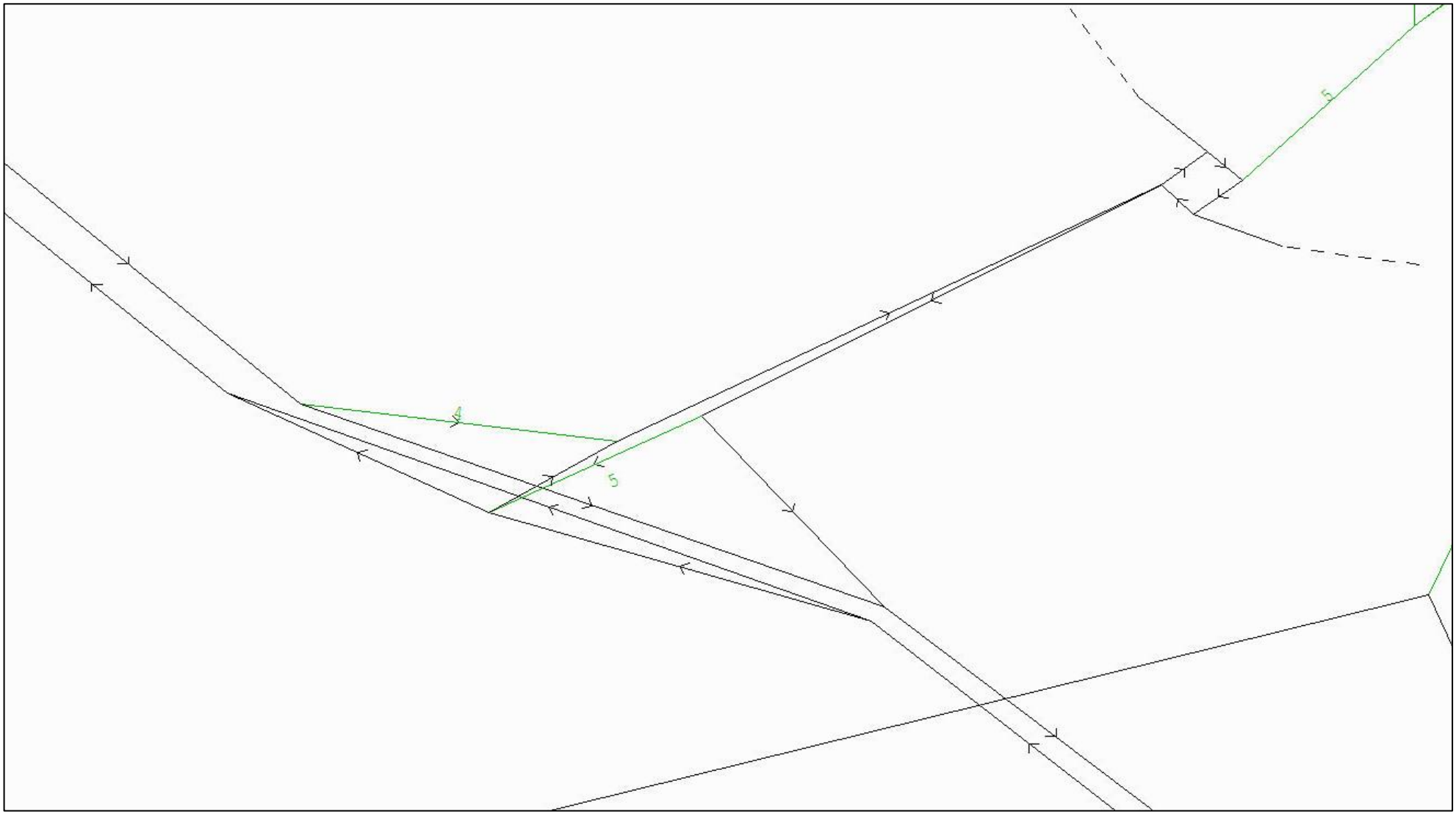


Figure 70: ERM SATURN Plot 2035 Do-Nothing PM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

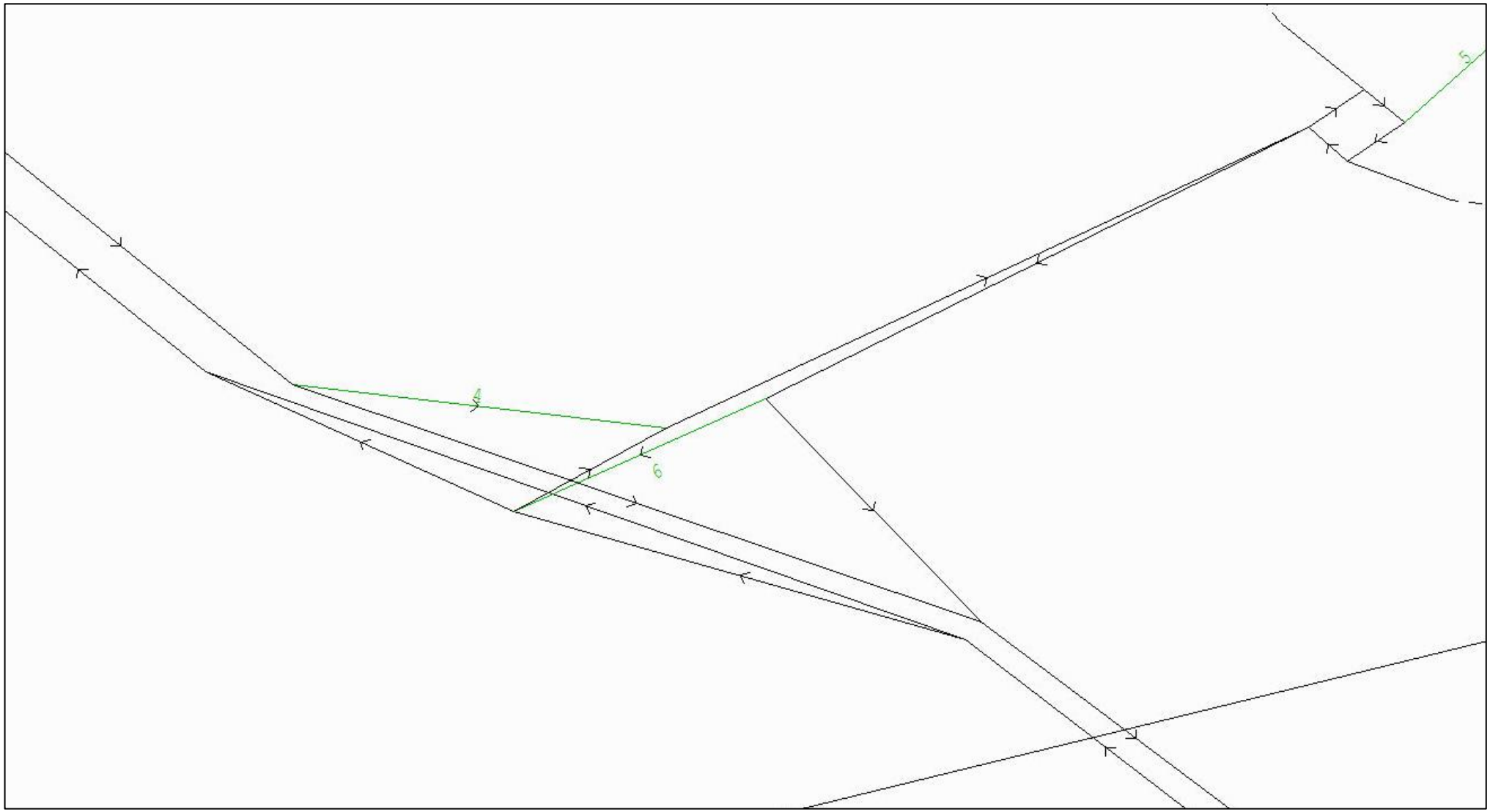


Figure 71: ERM SATURN Plot 2035 Do-Something PM Peak (Average Queue Length)

M50 Junction 16 – Average Queue Length Plots

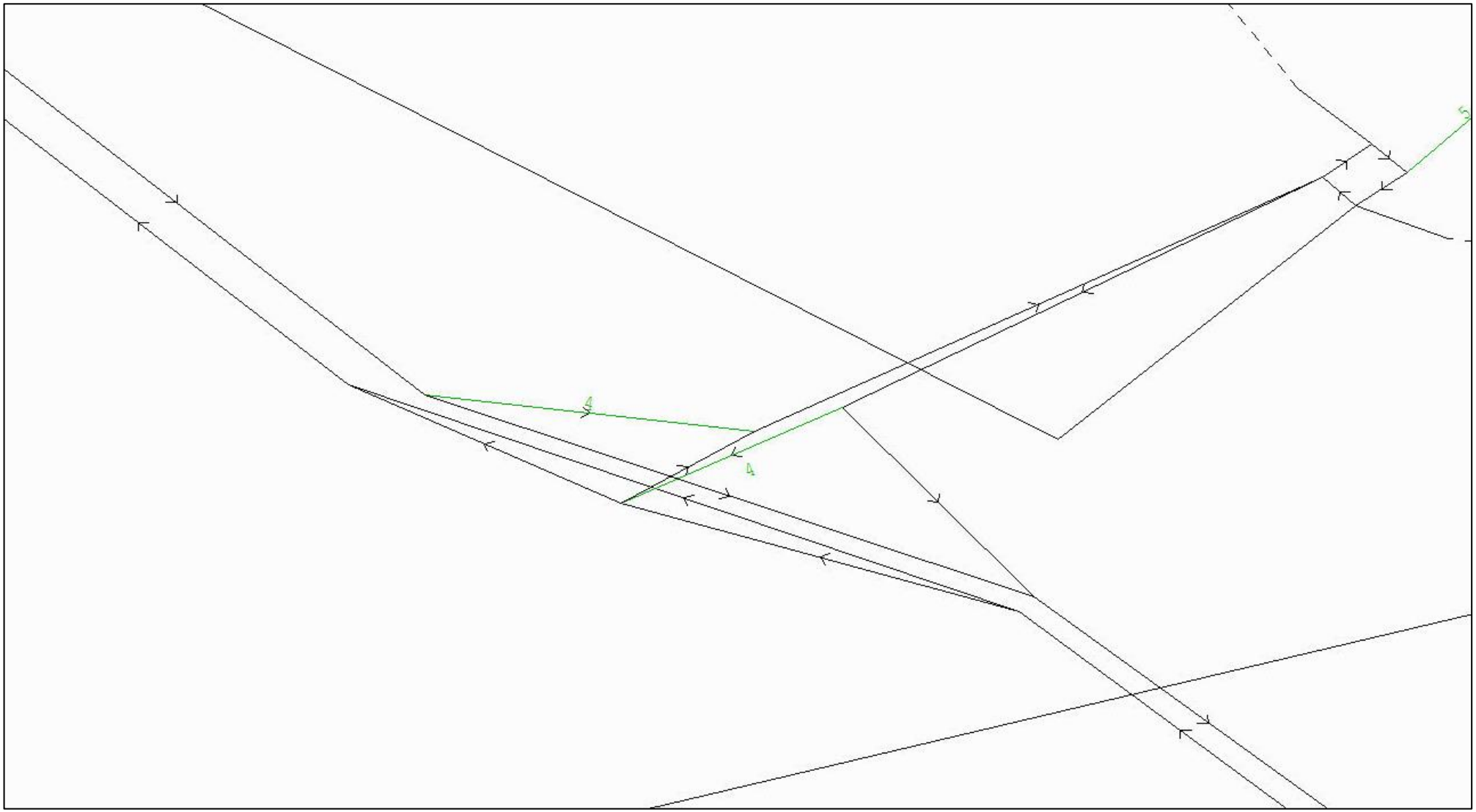
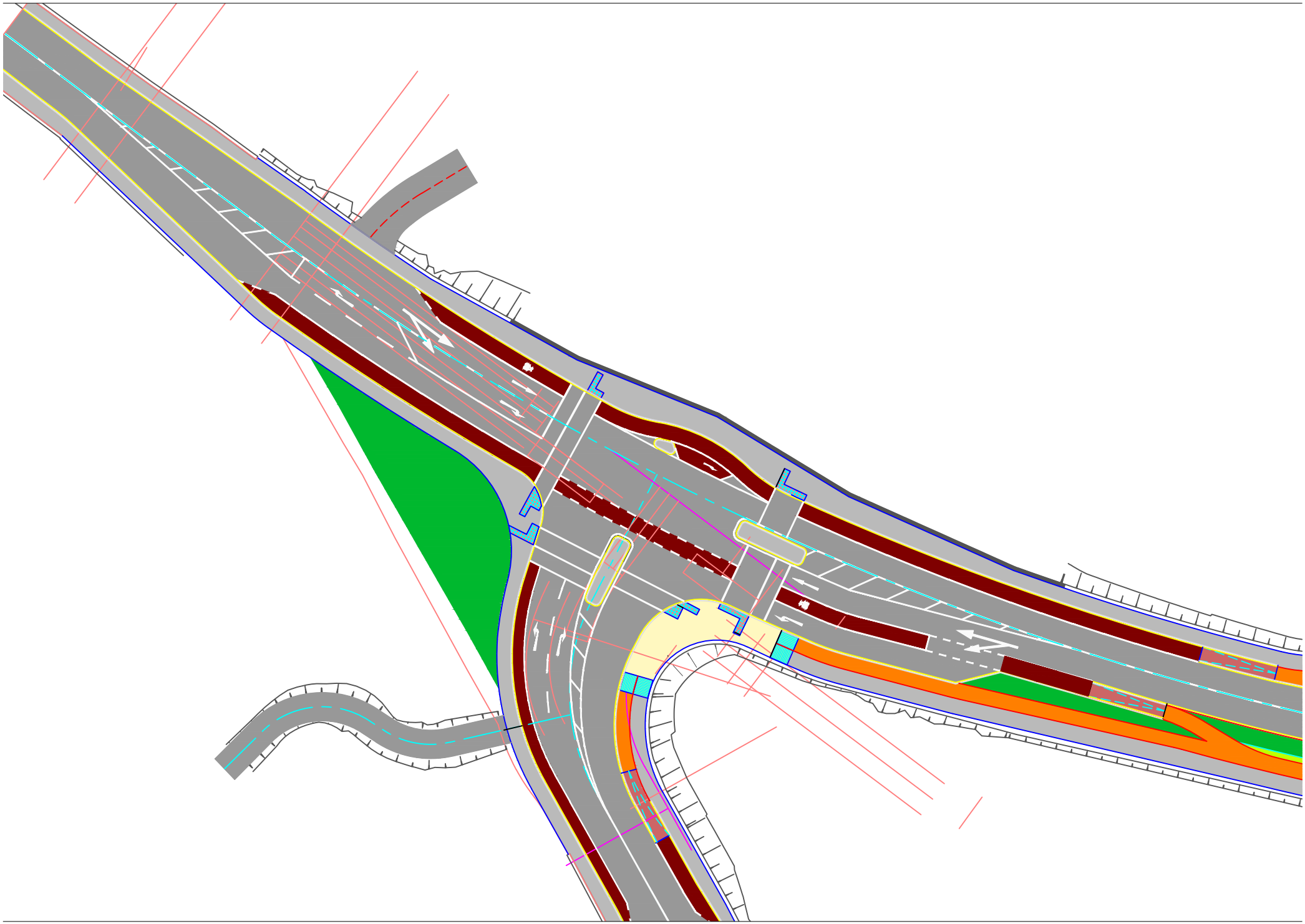
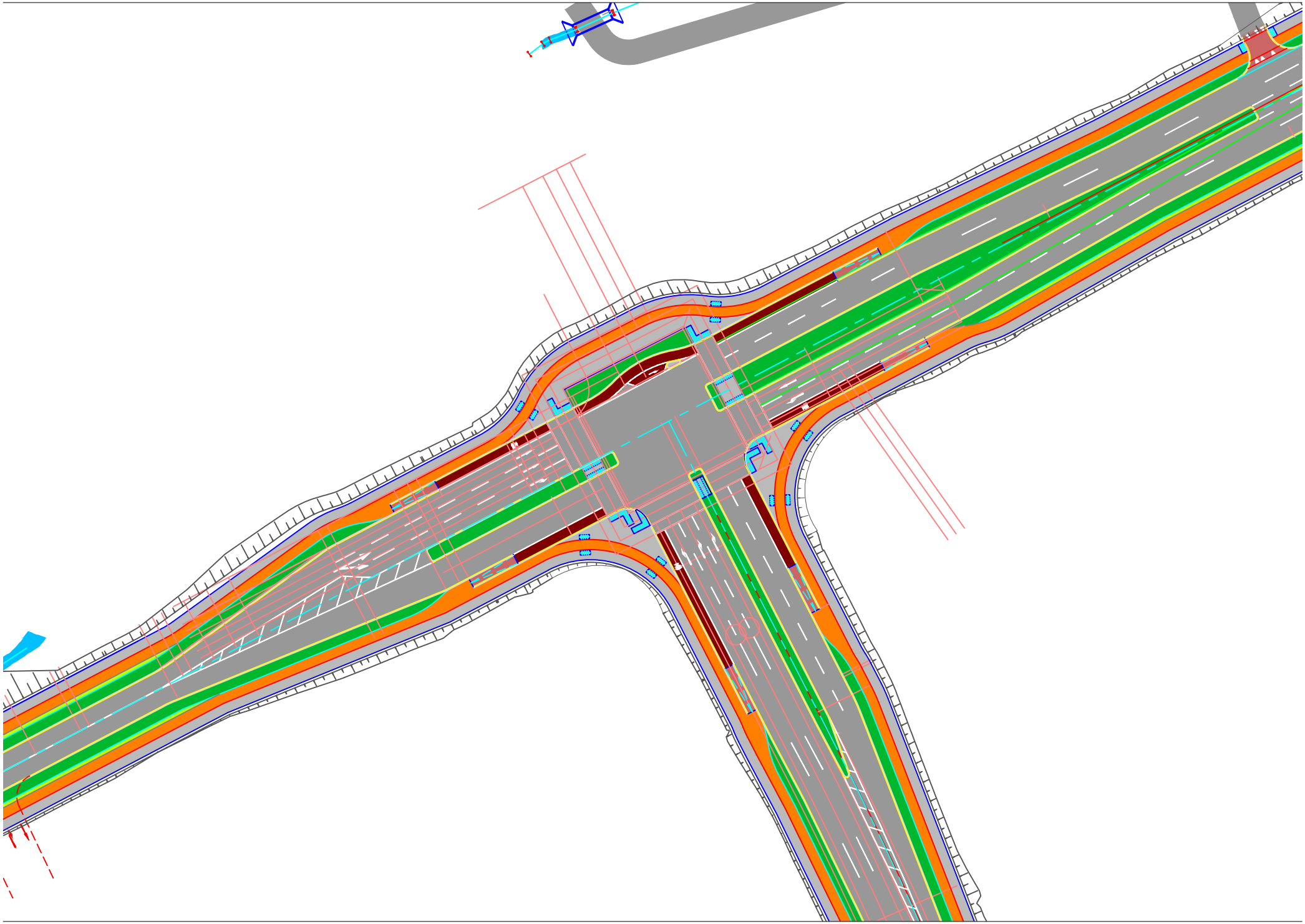
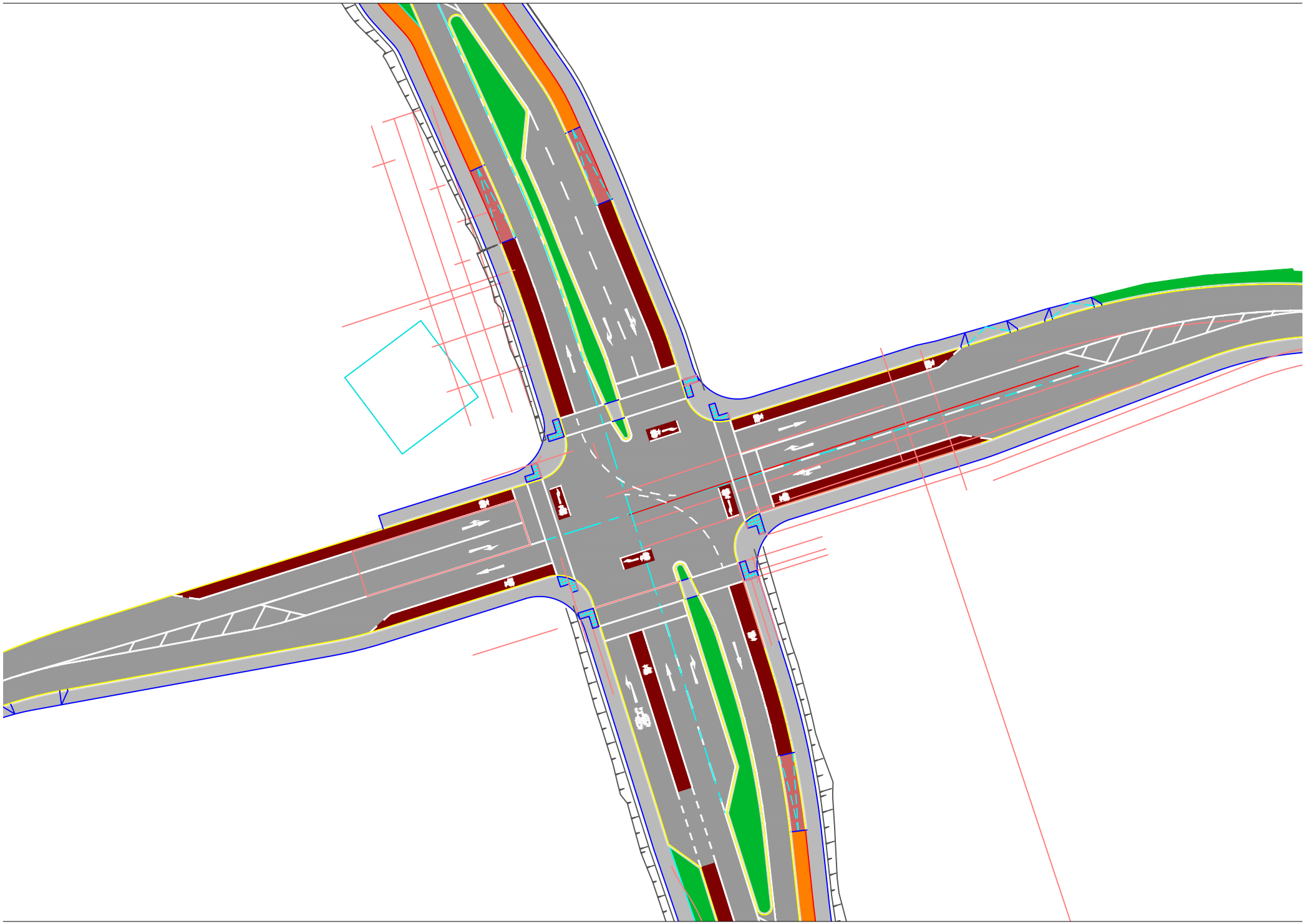


Figure 72: ERM SATURN Plot 2035 Do-Something with Complementary Measures PM Peak (Average Queue Length)

APPENDIX F

Proposed Junction Layout Drawings

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