

# Great Yarmouth Third River Crossing

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OUTLINE BUSINESS CASE

MARCH 2017

Supporting Document 3 – Data Collection Report

# Great Yarmouth Model

## Traffic Data Report

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# 1 Introduction

## 1.1 Background to Great Yarmouth Modelling

Norfolk County Council (NCC) has appointed Mouchel to perform an assessment of the impacts of the future bridge construction between Southtown and Great Yarmouth peninsula on the surrounding road network.

In order to carry out this appraisal, different proposals will be analysed by means of both SATURN (strategic analysis) and Paramics Discovery (functional assessment).

The models will be used to develop economic appraisals and to check and enhance the proposed designs. For instance, economic appraisal including time and operating costs savings and operational analysis assisting in evaluation of capacity and geometrical design.

NCC currently has a SATURN (Simulation and Assignment of Traffic in Urban Road Networks) macrosimulation model developed using 2003 base data but with a present year validation undertaken for 2008.

Previously, Mouchel was appointed by NCC to develop the Paramics Discovery model of Great Yarmouth Town Centre. The aim of this model was to perform an analysis of the alternative proposal for the main town junctions. This previous model was considered as the starting point and has been extended to include the new study area.

To facilitate the future assessments, Norfolk County Council has commissioned Mouchel to produce an updated strategic model as well as extend the aforementioned Paramics Discovery model to reflect 2016 travel demands. The models will test the future reference forecasting years (2023 and 2038) in accordance with NCC requirements.

It is understood NCC wish to assess not only the transport impacts due to the new bridge construction but also the possible effects of future developments and infrastructure improvements. Therefore, both models will be required to assist NCC transport and development teams in reviewing transport assessments and determining the consequences of future planning applications.

## 1.2 Overview of Traffic Model

“A transport model is a tool that converts readily available forecasting assumptions into a forecast of demand (number of trips) and supplies (level of service/cost of travel) on the transport network.” (DfT TAG Unit M1.1).

The original 2008 SATURN model will be updated covering the Norfolk County with specific focus on the town of Great Yarmouth and surrounding areas. SATURN is the

most established highway assignment modelling software in the UK due to its enhanced simulation routines.

The detailed strategic model area will include Great Yarmouth town and the surrounding areas of Gorleston-on-Sea, Bradwell, Belton and Caister-on-Sea. The network includes all main roads as well as those secondary routes and roads in residential areas (especially 'rat runs'). The wider area is modelled in less detail to enable a broad assessment of trips.

The microsimulation model, developed in parallel, will focus on Great Yarmouth itself, including only the northern areas of Gorleston and Bradwell in addition to Great Yarmouth town. The whole road network will be modelled in order to simulate the real behaviour of drivers, their route choices and the operational effects of the infrastructure update

The SATURN and Paramics Discovery modelled areas are shown in Figure 1-1 and Figure 1-2.

The following scenarios are to be modelled:

- 2016 Base year model. A comprehensive set of traffic surveys around the Great Yarmouth area (including Road Side Interviews (RSI) to understand travel demand data) will inform the Base year model.
- 2023, 2038 and 2051 are the Reference Forecast Future year model to test the forecast effects of future land use changes, consequent impacts of the proposed bridge as well as the increasing of travel demands.

“Data collection is necessary in order to inform the parameters that represent the model responses (calibration) and to provide a source of information against which the model can be compared to assure its quality (validation).” (DfT TAG Unit M1.1)

To provide an up to date and robust traffic model that is reflective of existing and future conditions it is necessary to collect a variety of travel related data. The following types of data have been collected by utilising existing data provided by NCC or through commissioning new surveys:

- The transport network, including the physical layout, the number of lanes, signal timings;
- Counts of vehicles on links or at junctions (ATCs and MCCs);
- Journey times; and
- Roadside Interview Surveys, in which transport users are asked to describe trips (traveller's origin and destination, reason for travel).

This report summarises the sources of traffic data that have been used, and the suitability of the data collected.

**Figure 1-1 Macro-simulation. Area of Detailed Modelling**

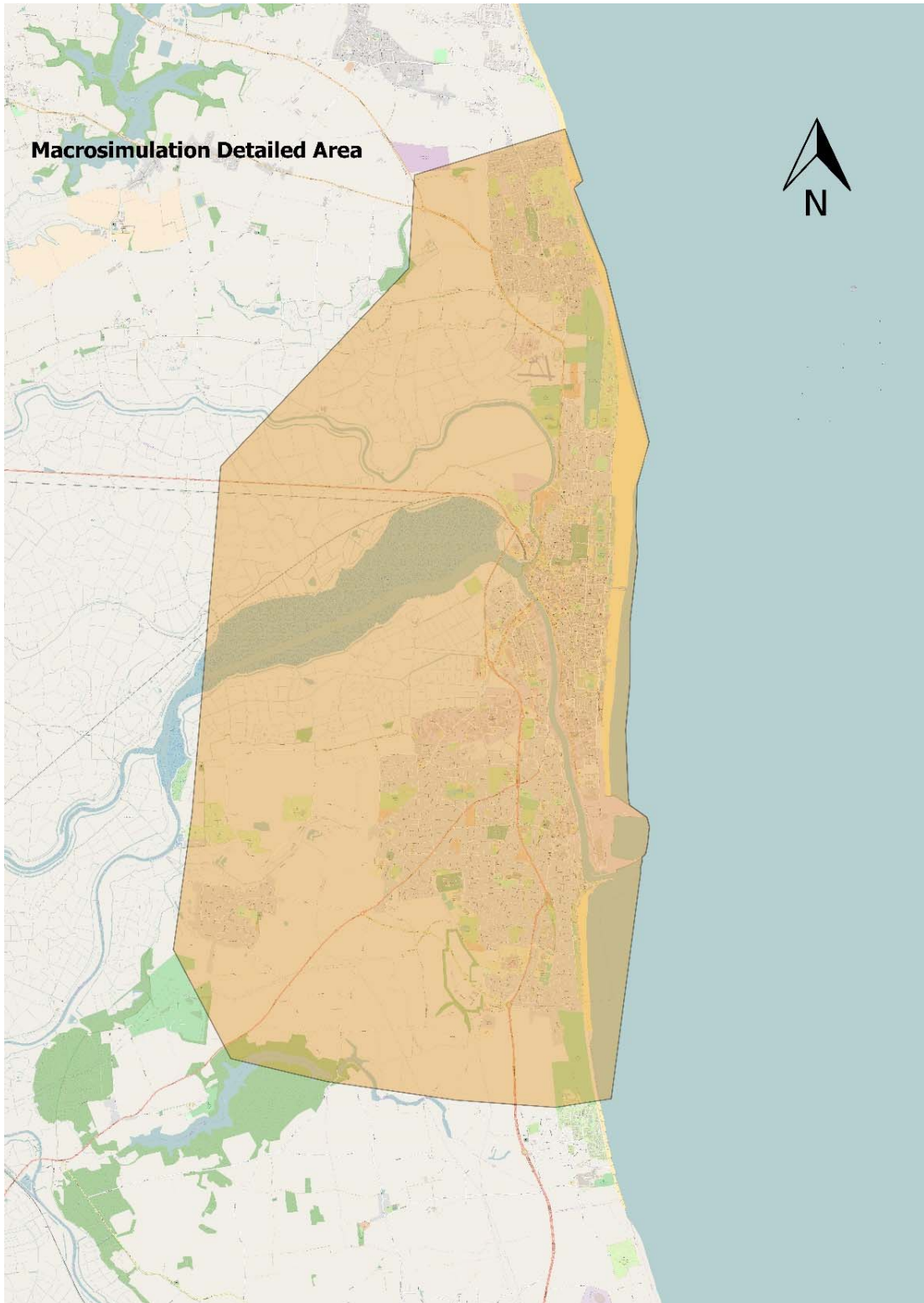
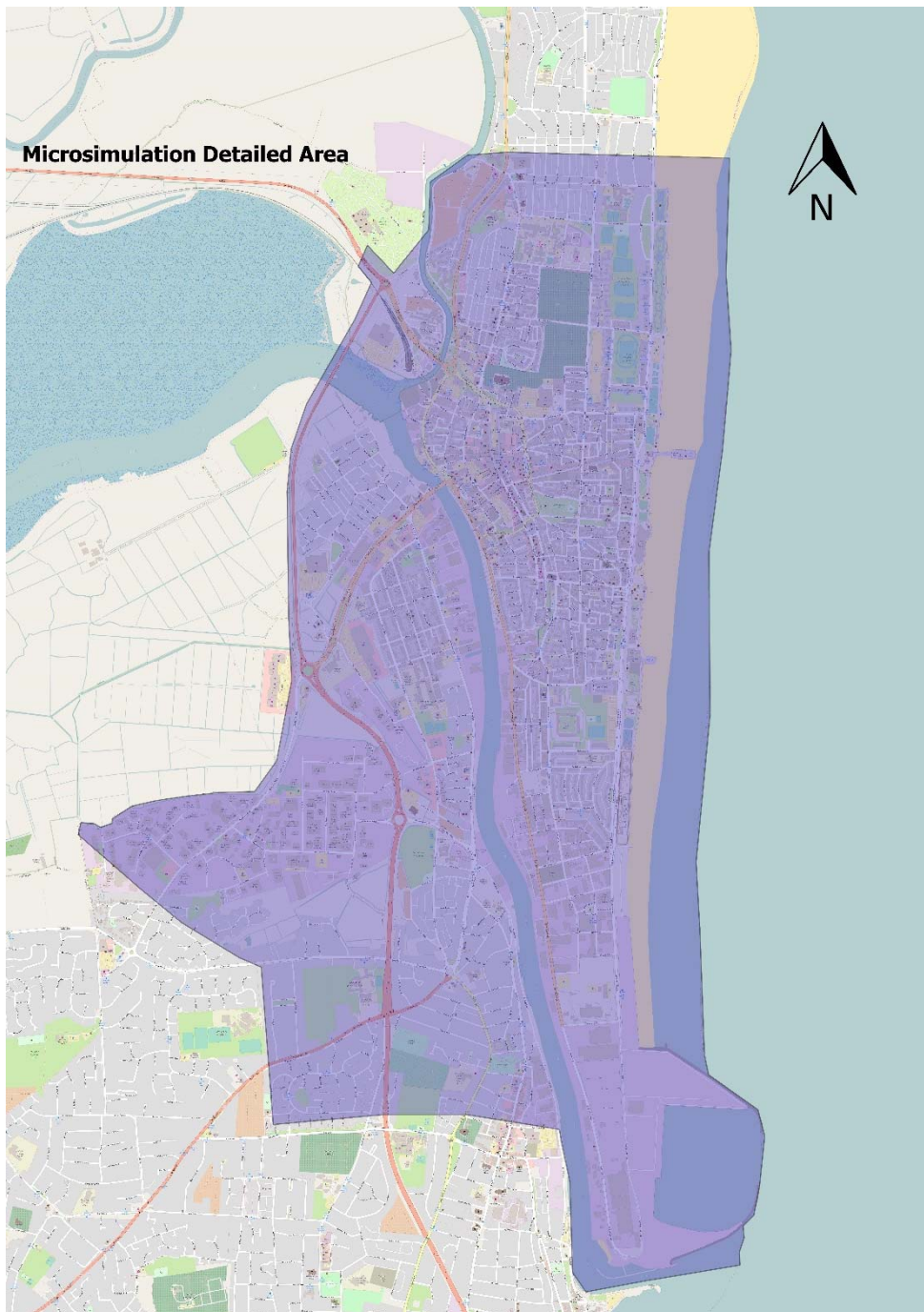




Figure 1-2 Microsimulation. Area of Detailed Modelling



### 1.3 Need for Additional Data

Highways England maintains two main sources of traffic data.

- The Traffic Flow Data System (TRADS) is a collection of permanent Automatic Traffic Count (ATC) sites which record traffic volumes at 15-minute intervals. Classification is determined by axle length.
- The Journey Time Database (JTDB) holds observed journey times and traffic flows for links of the network.

Both of these sources only provide information for roads within Highways England's Strategic Road Network (SRN) of which there are limited numbers in the study area. For instance, there is traffic and journey time data along the A12 but there are no counts close to Great Yarmouth town centre and thus additional data sources will be required.

In addition to Highways England data sources, Mouchel has received recently conducted traffic surveys produced for Norfolk County Council and AECOM which include ATCs as well as MCCs. These surveys were carried out between 2015 and 2016 in different locations within Great Yarmouth as well as the surrounding main roads and nearby towns. The surveys provide relevant information of vehicle types and flow records in 15-minute intervals as well as queue data for some of the junctions.

Despite the number of available traffic surveys, in order to collate the data from existing sources, a set of new traffic surveys have been commissioned. New ATCs have been undertaken at various locations within Great Yarmouth, Gorleston, Bradwell and Caister as well as the main roads included within the SATURN model. These will be used to analyse the variations in traffic flows at particular sites and to support the model calibration and validation. In addition, MCCs have been undertaken at various junctions within Great Yarmouth town centre. In some locations queue data was gathered as well. The gathered information will be used to develop the vehicle matrices and to support the calibration and validation.

### 1.4 Structure of Report

The subsequent content of this report is structured as follows:

- Chapter 2 considers the **existing traffic data that is available** for the model.
- Chapter 3 covers the **collection and analysis of new traffic data collected** to inform the model.
- Chapter 4 considers the **validity of the data collected**, and documents the actions that have been undertaken to ensure that the data is robust and 'fit for purpose'.

- Chapter 5 summarises the data sources and the suitability of the data to be used in the model building process.

## 2 Review of Existing Data

### 2.1 Introduction

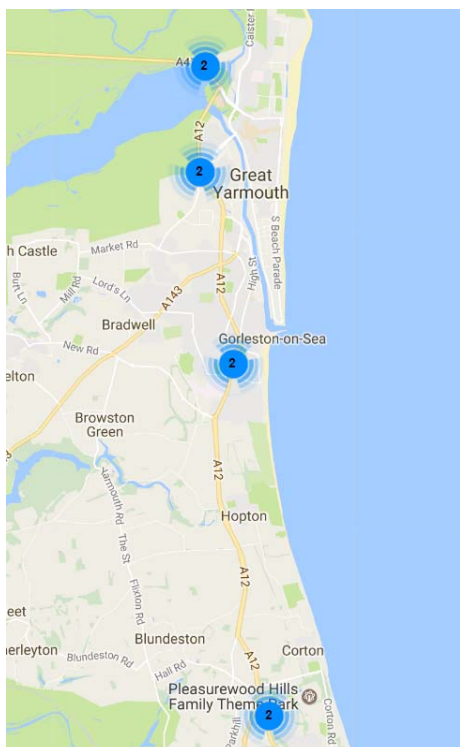
A range of data sources exists to provide base traffic flow information that can be used within the traffic model. Highways England maintains a database of traffic information collected on the Strategic Highway Network. They also maintain a database of journey time information on Integrated Transport Network (ITN) links. Norfolk County Council also owns a database of traffic count information. All the data has been reviewed to check its acceptability for the model and to determine the key time periods for the model.

### 2.2 Traffic Data

The Highways England Traffic Flow Data System (TRADS) has been examined to identify locations of permanent automatic traffic count sites within the model area that can be used to inform the traffic model.

Figure 2-1 below shows the locations where TRADS data is available in relation to the area of the Great Yarmouth Traffic Model (GYTM). As can be seen, the Strategic Route Network has very limited coverage of the model area, and thus there is only a small amount of data that will be of use to this model. Nevertheless, the data from TRADS will allow collating the traffic counts of the new surveys. The Local Model Validation Report (LMVR) will provide details on the data used in the model development.

Figure 2-1 TRADS Site Locations



Additionally, Mouchel has received data from a large traffic survey carried out by AECOM in the Great Yarmouth area and its main roads between 2015 and 2016 which included MCCs, ATCs and queue measurements in relevant locations. This data will be used to develop the demand matrices as well as calibrating and validating the macro/micro simulation models. The data received from AECOM is as follows:

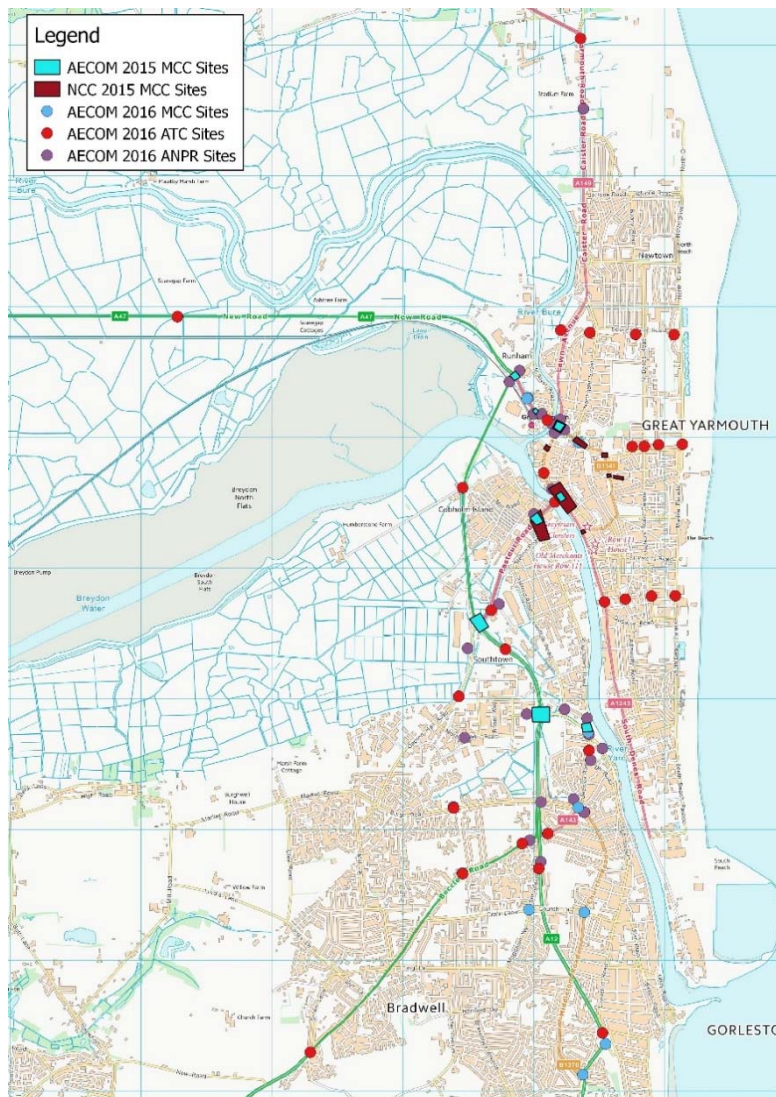
- Manual traffic counts conducted in June 2015 in 8 different locations of Great Yarmouth and Southtown. The information was gathered in 15 minutes intervals between the 07:00 and 19:00. The queues were measured as well in the same locations as the traffic counts were conducted.
- Automatic Number Plate Recognition (ANPR), MCCs and ATCs surveys were carried out in April 2016. The ANPR was conducted at 36 different points in the Great Yarmouth area. In addition, the MCCs were collected in 8 locations and the ATCs in 38.

Mouchel also received a set of 9 MCCs produced for Norfolk County Council from October 2015 at various locations in the town centre.

Figure 2-2 below highlights the locations where data is available from the NCC and AECOM traffic surveys.

The Local Model Validation Report (LMVR) will provide details on the data used in the model development.

Figure 2-2 AECOM and NCC Count Locations



### 2.3 Key Time Periods

Both the provided data by NCC and the data commissioned for the traffic model has been interrogated to identify the key peak period time periods to base the model. The new traffic surveys gathered are detailed in the following section of this report.

The collected survey data was reviewed and collated with the provided information of near locations in order to check the consistency and reliability of the received information. As a result of the data analysis, the peak hours were decided as:

- Morning peak - 08:00 – 09:00;
- Evening peak- 16:30 – 17:30.

## 2.4 Travel Time Data

The information regarding travel times was collected from Highways England Open Data website. The data source provided information of journey times along the A-12, specifically between William Adams and Pasteur Rd roundabouts as well as Pasteur and Acle New Road roundabouts, collected from January to October 2016.

Trafficmaster origin/destination (TMOD) data was obtained from the Base Map 'Highways Analyst' tool as a shapefile of Integrated Transport Network (ITN) links. The data provided by Highways Analyst covered the period October to November 2014 and included all routes around the region of interest. TMOD data was provided in 15 minute periods and the data was selected to represent the AM and PM peak hour and the inter peak period as defined elsewhere in the model.

In the southerly part of the peninsular the journey time sample was low for some links during the AM period, due to the low volumes of traffic occurring in this area. Consequently the average of the PM and inter-peak values were used instead. This was deemed reasonable as the low flow of vehicles along these links suggested that journey times would not be influenced by the time period of the trip.

Eight routes were analysed, based on the Mott McDonald model routes but with route nine discarded due to having little value for validation purposes and Routes 3, 5 and 6 shortened. The reason for shortening route 3 was that the original route extended into the buffer zone at a point of low interest. Route 3 was shortened due to the south-westernmost portion of the route having been affected by roadworks during the period over which the TMOD data was recorded. This would have given an unrepresentative view of the normal journey time for this route, and so the affected section was discarded. The extreme southern segment of route five around the peninsular was discarded as one of its constituent links was accessible to port authority vehicles only. As such, the circuit was modified to take the longest route around the peninsular available to normal traffic.

Each route was defined as a sequence of network nodes and timing points were defined at logical 'interruptions' along the route such as roundabouts or signalised junctions. The journey times of the corresponding ITN links were aggregated to give the total trip duration at each timing point and were compared to modelled journey times for each section.

This data has been made available to Mouchel to inform the model building process and to aid calibration and validation of the model. Travel time data has been used specifically to ensure that network travel times are representative of reality and will be used to define specific journey time data against which network calibration can be evaluated.

The Local Model Validation Report (LMVR)<sup>1</sup> provides detail of the data used in the model development.

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<sup>1</sup> 1076653-MOU-GEN-XX-TN-TP-0003



## 3 New Data Collection

### 3.1 Introduction

To develop a robust matrix it is necessary to collect observed demand data around the region of interest. Roadside Interview Surveys (RSIs) were conducted to provide a primary source of travel demand data including journey origin, destination and purpose.

Manual classified counts (MCCs) and two week long Automatic Traffic Counts (ATCs) have been commissioned in several locations of Great Yarmouth study area. The purpose of these new traffic counts is to fill any gaps and help collate existing data. Traffic light timings were also gathered where signalised crossings for vehicles and pedestrians were located.

### 3.2 Roadside Interview Surveys

In order to get a clear picture of traffic flow in Great Yarmouth and surrounding areas, RSIs were conducted at nine sites in the area. The RSI site locations are shown in **Error! Reference source not found.** and listed in Table 3-1.

For the initial model, the RSIs at sites 1-4 will be included for matrix development and the other sites will be used for comparison/verification with regards to vehicle splits and traffic movements. The data will also be retained for use in subsequent model updates where more model development time can be spared.

Figure 3-1 RSI Site Locations

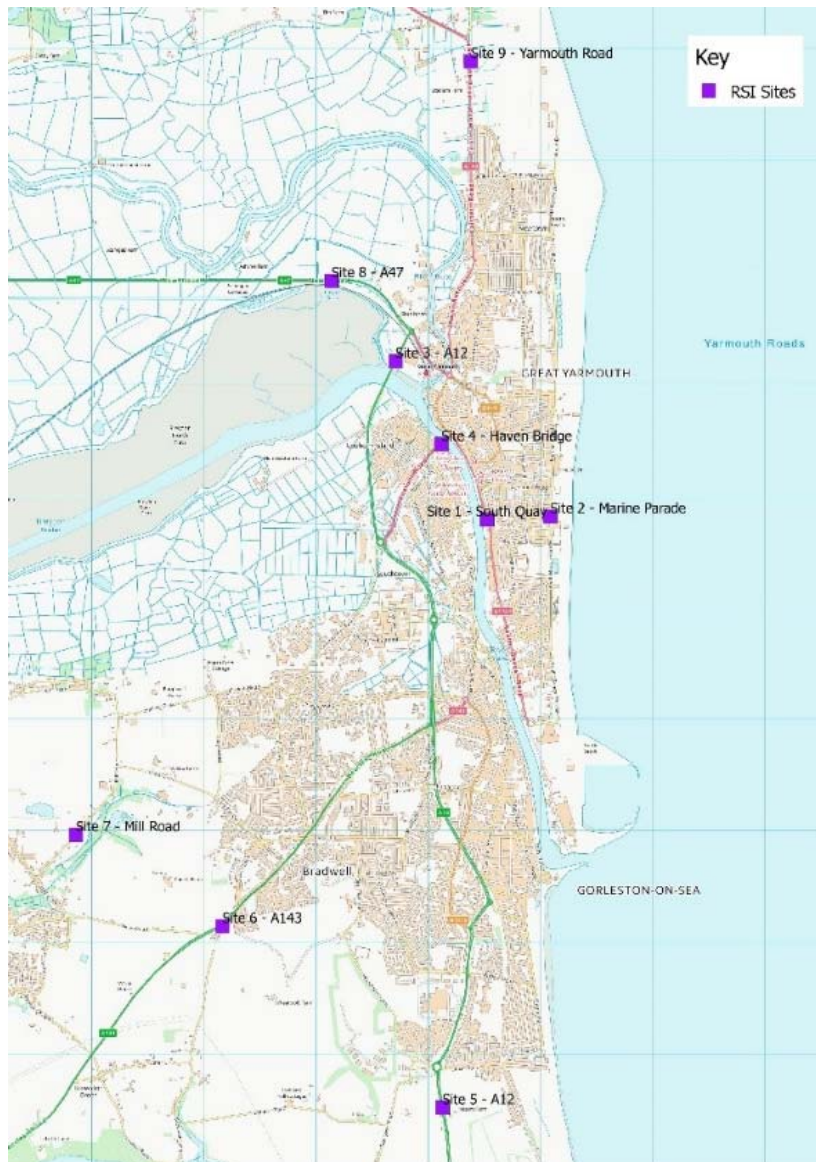


Table 3-1 RSI Site Locations

Site	Location Description	RSI Direction
1	South Quay	NB
2	Marine Parade	NB
3	A12 (for Breydon Bridge)	NB
4	A149 Haven Bridge	WB
5	A12 Lowestoft Road	SB
6	A143 Beccles Road	SB
7	Mill Road	SB
8	A47 New Road	NB
9	Yarmouth Road	NB

The RSIs were scheduled to run for 12 hours (07:00 to 19:00) between 10<sup>th</sup> and 24<sup>th</sup> November. Face to face interviews were carried out for sites 1, 2, 6 and 8; the other sites were postcard interviews.

The data reported by the survey company includes:

- A Unique Serial Number;
- Site Number;
- Interview Date;
- Interview Time (15 minute intervals);
- Vehicle Type;
- Occupancy;
- Origin and Destination Postcode; and
- Origin and Destination Purpose.

A summary of each RSI site is shown in **Table 3-2**, including the date for each site and any issues that occurred on the day. No issues were considered sufficiently serious to invalidate data collection.

*Table 3-2 Summary of RSI Data Capture*

Site	Location Description	Date Undertaken	Weather Conditions	Issues
1	South Quay	Thursday 10th November 2016	Overcast with rain. Not significant to stop surveys.	Access to bay was narrow, hard to accommodate larger vehicles. Some queuing during peak times with vehicles observed turning to avoid road.
2	Marine Parade	Thursday 10th November 2016	Overcast with rain. Not significant to stop surveys.	Police Accredited Traffic Officer (PATO) didn't arrive until 07:05 so delayed start time. Parked lorry 11:55-12:30 south of site caused disruption so traffic was allowed to flow. During peak periods many vehicles seen turning to avoid site and heavy queuing forced interviews to be suspended often.
3	A12 (for Breydon Bridge)	Wednesday 23rd November 2016		Traffic often allowed to flow freely to avoid delays.

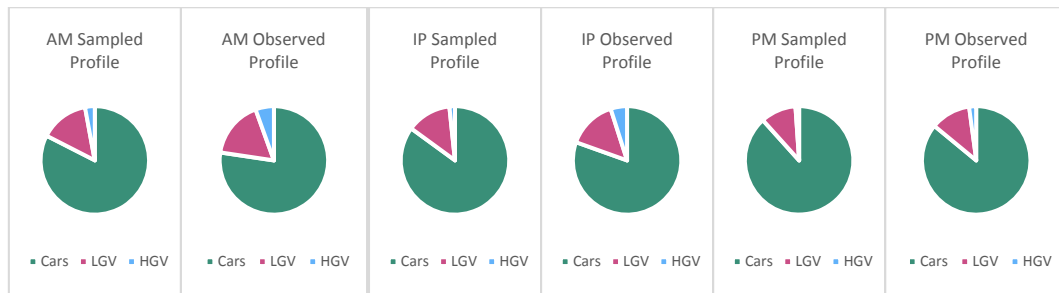
Site	Location Description	Date Undertaken	Weather Conditions	Issues
4	A149 Haven Bridge	Wednesday 23rd November 2016		Postcards only issued when traffic lights were red (around 20 seconds of 3 minutes) resulting in a very small amount being handed out.
5	A12 Lowestoft Road	Tuesday 22nd November 2016	Occasional showers in AM.	Site set up incorrectly resulting in lane 1 traffic being missed until after AM peak. Interviews frequently suspended to relieve queues.
6	A143 Beccles Road	Tuesday 22nd November 2016	Occasional showers in AM.	No major issues.
7	Mill Road	Tuesday 22nd November 2016	Occasional showers in AM.	PATO arrived late delaying survey start until 07:30. Stops in traffic management occurred twice to let large vehicles pass.
8	A47 New Road	Thursday 24th November 2016		Delayed start until 07:20.
9	Yarmouth Road	Thursday 24th November 2016		Surveys did not start until 07:40 due to traffic management contractor being late. From 15:30 distribution of postcards regularly stopped to allow traffic to disperse.

For the RSI sites to be used for matrix development (sites 1-4), comparison of the sampled vehicles and the observed traffic flow during the morning, inter and evening peak periods is shown in Table 3-3. Vehicle class proportions are demonstrated in Table 3.2.

Table 3-3 Sampling by Time Period and Vehicle Class – All Sites

Vehicle Type	Daily Sampled vs Observed		AM Sampled vs Observed		IP Sampled vs Observed		PM Sampled vs Observed	
<b>Cars</b>	<b>1961</b>	20145	<b>453</b>	4468	<b>1017</b>	10108	<b>491</b>	5569
<b>LGV</b>	<b>298</b>	3603	<b>80</b>	990	<b>159</b>	1841	<b>59</b>	772
<b>HGV</b>	<b>42</b>	1069	<b>16</b>	318	<b>20</b>	614	<b>6</b>	137

Figure 3-2 Vehicle Class Proportions



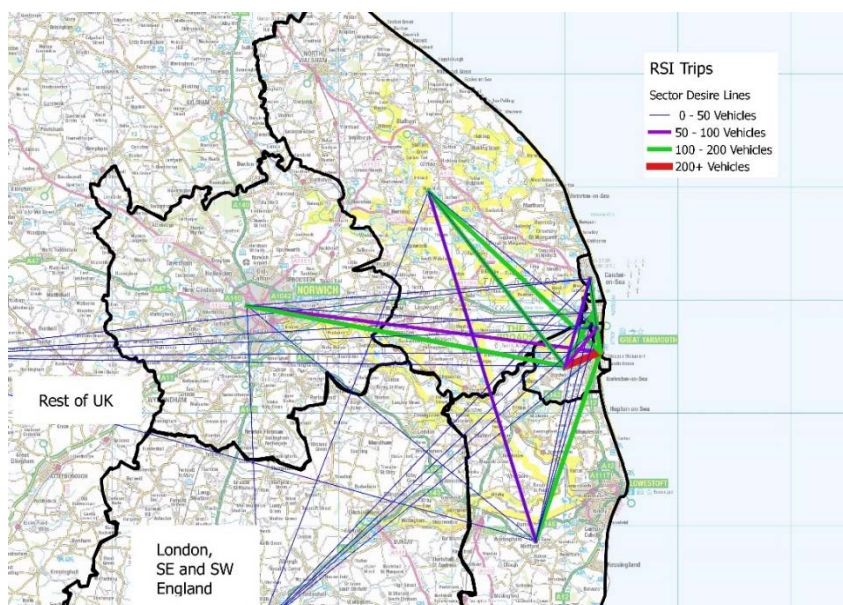
Bi-directional MCCs were conducted at the survey sites on the day of the RSI. They will be used to expand the RSI sample to the total observed flow in the surveyed direction.

ATC counts were conducted on the same road and close to the RSI sites. On the peninsula all roads between the two main outer roads also had ATCs so any diverting traffic would be picked up. These will be used to control any day to day variability that may occur over the survey period and calculate appropriate adjustment factors.

Application of any of these factors will improve confidence intervals and will be reported in later documentation.

Figure 3-3 below shows the origin-destination desire-line diagram for the RSI data (after cleaning and removing errors). The desire-lines show the traffic observed in the 4 RSI sites which are being used for the base year model. It should be noted that the number of vehicles have not been factored to the ATC totals. Therefore, the weighting of individual origin-destinations will change in the base year model. Also, unobserved trips are not included in the desire-lines.

Figure 3-3 DesireLines based on RSI data



### 3.3 Automatic Traffic Counts

Three ATCs have been undertaken at locations to the north of Great Yarmouth. These will be used to analyse the flow in and out of town to the north and to support calibration and validation. These counts were collected between 5<sup>th</sup> November 2016 and 20<sup>th</sup> November 2016.

The site locations of all the ATCs are shown in Figure 3.4 and listed in **Error! Reference source not found.** with the dates they were recorded.

Figure 3-4 ATC Site Locations

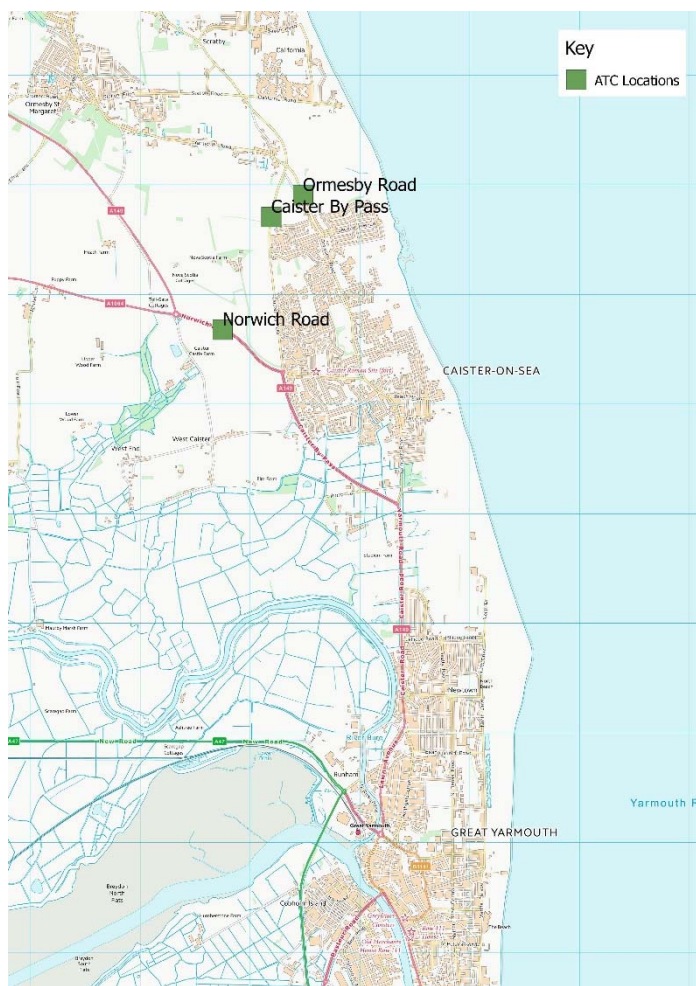


Table 3-4 ATC Site Locations and Dates

ATC Site Location	Date of ATC
Ormesby Road	10 November 2016 - 20 November 2016
Caister By Pass	7 November 2016 - 20 November 2016
Norwich Road	5 November 2016 - 18 November 2016

A summary of the average weekday two way hourly flows for each ATC are shown in **Error! Reference source not found.**

Table 3-5 Average Weekday Two Way Flow at ATCs

	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	Total
Ormesby Road	200	385	285	294	331	329	325	338	419	372	322	242	3843
Caister By Pass	572	739	672	643	696	650	662	710	744	787	689	517	8082
Norwich Road	1017	1059	799	768	786	766	764	846	935	1085	1009	645	10478

### 3.4 Manual Classified Counts

Forty-one Manual Classified Counts (MCCs) have been undertaken at various junctions within Great Yarmouth town centre as well as Gorleston, Bradwell and Caister. These will be used to develop the vehicle matrices and to support calibration and validation. They were undertaken for twelve hours (07:00-19:00) on Tuesday 4<sup>th</sup> and Wednesday 5<sup>th</sup> of October 2016. Data was classified by six vehicle types:

- Pedal cycle / motorcycle;
- Car;
- LGV;
- OGV1;
- OGV2; and
- Public Service Vehicles (PSV).

Pedestrian counts were also conducted at some locations.

The site locations are listed in **Table 3-6** and shown in Figure 3.5.

Table 3-6 Commissioned MCC Locations

Location	Surveyed Area	ID Junction
Euston Rd / North Dr Roundabout	1	Junction 1
Euston Rd / Marine Parade	1	Junction 2
Euston Rd / Wellesley Rd	1	Junction 3
St Nicholas Rd / Nelson Rd	1	Junction 4
St Nicholas Rd (Sainsbury's)	1	Junction 5
The Conge / Fuller's Hill / King St / Car Park	1	Junction 6
Alexandra Rd / Trafalgar Rd	1	Junction 7/8
Yarmouth Way / King St	1	Junction 7/8
N quay/Aldi	1	Junction 9/10
Brewery Street /Aldi	1	Junction 9/10
The Conge / Howards St N/Northern road	1	Junction 11
Howard Street South Car Park	1	Howard St Car Park
King Street Car Park	1	King Street Car Park
Norwich Rd / Caister By-Pass Roundabout	2	Junction 1
Yarmouth Rd / Caister By-Pass Roundabout	2	Junction 2
Marine Parade / North Dr	2	Junction 3
S Beach Parade / Kings Rd Roundabout	2	Junction 4
S Beach Parade / Harbord Cres (north junction)	2	Junction 5
S Beach Parade / Harbord Cres (south junction)	2	Junction 6
S Denes Rd / Salmon Rd	2	Junction 7
S Denes Rd / Suffling Rd	2	Junction 8
S Denes Rd / Main Cross Rd	2	Junction 9
S Denes Rd / Swanston's Rd	2	Junction 10
South Beach Parade Car Park	2	South Beach Car Park
A12 (Rugby Club)	3	Junction 12
Pasteur Rd / Jones Way Roundabout	3	Junction 13
A12 / Beccles Rd	3	Junction 14
Beccles Rd / High Rd	3	Junction 15
Beccles Rd / Malthouse Ln / Alpha Rd	3	Junction 16
William Admas Way / Suffolk Rd	3	Junction 17
Southtown Rd / Boundary Rd	3	Junction 18
Southtown Rd / Tollgate Rd	3	Junction 19
Southtown Rd / Gordon Rd	3	Junction 20
Pasteur Road/GC Way road (Pasta Foods/API Capacitors)	3	Junction 21
Beccles Rd / New Rd Roundabout	3	Junction 22
Beccles Rd / Church Ln / Long Ln	3	Junction 23
A12 / Links Rd / Beaufort Way Roundabout	3	Junction 24
A12 / Brasenose Ave / Bridge Rd	3	Junction 25
A12 / Victoria Rd Roundabout	3	Junction 26
Lidl Car Park	3	Lidl Car Park
James Paget University Hospital	3	James Paget Hospital



Figure 3-5 Commissioned MCC Site Locations



### 3.5 Observed Traffic Flows

The observed traffic flow data from the ATC and MCC data was verified and cleaned as described in Section 4 of this report. This process provided traffic flows which were suited to the calibration and validation of the base year SATURN traffic model. Figures 3-5, 3-6 and 3-7 below show the observed traffic flows for significant links in the highway network.

Figure 3-6 AM Peak Hour (08:00 – 09:00) Observed Traffic Flows (Vehicles)



Figure 3-7 Inter Peak Average Hour (10:00 – 15:30) Observed Traffic Flows (Vehicles)



Figure 3-8 PM Peak Hour (16:30 – 17:30) Observed Traffic Flows (Vehicles)



### 3.6 Queue Measurements

In order to assess the congestion within the study area, some queue measurements have been undertaken in some locations along with the commissioned MCCs. The data was gathered at the same hours and same date that the traffic counts were conducted. In addition, queue surveys from the previous Bridge Study, and from AECOM were also available.

There are inconsistencies in the way the queue data was collected, for example some have been measured using meters, whilst others counted the number of cars in the queue. Also, some junction queues were measured in 15 minute intervals and others in 5 minute intervals. As a result of this, the whole data set needed to be processed into the same units in order to compare and use the data for validation purposes.

The site locations are listed in Table 3-7 and shown in Figure 3-9.

Table 3-7 Commissioned Queue Measurement Locations

Location	Surveyed Area	ID Junction	Date	Source
Euston Rd / North Dr Roundabout	1	Junction 1	05/10/2016	Mouchel
St Nicholas Rd / Nelson Rd	1	Junction 4	05/10/2016	Mouchel
Alexandra Rd / Trafalgar Rd	1	Junction 7/8	05/10/2016	Mouchel
Yarmouth Way / King St	1	Junction 7/8	05/10/2016	Mouchel
S Beach Parade / Kings Rd Roundabout	2	Junction 4	05/10/2016	Mouchel
Pasteur Rd / Jones Way Roundabout	3	Junction 13	05/10/2016	Mouchel
A12 / Beccles Rd	3	Junction 14	05/10/2016	Mouchel
Beccles Rd / High Rd	3	Junction 15	05/10/2016	Mouchel
Southtown Rd / Boundary Rd	3	Junction 18	05/10/2016	Mouchel
Southtown Rd / Gordon Rd	3	Junction 20	05/10/2016	Mouchel
Hall Quay/North Quay/Haven Bridge		2	15/10/2015	Bridge First Study
South Quay/Yarmouth Way		3	15/10/2015	Bridge First Study
Acle New Road/NQuay/Fuller's Hill Roundabout		8	15/10/2015	Bridge First Study
Mill Road/Bridge Road/Southtown Road/Pasteur Road		1A	15/10/2015	Bridge First Study
Southtown Road/Station Road/Matalan		1B		Bridge First Study
A47 Acle New Road/A12/A149/Runham Road		Site 1	25/06/2015	AECOM
A149 Acle New Road/Great Yarmouth Station		Site 2	25/06/2015	AECOM
A149 N Quay/A149 Acle New Road/Fuller's Hill		Site 3	25/06/2015	AECOM
A1243 Bridge Road/A1423 S Quay/B1141 N Quay		Site 4	25/06/2015	AECOM
A1243 Bridge Road/A1243 Pasteur Road/Mill Road/Southtown Road		Site 5	25/06/2015	AECOM
A1243 Bridge Road/A1243 Pasteur Road/Mill Road/Southtown Road		Site 6	25/06/2015	AECOM
Southtown Road/Beccles Road/William Adams Way		Site 7	25/06/2015	AECOM
A12/William Adams Way		Site 8	25/06/2015	AECOM

Figure 3-9 Queue Measurement Site Locations



The busiest queues by length in metres for each of the surveyed junctions are given in Table 3-8 below.

Table 3-8 Queue Lengths (metres)

Location	AM Peak Period (m)	Inter Peak Period (m)	PM Peak Period (m)
Euston Rd / North Dr Roundabout	5	10	5
St Nicholas Rd / Nelson Rd	37	31	60
Alexandra Rd / Trafalgar Rd	64	27	43
Yarmouth Way / King St	5	5	10
S Beach Parade / Kings Rd Roundabout	10	15	10
Pasteur Rd / Jones Way Roundabout	17	42	45
A12 / Beccles Rd	62	52	57
Beccles Rd / High Rd	62	58	62

Location	AM Peak Period (m)	Inter Peak Period (m)	PM Peak Period (m)
Southtown Rd / Boundary Rd	79	Not Available	53
Southtown Rd / Gordon Rd	39	Not Available	45
Hall Quay/North Quay/Haven Bridge	150	143	128
South Quay/Yarmouth Way	155	138	125
Acle New Road/NQuay/Fuller's Hill Roundabout	140	135	140
Mill Road/Bridge Road/Southtown Road/Pasteur Road	155	140	150
Southtown Road/Station Road/Matalan	120	110	133
A47 Acle New Road/A12/A149/Runham Road	108	99	108
A149 Acle New Road/Great Yarmouth Station	84	108	123
A149 N Quay/A149 Acle New Road/Fuller's Hill	66	87	132
A1243 Bridge Road/A1423 S Quay/B1141 N Quay	108	114	108
A1243 Bridge Road/A1243 Pasteur Road/Mill Road/Southtown Road	144	135	138
A1243 Bridge Road/A1243 Pasteur Road/Mill Road/Southtown Road	135	135	126
Southtown Road/Beccles Road/William Adams Way	105	81	84
A12/William Adams Way	84	69	66

The relative observed queue sizes for each time period can be seen in Figure 3-10, 3-11 and 3-12 below.

Figure 3-10 AM Peak Queue Sizes

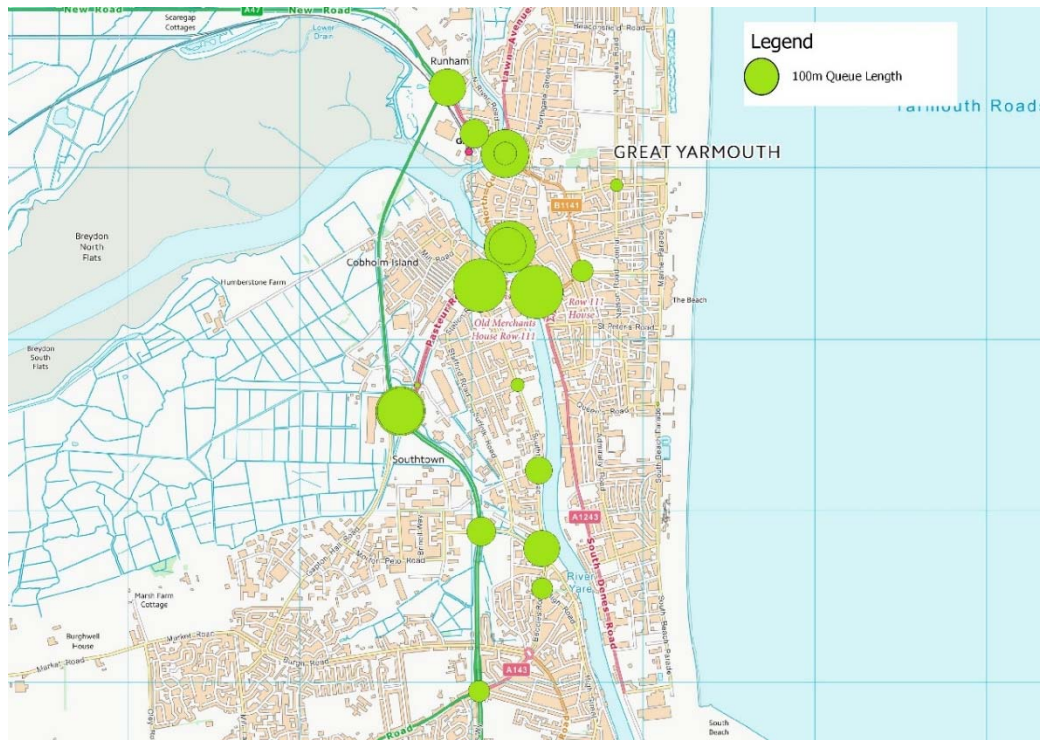


Figure 3-11 Inter Peak Queue Sizes

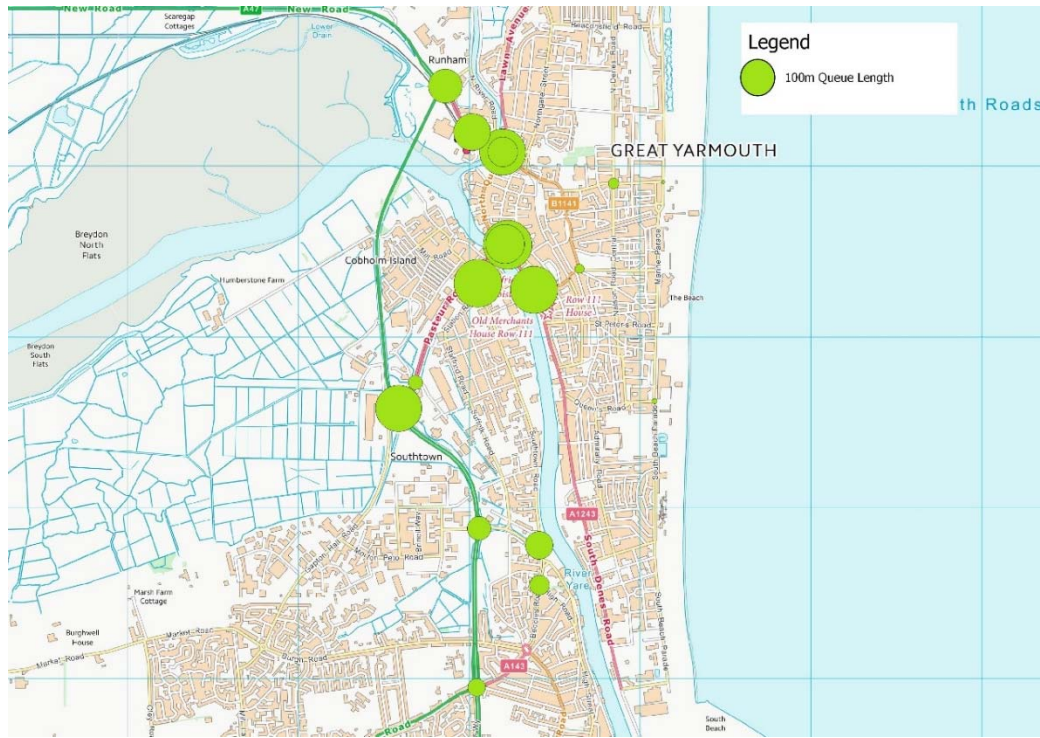


Figure 3-12 PM Peak Queue Sizes



These statistics and diagrams show that significant queuing of over 100m in length can be seen at the intersections on either side of the two bridges and in adjacent junctions on the A12, Acle New Road and South Quay. Queuing is significantly lower away from this area



## 4 Data Verification and Cleansing

### 4.1 Introduction

Before using collected traffic data, the data has analysed to establish its reliability. This section outlines the verification checks and cleaning processes applied to the new ATC, MCC and RSI data. The data sets are ‘cleaned’ and any data for which there is insufficient confidence is removed. For the ATCs, checking includes constructing flow profiles, comparing directionality of flows against logical movements and removing outliers. For the RSIs, purpose splits will be considered and illogical trip movements are removed.

### 4.2 ATCs Comparison

After processing the information from the surveys conducted at Great Yarmouth by NCC, AECOM and Mouchel, some differences were observed when comparing the two last sources of traffic counts.

The comparison between the ATCs carried out by AECOM on the north of Great Yarmouth town centre and the MCCs carried out by Mouchel show important differences. For instance, an example of the observed differences is shown below:

- Lawn Ave/North Quay. 1002 cars were counted by Mouchel and 589 by AECOM in South bound during the morning peak.

### 4.3 Data Verification

For the MCCs conducted with RSI sites, a check on the proportions of vehicle class splits is undertaken. Over the nine sites surveyed, the vast majority of trips were made by cars. The totalled vehicle proportions over all the MCC sites is shown in Table 4-1.

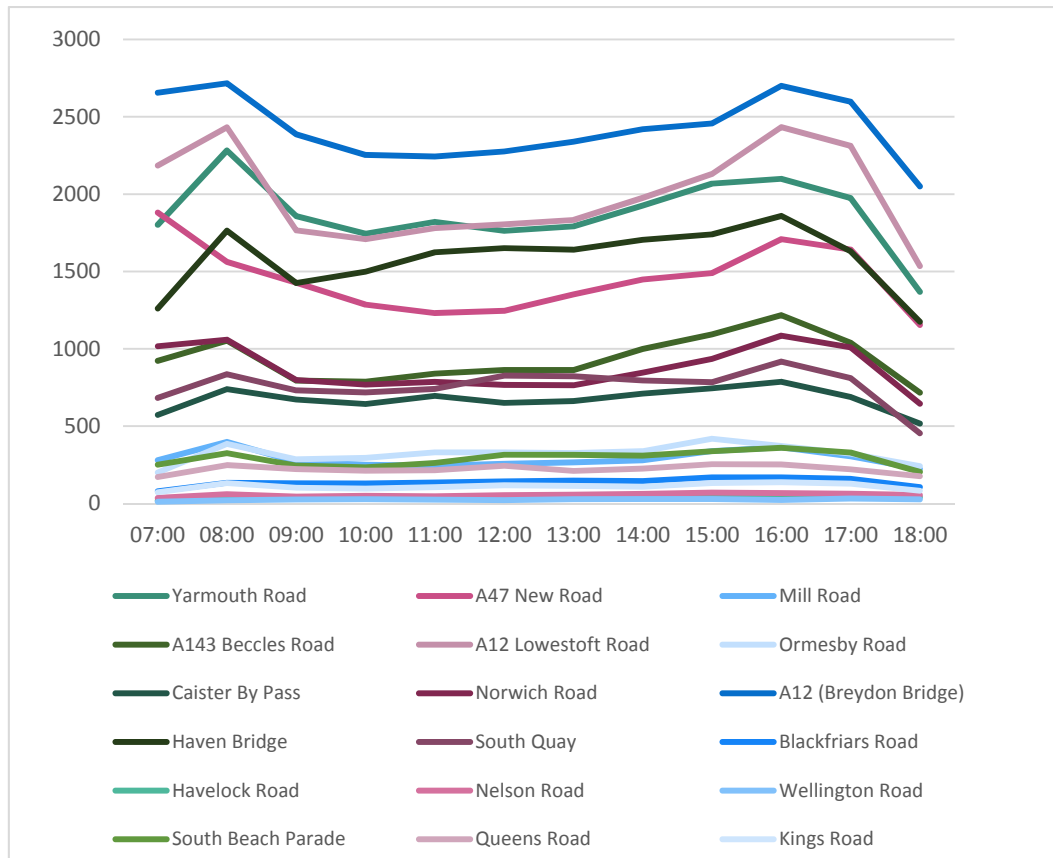
*Table 4-1 Vehicle Class Proportions for MCC Sites*

Vehicle Type	Trips	Proportions
Motorcycle & Pedal Cycle	1215	1%
Cars	112499	81%
LGV	19659	14%
OGV1	2757	2%
OGV2	1723	1%
PSV	1358	1%

In order to use the ATC data from the various sites around Great Yarmouth, the average weekday was calculated from survey information from Monday – Friday with any outlier values removed. The flow profiles from the ATC data were checked and broadly align with the expected peak times (08:00-09:00 in the AM and 16:00-17:00

in the PM) with the AM peak having a sharper peak than the PM. The ATC flow profiles are given in Figure 4-1.

Figure 4-1 Average Daily Flow Profiles at ATC Sites



Some of the sites demonstrate similar flows in both directions, whilst other sites show a distinct AM peak in one direction and a distinct PM peak in the other.

For the four RSI sites that are being used for matrix development, their purpose splits are compared against National Travel Survey (NTS) data. To gather a representative sample from the NTS data set for comparison, the data was filtered by the following constraints:

- Households for Norfolk and Suffolk up to medium urban category (< 250k population) are included to increase sample size;
- Trips from years 2012 – 2014 are included in the sample;
- Trips are aggregated into 5 categories by home based/ non-home based; commute, business and other.

The results of this comparison, shown in Table 4-2, demonstrate that the RSI data overall shows similar patterns of purpose split distributions as NTS data for . Although the proportions of home based commute and home based other are quite different to NTS, this is to be expected considering the land use of the area on the peninsula which is heavily industrial. Home based other trips simply aren't attracted to this specific area due to the land use.

Table 4-2 RSI and NTS Car Purpose Splits

Purpose	NTS	RSI
Home Based Commute	19%	35%
Home Based Business	4%	4%
Home Based Other	61%	39%
Non Home Based Business	3%	7%
Non Home Based Other	14%	15%

#### 4.4 RSI Data Expansion

As the RSI data only represents a sample of the actual traffic flow, the data collected in these surveys will be expanded to give a realistic representation of traffic flow. This will be done using the relevant MCC and ATC data to represent an average weekday, accounting for any atypical traffic conditions on the survey day.

#### 4.5 RSI Data Cleansing

RSI data that is to be used for matrix development has been cleaned based on two criteria:

- Logical/ illogical movement; and
- Valid origin/ destination address

A movement is deemed logical if it is feasible for the vehicle to have passed through the RSI site from the stated origin to destination. This is determined by the survey company originally and is used as part of the criteria as to whether a trip is valid.

For the four sites being used for matrix development, 2320 records were provided by the survey company. Of these:

- 1772 were classed as logical;
- 361 were classed as illogical;
- 138 were classed as 'reversed' and
- 49 were classed as void.

When Mouchel received the raw data, a different method was applied to isolate illogical trips by using sectorisation. This involved grouping trip origins/ destinations into sectors based on location and eliminating entries whose sector to sector movement would not logically pass through the RSI location.

Where trips were seen to be illogical in the direction recorded, but made sense in reverse, these trips were reversed and classed as logical trips.

Any addresses that had been flagged as void for incomplete addresses were kept as void.

After this processing, the 2320 trips were reclassified as:

- 1802 logical;
- 469 illogical; and
- The original 49 void trips remained void.

## 5 Summary and Conclusions

### 5.1 Existing Data

Existing traffic data in the Great Yarmouth study area has been collated and compiled into a repository of information related to traffic flow volumes. This information has been reviewed and offers sufficient coverage for the purposes of developing a traffic model.

Trafficmaster data has been downloaded from the DfT for journey time validation. This presents information on travel times and levels of congestion based on a sample of vehicles travelling within the general traffic fleet. This data will be used to develop travel speeds both to verify the network development and to provide a source of observed travel time data to calibrate against. Details of this data are not included within this document but use will be identified within the LMVR.

### 5.2 New Data

Key gaps in data availability have been resolved by the additional collection of new information. The additional data collection is has been focussed on Great Yarmouth town centre and peninsula, as well as Southtown, Gorleston and Bradwell.

The data collected includes RSIs that have been undertaken in key locations to assist in matrix development, as well as MCC and ATC data that has also been collected to support model calibration and validation.

## Appendix A – RSI Headline Results

RSI Survey Summary	Site Location			
	Site 1 - South Quay (10/11/2016)	Site 2 - South Beach Parade (10/11/2016)	Site 3 - A12 Breydon Bridge (23/11/2016)	Site 4 - Haven Bridge (23/11/2016)
MCC Total Count	4868	1637	11429	9442
MCC HGV Count	322	46	316	407
Number of Face to Face Interviews (Total)	622	725	0	0
Number of Face to Face Interviews (HGVs)	17	14	0	0
Number of Postcards Distributed Total	0	0	3265	888
Number of Postcards Returned Total	0	0	806	167
Number of Postcards Returned HGVs	0	0	3	0
Number of Interviews After Removing Void Entries Total	603	712	792	164
Number of Interviews After Removing Void Entries HGVs	17	12	3	0
Sample Rate Total	<b>12%</b>	<b>43%</b>	<b>7%</b>	<b>2%</b>
Sample Rae HGVs	<b>5%</b>	<b>26%</b>	<b>1%</b>	<b>0%</b>

Site	AM Peak				IP Average				PM Peak		
	Car	LGV	HGV		Car	LGV	HGV		Car	LGV	HGV
AECOM ATC A8 NB	108.2494	11.6301	2.245504		159.6827	21.54449	3.666787		240.0743	24.21802	3.179931
AECOM ATC A8 SB	307.9039	30.06469	5.888533		169.5647	20.85667	4.734464		171.9714	14.91082	1.332033
AECOM ATC A9 NB	15.28389	2.547315	1.69821		27.79161	5.210927	0.771989		48.68085	3.319149	0
AECOM ATC A9 SB	95.38462	4.769231	0		58.17082	5.027108	0.718158		46.56782	2.822292	0
AECOM ATC A10 NB	137.5456	21.16086	5.626866		221.9295	25.24421	4.866645		371.7178	31.16197	5.564638
AECOM ATC A10 SB	354.1914	50.59877	13.42416		185.0431	20.94828	5.657974		173.0884	18.10074	4.525186

Site	Site For Comparison	AM							IP							PM						
		Car	LGV	HGV	Total	Car %	LGV %	HGV %	Car	LGV	HGV	Total	Car %	LGV %	HGV %	Car	LGV	HGV	Total	Car %	LGV %	HGV %
AECOM ATC A8 NB	Junction 4 (Nelson Road North) NB	120.8269	12.9814	2.50641	136.3147	89%	10%	2%	150.9837	20.37082	3.467033	174.8216	86%	12%	2%	227.6739	22.9671	3.01568	253.6566	90%	9%	1%
AECOM ATC A8 SB	Junction 4 (Nelson Road North) SB	296.5752	28.95852	5.671875	331.2055	90%	9%	2%	162.3674	19.97139	4.533506	186.8723	87%	11%	2%	172.7525	14.97854	1.338083	189.0692	91%	8%	1%
AECOM ATC A9 NB	Junction 3 (Wellesley Road) NB	17.97425	2.995709	1.997139	22.9671	78%	13%	9%	28.7588	5.392276	0.798856	34.94993	82%	15%	2%	43.93706	2.995709	0	46.93277	94%	6%	0%
AECOM ATC A9 SB	Junction 3 (Wellesley Road) SB	79.88556	3.994278	0	83.87984	95%	5%	0%	48.53048	4.193992	0.599142	53.32361	91%	8%	1%	32.9528	1.997139	0	34.94993	94%	6%	0%
AECOM ATC A10 NB	Junction 1 (Marine Parade north of jtn) NB	142.7954	21.96853	5.841632	170.6056	84%	13%	3%	201.9108	22.9671	4.427657	229.3055	88%	10%	2%	333.5222	27.95995	4.992848	366.475	91%	8%	1%
AECOM ATC A10 SB	Junction 1 (Marine Parade north of jtn) SB	342.5094	48.92991	12.9814	404.4207	85%	12%	3%	190.5271	21.5691	5.825655	217.9218	87%	10%	3%	152.7811	15.97711	3.994278	172.7525	88%	9%	2%



Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean						
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday								
00:00											24	14	25	16	17	17	18	13	20	18	4.116	0	164	9	18	AM	122
01:00											6	17	10	17	8	13	10	14	10	12	3.841	0	105	9	12	IP	184.8939
02:00											4	3	4	4	6	9	7	11	5	6	2.667	0	53	9	6	PM	267
03:00											6	10	9	12	3	6	5	7	6	7	2.759	0	64	9	7		
04:00											9	8	14	16	12	16	13	11	20	13	3.768	0	119	9	13		
05:00											12	14	13	21	10	14	11	17	12	14	3.383	1	103	8	13		
06:00											29	27	28	42	29	24	21	34	29	29	5.995	1	221	8	28		
07:00											75	73	64	63	72	70	90	75	77	73	7.934	1	569	8	71		
08:00											122	126	138	125	123	114	114	115	158	126	14.155	1	977	8	122		
09:00											134	131	125	151	129	125	148	126	137	134	9.708	0	1206	9	134		
10:00											175	168	148	157	162	176	161	179	144	163	12.349	0	1470	9	163		
11:00											173	166	173	162	173	154	170	155	198	169	13.077	1	1326	8	166		
12:00											202	190	165	178	185	174	207	179	192	186	13.452	0	1672	9	186		
13:00											175	186	182	173	182	181	184	165	213	182	13.229	1	1428	8	179		
14:00											215	233	219	237	207	190	224	229	245	222	16.714	0	1999	9	222		
15:00											111	105	125	80	97	84	107	102	102	101	13.575	0	913	9	101	198	
15:30											101	85	87	101	88	103	88	110	102	96	9.089	0	865	9	96		
16:00											98	99	97	122	106	117	112	109	139	111	13.601	1	860	8	108	233	
16:30											109	127	131	142	134	114	118	127	125	125	10.244	0	1127	9	125		
17:00											149	142	146	143	151	135	133	139	164	145	9.394	1	1138	8	142	257	
17:30											115	114	113	109	115	92	125	113	111	112	8.681	1	915	8	114		
18:00											169	157	153	182	150	164	157	186	154	164	12.972	0	1472	9	164		
19:00											125	120	149	164	118	122	98	129	128	128	18.864	0	1153	9	128		
20:00											77	87	86	118	86	68	98	100	97	91	14.515	0	817	9	91		
21:00											54	78	79	88	71	58	68	84	77	73	11.391	0	657	9	73		
22:00											54	45	57	74	50	48	54	57	73	57	10.228	0	512	9	57		
23:00											27	18	28	42	30	21	34	26	39	29	7.844	0	265	9	29		

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean						
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday								
00:00	12	15	12	12	19						18	19	18	16	15	21	16	17	19	16	2.898	0	229	14	16	AM	343.8571
01:00	6	11	11	8	11						6	10	5	7	9	7	5	10	12	8	2.441	0	118	14	8	IP	195.1558
02:00	0	0	3	2	2						5	2	2	2	5	2	5	3	5	3	1.729	0	38	14	3	PM	188
03:00	7	11	8	4	5						5	3	6	9	4	6	7	6	6	6	2.119	1	76	13	6		
04:00	18	15	14	19	19						23	13	16	22	18	15	22	18	26	18	3.756	1	232	13	18		
05:00	14	19	31	18	16						23	20	23	20	26	19	22	25	23	21	4.343	1	268	13	21		
06:00	53	66	59	55	60						46	52	55	54	50	62	49	61	48	55	5.897	0	770	14	55		
07:00	192	206	188	169	164						168	180	173	160	167	178	165	163	163	174	13.376	1	2230	13	172		
08:00	360	367	346	358	337						365	313	355	340	338	377	318	338	302	344	21.792	0	4814	14	344		
09:00	248	268	254	272	261						273	260	235	242	218	224	241	192	227	244	23.246	1	3223	13	248		
10:00	198	339	237	208	216						194	180	200	228	232	202	167	169	231	214	42.415	1	2662	13	205		
11:00	209	236	204	202	207						211	202	176	200	186	199	210	179	193	201	14.987	1	2578	13	198		
12:00	184	198	196	182	198						185	194	192	182	198	189	195	179	179	189	7.334	0	2651	14	189		
13:00	172	223	208	188	180						177	175	182	182	185	152	193	173	185	184	16.731	1	2352	13	181		
14:00	207	212	186	178	189						199	169	168	183	191	176	160	174	177	184	14.986	0	2569	14	184		
15:00	110	115	114	112	127						108	105	109	121	116	120	123	122	129	117	7.356	0	1631	14	117	228	
15:30	111	115	107	120	131						100	117	105	110	123	109	114	106	111	113	8.059	1	1448	13	111		
16:00	90	106	142	99	138						117	96	92	117	93	106	102	108	94	107	16.356	1	1358	13	104	207	
16:30	113	126	92	93	132						74	94	112	117	101	94	101	83	97	102	16.179	0	1429	14	102		
17:00	80	92	95	91	93						75	79	78	85	97	79	88	78	96	86	7.843	0	1206	14	86	167	
17:30	86	96	92	93	77						94	85	76	71	75	76	60	66	80	81	10.974	0	1127	14	81		
18:00	125	161	132	137	146						128	122	150	167	145	131	141	133	146	140	13.193	1	1797	13	138		
19:00	111	123	114	117	110						100	114	101	134	107	119	97	103	145	114	13.373	1	1450	13	112		
20:00	64	90	92	92	72						79	91	88	86	61	66	80	77	84	80	10.784	0	1122	14	80		
21:00	54	59	63	52	74						43	64	57	91	56	59	77	53	68	62	12.203	1	779	13	60		
22:00	43	43	41	39	52						44	43	53	67	47	40	43	34	67	47	9.813	2	522	12	44		
23:00	27	22	17	13	33						12	13	22	34	29	14	18	26	28	22	7.636	0	308	14	22		

Start Hour	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016							13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday							Friday
00:00	3	2	9	4	4	4	6	0	1	2	4	4	3	4	3	10	1	3	2	4	2.499	2	50	17	3
01:00	6	2	4	0	2	3	2	1	2	0	3	2	1	3	1	3	3	3	2	2	1.408	1	37	18	2
02:00	2	4	3	1	1	0	0	1	2	3	2	3	1	3	0	0	0	1	1	1	1.264	0	28	19	1
03:00	2	1	1	2	1	0	1	1	2	1	1	1	1	1	0	1	1	1	3	1	0.688	1	19	18	1
04:00	2	3	1	0	2	1	1	0	0	3	4	0	1	3	1	4	2	2	0	2	1.346	0	30	19	2
05:00	0	3	1	1	0	0	2	4	1	3	3	1	1	1	0	4	2	0	1	1	1.349	0	28	19	1
06:00	3	4	5	1	4	3	5	5	0	4	2	3	3	2	5	2	3	6	6	3	1.645	1	66	18	4
07:00	9	10	13	8	12	15	15	12	16	12	13	18	15	15	8	12	17	20	15	13	3.288	1	235	18	13
08:00	19	20	17	10	17	24	20	16	14	20	29	23	26	22	17	15	20	19	23	20	4.452	2	332	17	20
09:00	25	26	25	32	35	27	22	21	26	28	24	39	25	35	34	38	31	24	29	29	5.394	0	546	19	29
10:00	26	20	29	32	28	31	34	33	12	34	22	30	34	38	36	24	37	29	35	30	6.583	1	552	18	31
11:00	32	28	35	28	35	33	32	33	4	30	36	38	30	50	34	30	44	33	29	32	8.756	2	560	17	33
12:00	35	25	36	41	41	29	32	46	32	36	36	38	38	42	47	25	40	37	37	36	6.022	0	693	19	36
13:00	33	36	38	55	25	33	26	37	30	44	42	28	33	44	37	36	31	33	38	36	7.132	1	624	18	35
14:00	32	31	32	48	27	33	29	33	26	34	26	37	31	29	45	38	45	33	37	34	6.360	1	598	18	33
15:00	26	14	13	18	19	15	13	14	15	26	26	20	21	16	17	15	13	16	21	18	4.454	0	338	19	18
15:30	12	18	14	12	12	20	15	31	15	13	20	22	15	24	20	17	25	28	22	19	5.608	1	324	18	18
16:00	29	22	26	13	12	22	18	25	27	35	23	19	16	25	24	25	13	20	18	22	5.926	1	377	18	21
16:30	32	34	23	18	19	23	16	27	21	33	20	21	29	26	25	21	14	21	23	23	5.571	0	446	19	23
17:00	41	36	38	43	24	24	30	19	31	20	36	31	26	23	15	22	31	23	29	29	7.763	0	542	19	29
17:30	20	38	25	28	32	32	15	21	23	20	20	18	21	24	28	26	25	20	21	24	5.632	1	419	18	23
18:00	48	46	45	58	34	38	41	40	67	49	36	49	59	38	39	56	51	63	45	47	9.524	1	835	18	46
19:00	35	31	35	42	33	30	29	35	26	48	26	34	32	34	43	27	37	34	30	34	5.772	1	593	18	33
20:00	19	26	18	24	28	22	24	16	16	27	21	20	27	24	25	15	31	24	23	23	4.425	0	430	19	23
21:00	22	21	19	23	21	14	16	19	14	25	15	21	19	23	18	19	17	20	19	19	3.066	0	365	19	19
22:00	9	14	9	15	19	10	16	13	9	24	13	13	9	19	14	12	19	12	24	14	4.740	2	225	17	13
23:00	1	5	8	10	11	4	4	6	5	13	7	5	8	13	8	6	4	7	13	7	3.429	0	138	19	7

AM 19.52941  
IP 33.77453  
PM 52

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	2	6	6	4	2						2	4	1	2	2	2	3	1	2	3	1.626	0	39	14	3
01:00	2	2	1	1	2						1	1	2	1	3	3	2	3	0	2	0.914	0	24	14	2
02:00	1	1	1	1	0						4	1	1	1	0	1	0	0	0	1	1.027	1	8	13	1
03:00	3	4	1	0	1						0	3	2	2	1	1	0	0	1	1	1.277	1	15	13	1
04:00	0	1	1	2	6						1	1	3	5	2	4	4	1	2	2	1.781	1	27	13	2
05:00	5	5	4	9	4						4	8	2	9	4	7	5	5	11	6	2.538	1	71	13	5
06:00	17	28	33	27	27						16	23	22	22	13	18	18	21	20	22	5.452	1	272	13	21
07:00	54	55	58	55	47						40	43	46	46	44	44	42	51	42	48	5.839	0	667	14	48
08:00	131	114	145	69	118						86	101	101	109	87	94	90	106	96	103	19.504	1	1302	13	100
09:00	99	88	95	84	84						66	68	67	76	71	66	62	67	95	78	12.797	0	1088	14	78
10:00	69	90	75	77	81						71	73	60	67	71	52	85	68	88	73	10.507	1	975	13	75
11:00	75	106	62	81	72						66	72	55	74	76	53	69	67	73	72	12.660	1	895	13	69
12:00	61	68	99	65	70						62	57	42	60	51	47	66	53	54	61	13.596	1	756	13	58
13:00	63	62	70	59	58						67	57	63	48	58	40	53	56	47	57	8.126	1	761	13	59
14:00	60	62	62	51	59						67	49	65	62	52	48	52	64	66	59	6.688	0	819	14	59
15:00	31	38	45	33	32						24	31	32	31	36	20	30	36	36	33	5.984	2	390	12	33
15:30	33	44	28	29	34						27	24	21	36	27	17	29	26	24	29	6.723	1	355	13	27
16:00	30	34	33	38	29						17	25	24	27	33	17	40	23	24	28	7.037	0	394	14	28
16:30	21	33	24	30	20						30	25	23	22	30	18	25	20	28	25	4.615	0	349	14	25
17:00	33	29	19	26	25						22	21	21	29	24	24	25	27	26	25	3.731	1	318	13	24
17:30	11	26	19	17	18						28	21	27	25	16	25	18	22	20	21	4.859	1	282	13	22
18:00	42	36	53	34	30						26	30	38	36	46	31	29	44	39	37	7.569	1	461	13	35
19:00	35	39	32	47	24						21	38	30	23	27	30	30	37	24	31	7.350	1	390	13	30
20:00	32	22	24	39	27						27	21	43	36	21	22	29	36	25	29	7.220	0	404	14	29
21:00	28	40	19	20	22						12	19	14	20	20	10	14	14	24	20	7.630	1	236	13	18
22:00	7	24	14	14	7						10	13	19	16	12	8	14	12	8	13	4.811	1	154	13	12
23:00	3	13	5	1	6						9	4	3	5	6	2	5	3	10	5	3.319	1	62	13	5

AM 100.1538  
IP 63.91608  
PM 49

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean					
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
00:00											18	11	14	15	23	11	11	12	18	18	15	4.177	0	133	9	15
01:00											6	10	9	10	5	10	9	8	14	14	9	2.598	0	81	9	9
02:00											1	7	7	8	2	3	3	3	7	7	5	2.651	0	41	9	5
03:00											7	7	2	7	4	5	4	6	4	4	5	1.764	0	46	9	5
04:00											3	5	2	7	5	4	4	10	3	3	5	2.438	1	33	8	4
05:00											13	15	8	11	9	11	15	6	13	13	11	3.114	0	101	9	11
06:00											30	35	37	35	37	36	31	35	37	37	35	2.587	0	313	9	35
07:00											72	71	62	72	94	79	68	76	84	84	75	9.421	0	678	9	75
08:00											172	165	165	180	151	151	169	168	158	158	164	9.592	0	1479	9	164
09:00											160	145	153	162	194	148	134	160	162	162	158	16.599	1	1224	8	153
10:00											215	199	180	207	224	156	210	162	207	207	196	23.985	0	1760	9	196
11:00											233	249	211	251	229	176	244	212	195	195	222	25.714	0	2000	9	222
12:00											253	285	253	255	274	298	269	228	243	243	262	21.639	0	2358	9	262
13:00											252	224	232	277	228	231	243	242	277	277	245	20.015	0	2206	9	245
14:00											309	318	281	329	308	289	297	295	321	321	305	15.896	0	2747	9	305
15:00											140	133	179	162	162	141	181	148	159	159	156	16.989	0	1405	9	156
15:30											139	146	143	172	127	159	163	164	161	161	153	14.586	0	1374	9	153
16:00											138	180	186	175	177	160	194	174	161	161	172	16.591	1	1407	8	176
16:30											227	213	208	173	208	167	227	198	164	164	198	24.617	0	1785	9	198
17:00											197	240	220	204	231	210	207	211	171	171	210	19.928	0	1891	9	210
17:30											142	172	181	145	154	134	145	163	116	116	150	19.861	0	1352	9	150
18:00											184	211	197	234	193	199	195	218	198	198	203	15.213	1	1595	8	199
19:00											146	165	148	188	145	125	175	177	174	174	160	20.335	0	1443	9	160
20:00											107	126	105	147	122	115	151	120	137	137	126	16.433	0	1130	9	126
21:00											76	91	86	129	100	78	119	97	125	125	100	19.915	0	901	9	100
22:00											56	66	85	110	66	83	69	68	119	119	80	21.470	0	722	9	80
23:00											43	27	35	60	46	48	45	52	64	64	47	11.446	0	420	9	47

AM 164.3333  
IP 252.0404  
PM 408

Start Hour	Date																	Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean		
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016							12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday							Thursday	Friday
00:00	13	10	7	6	17						10	8	12	11	17	10	11	14	7	11	3.452	0	153	14	11
01:00	6	3	3	10	4						6	9	4	11	4	7	11	6	7	7	2.822	0	91	14	7
02:00	4	1	4	1	5						1	2	4	4	1	3	2	5	4	3	1.542	0	41	14	3
03:00	1	3	0	0	4						1	1	1	1	3	0	0	1	4	1	1.453	0	20	14	1
04:00	2	6	4	3	9						3	4	5	10	6	5	8	5	3	5	2.392	1	63	13	5
05:00	9	8	11	9	10						17	11	9	9	11	15	20	8	18	12	4.003	1	145	13	11
06:00	67	48	44	45	48						53	63	52	68	68	64	53	65	81	59	10.981	1	738	13	57
07:00	218	206	220	217	217						258	266	242	248	252	262	262	255	250	241	20.738	0	3373	14	241
08:00	367	372	370	404	359						428	456	453	406	461	465	448	464	402	418	40.135	0	5855	14	418
09:00	236	223	237	218	228						251	278	233	264	300	261	281	267	258	253	24.368	0	3535	14	253
10:00	178	373	187	216	209						236	213	204	218	287	264	271	210	261	238	50.698	1	2954	13	227
11:00	191	221	193	187	178						214	224	237	231	248	212	265	258	254	222	28.122	0	3113	14	222
12:00	167	220	205	194	213						224	192	240	231	219	218	231	223	205	213	19.123	1	2815	13	217
13:00	155	207	156	168	159						228	226	226	177	194	212	212	196	208	195	26.849	0	2724	14	195
14:00	164	174	162	167	162						182	206	237	204	217	179	193	204	194	189	22.886	1	2408	13	185
15:00	90	115	133	115	124						104	132	130	119	111	94	126	131	130	118	14.147	0	1654	14	118
15:30	93	130	119	146	121						142	142	152	131	143	117	139	143	141	133	15.690	1	1766	13	136
16:00	83	107	82	90	120						87	107	108	104	118	74	104	110	101	100	14.075	0	1395	14	100
16:30	89	80	110	100	92						81	97	132	109	123	84	108	133	106	103	17.532	0	1444	14	103
17:00	76	70	79	92	95						94	106	113	113	90	76	86	105	101	93	13.982	0	1296	14	93
17:30	77	76	83	72	85						86	96	99	85	81	89	102	91	86	86	8.642	0	1208	14	86
18:00	123	162	146	140	140						123	170	164	178	181	159	179	187	186	160	22.163	0	2238	14	160
19:00	101	105	129	123	151						129	134	138	173	138	131	143	146	153	135	18.636	1	1721	13	132
20:00	58	73	71	77	83						66	87	80	118	106	73	106	96	85	84	16.994	0	1179	14	84
21:00	53	52	42	54	83						43	60	54	98	51	53	68	74	87	62	17.135	1	774	13	60
22:00	31	36	37	30	84						35	52	60	76	36	39	59	53	66	50	17.426	0	694	14	50
23:00	18	15	17	16	47						16	19	16	41	34	26	27	29	53	27	12.640	1	321	13	25

AM 418  
IP 211.6494  
PM 196

Start Hour	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016						
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	13	29	36	30	34	16	18	29	31	29	24	14	25	16	17	17	18	13	20	23	7.537	0	429	19	23
01:00	10	15	17	21	18	5	12	18	21	24	6	17	10	17	8	13	10	14	10	14	5.312	0	266	19	14
02:00	5	3	8	5	9	3	7	5	7	6	4	3	4	4	6	9	7	11	5	5	2.267	1	100	18	6
03:00	7	11	5	8	19	8	12	10	10	11	6	10	9	12	3	6	5	7	6	6	3.591	1	146	18	8
04:00	9	14	13	13	19	12	18	14	14	16	9	8	14	16	12	16	13	11	20	14	3.280	0	261	19	14
05:00	7	24	21	22	17	23	21	22	23	16	12	14	13	21	10	14	11	17	12	12	5.210	0	320	19	17
06:00	33	35	33	59	47	34	41	48	52	59	29	27	28	42	29	24	21	34	29	29	11.321	0	704	19	37
07:00	106	118	119	96	124	117	108	112	103	107	75	73	64	63	72	70	90	75	77	77	20.979	0	1769	19	93
08:00	202	214	221	176	193	197	213	179	177	204	122	126	138	125	123	114	114	115	158	158	39.570	0	3111	19	164
09:00	179	165	223	175	163	184	187	187	186	166	134	131	125	151	129	125	148	126	137	137	28.042	1	2798	18	155
10:00	239	216	224	241	171	230	216	224	236	207	175	240	148	157	162	176	161	179	144	144	34.654	0	3645	19	192
11:00	222	249	248	243	185	244	255	238	244	190	173	166	173	162	173	154	170	155	198	198	37.597	0	3842	19	202
12:00	256	269	286	274	223	280	271	255	264	213	202	190	165	178	185	174	207	179	192	192	42.173	0	4263	19	224
13:00	249	264	279	294	243	280	266	277	246	224	175	186	182	173	182	181	184	165	213	213	44.551	0	4263	19	224
14:00	316	315	335	355	258	303	344	303	341	230	215	233	219	237	207	190	224	229	245	245	54.188	0	5099	19	268
15:00	168	182	174	153	103	155	165	174	153	104	111	105	125	80	97	84	107	102	102	102	34.246	0	2444	19	129
15:30	145	163	139	156	130	144	153	202	172	96	101	85	87	101	88	103	88	110	102	102	34.413	1	2163	18	120
16:00	173	193	176	173	137	147	183	249	168	140	98	99	97	122	106	117	112	109	139	139	40.541	1	2489	18	138
16:30	239	247	245	227	139	213	207	160	182	129	109	127	131	142	134	114	118	127	125	125	49.361	0	3115	19	164
17:00	265	276	260	244	171	249	224	130	253	180	149	142	146	143	151	135	133	139	164	164	54.027	0	3554	19	187
17:30	165	180	190	180	134	183	230	104	182	115	115	114	113	109	115	92	125	113	111	111	39.232	1	2440	18	136
18:00	256	255	247	246	220	247	263	234	294	187	169	157	153	182	150	164	157	186	154	154	46.996	0	3921	19	206
19:00	176	202	202	227	136	140	164	216	197	133	125	120	149	164	118	122	98	129	128	128	38.030	0	2946	19	155
20:00	141	150	156	148	97	146	120	160	147	119	77	87	86	118	86	68	98	100	97	97	29.813	0	2201	19	116
21:00	124	123	123	117	78	122	108	123	110	98	54	78	79	88	71	58	68	84	77	77	24.114	0	1783	19	94
22:00	94	88	88	90	78	82	87	79	86	68	54	45	57	74	50	48	54	57	73	73	16.365	0	1352	19	71
23:00	35	43	47	42	58	41	50	42	67	48	27	18	28	42	30	21	34	26	39	39	12.424	1	671	18	37

Start Hour	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016						
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	12	15	12	12	19	13	14	16	16	22	18	19	18	16	15	21	16	17	19	16	2.964	0	310	19	16
01:00	6	11	11	8	11	4	13	11	12	14	6	10	5	7	9	7	5	10	12	9	2.990	0	172	19	9
02:00	0	0	3	2	2	3	10	8	1	1	5	2	2	2	5	2	5	3	5	3	2.594	1	51	18	3
03:00	7	11	8	4	5	3	8	5	9	9	5	3	6	9	4	6	7	6	6	6	2.216	1	110	18	6
04:00	18	15	14	19	19	16	26	14	26	27	23	13	16	22	18	15	22	18	26	19	4.607	0	367	19	19
05:00	14	19	31	18	16	23	33	28	23	25	23	20	23	20	26	19	22	25	23	23	4.773	1	398	18	22
06:00	53	66	59	55	60	54	70	76	73	88	46	52	55	54	50	62	49	61	48	60	10.911	1	1043	18	58
07:00	192	206	188	169	164	241	282	294	260	262	168	180	173	160	167	178	165	163	163	199	44.995	1	3481	18	193
08:00	360	367	346	358	337	392	440	471	484	408	365	313	355	340	338	377	318	338	302	369	50.412	2	6054	17	356
09:00	248	268	254	272	261	315	395	325	311	331	273	260	235	242	218	224	241	192	227	268	48.615	1	4697	18	261
10:00	198	339	237	208	216	224	245	258	249	237	194	180	200	228	232	202	167	169	231	222	38.721	1	3875	18	215
11:00	209	236	204	202	207	256	228	283	253	224	211	202	176	200	186	199	210	179	193	214	27.512	1	3775	18	210
12:00	184	198	196	182	198	227	239	228	247	215	185	194	192	182	198	189	195	179	179	200	20.750	1	3560	18	198
13:00	172	223	208	188	180	226	233	230	251	197	177	175	182	182	185	152	193	173	185	195	25.951	1	3461	18	192
14:00	207	212	186	178	189	267	230	235	234	198	199	169	168	183	191	176	160	174	177	196	28.155	1	3466	18	193
15:00	110	115	114	112	127	123	132	127	153	129	108	105	109	121	116	120	123	122	129	121	11.143	1	2142	18	119
15:30	111	115	107	120	131	158	127	146	126	118	100	117	105	110	123	109	114	106	111	119	14.427	1	2096	18	116
16:00	90	106	142	99	138	117	133	116	138	93	117	96	92	117	93	106	102	108	94	110	17.121	0	2097	19	110
16:30	113	126	92	93	132	125	117	104	124	112	74	94	112	117	101	94	101	83	97	106	15.749	1	1937	18	108
17:00	80	92	95	91	93	96	107	79	128	93	75	79	78	85	97	79	88	78	96	90	12.708	1	1581	18	88
17:30	86	96	92	93	77	96	92	87	118	91	94	85	76	71	75	76	60	66	80	85	13.223	1	1493	18	83
18:00	125	161	132	137	146	165	186	166	169	183	128	122	150	167	145	131	141	133	146	149	19.430	0	2833	19	149
19:00	111	123	114	117	110	140	152	156	143	119	100	114	101	134	107	119	97	103	145	121	18.346	0	2305	19	121
20:00	64	90	92	92	72	99	88	112	98	102	79	91	88	86	61	66	80	77	84	85	13.400	0	1621	19	85
21:00	54	59	63	52	74	62	73	86	70	93	43	64	57	91	56	59	77	53	68	66	13.650	0	1254	19	66
22:00	43	43	41	39	52	55	72	59	61	61	44	43	53	67	47	40	43	34	67	51	11.085	0	964	19	51
23:00	27	22	17	13	33	25	15	25	26	36	12	13	22	34	29	14	18	26	28	23	7.534	0	435	19	23

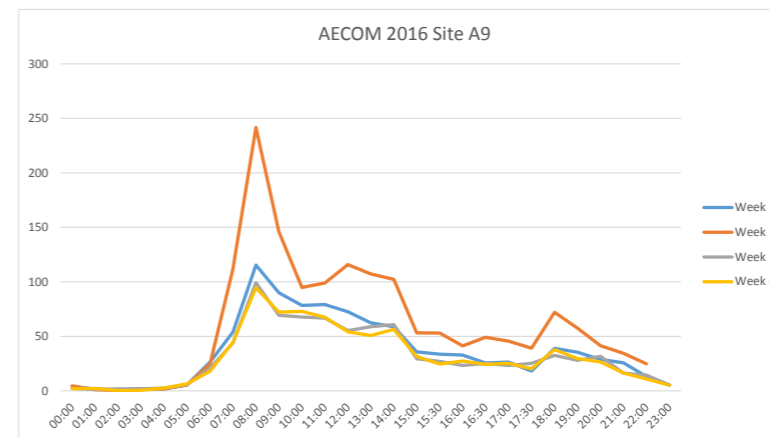


Start Hour	Date																				Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016							
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
00:00	3	2	9	4	4	4	6	0	1	2	4	4	3	4	3	10	1	3	2	<b>4</b>	2.499	2	50	17	<b>3</b>	
01:00	6	2	4	0	2	3	2	1	2	0	3	2	1	3	1	3	3	3	2	<b>2</b>	1.408	1	37	18	<b>2</b>	
02:00	2	4	3	1	1	0	0	1	2	3	2	3	1	3	0	0	0	1	1	<b>1</b>	1.264	0	28	19	<b>1</b>	
03:00	2	1	1	2	1	0	1	1	2	1	1	1	1	1	0	1	1	1	3	<b>1</b>	0.688	1	19	18	<b>1</b>	
04:00	2	3	1	0	2	1	1	0	0	3	4	0	1	3	1	4	2	2	0	<b>2</b>	1.346	0	30	19	<b>2</b>	
05:00	0	3	1	1	0	0	2	1	4	1	3	1	1	1	0	4	2	0	1	<b>1</b>	1.349	0	28	19	<b>1</b>	
06:00	3	4	5	1	4	3	5	5	0	4	2	3	3	2	5	2	3	6	6	<b>3</b>	1.645	1	66	18	<b>4</b>	
07:00	9	10	13	8	12	15	15	12	16	12	13	18	15	15	8	12	17	20	15	<b>13</b>	3.288	1	235	18	<b>13</b>	
08:00	19	20	17	10	17	24	20	16	14	20	29	23	26	22	17	15	20	19	23	<b>20</b>	4.452	2	332	17	<b>20</b>	
09:00	25	26	25	32	35	27	22	21	26	28	24	39	25	35	34	38	31	24	29	<b>29</b>	5.394	0	546	19	<b>29</b>	
10:00	26	20	29	32	28	31	34	33	12	34	22	30	34	38	36	24	37	29	35	<b>30</b>	6.583	1	552	18	<b>31</b>	
11:00	32	28	35	28	35	33	32	33	4	30	36	38	30	50	34	30	44	33	29	<b>32</b>	8.756	2	560	17	<b>33</b>	
12:00	35	25	36	41	41	29	32	46	32	36	36	38	38	42	47	25	40	37	37	<b>36</b>	6.022	0	693	19	<b>36</b>	
13:00	33	36	38	55	25	33	26	37	30	44	42	28	33	44	37	36	31	33	38	<b>36</b>	7.132	1	624	18	<b>35</b>	
14:00	32	31	32	48	27	33	29	33	26	34	26	37	31	29	45	38	45	33	37	<b>34</b>	6.360	1	598	18	<b>33</b>	
15:00	26	14	13	18	19	15	13	14	15	26	26	20	21	16	17	15	13	16	21	<b>18</b>	4.454	0	338	19	<b>18</b>	
15:30	12	18	14	12	12	20	15	31	15	13	20	22	15	24	20	17	25	28	22	<b>19</b>	5.608	1	324	18	<b>18</b>	
16:00	29	22	26	13	12	22	18	25	27	35	23	19	16	25	24	25	13	20	18	<b>22</b>	5.926	1	377	18	<b>21</b>	
16:30	32	34	23	18	19	23	16	27	21	33	20	21	29	26	25	21	14	21	23	<b>23</b>	5.571	0	446	19	<b>23</b>	
17:00	41	36	38	43	24	24	30	19	31	20	36	31	26	23	15	22	31	23	29	<b>29</b>	7.763	0	542	19	<b>29</b>	
17:30	20	38	25	28	32	32	15	21	23	20	20	18	21	24	28	26	25	20	21	<b>24</b>	5.632	1	419	18	<b>23</b>	
18:00	48	46	45	58	34	38	41	40	67	49	36	49	59	38	39	56	51	63	45	<b>47</b>	9.524	1	835	18	<b>46</b>	
19:00	35	31	35	42	33	30	29	35	26	48	26	34	32	34	43	27	37	34	30	<b>34</b>	5.772	1	593	18	<b>33</b>	
20:00	19	26	18	24	28	22	24	16	16	27	21	20	27	24	25	15	31	24	23	<b>23</b>	4.425	0	430	19	<b>23</b>	
21:00	22	21	19	23	21	14	16	19	14	25	15	21	19	23	18	19	17	20	19	<b>19</b>	3.066	0	365	19	<b>19</b>	
22:00	9	14	9	15	19	10	16	13	9	24	13	13	9	19	14	12	19	12	24	<b>14</b>	4.740	2	225	17	<b>13</b>	
23:00	1	5	8	10	11	4	4	6	5	13	7	5	8	13	8	6	4	7	13	<b>7</b>	3.429	0	138	19	<b>7</b>	

	W1	W2	W3	W4
00:00	22	13	15	19
01:00	14	8	9	12
02:00	11	6	9	2
03:00	7	5	4	6
04:00	8	5	8	9
05:00	5	10	6	7
06:00	17	17	10	22
07:00	52	70	61	72
08:00	83	94	100	94
09:00	143	124	123	156
10:00	135	144	124	161
11:00	158	132	154	170
12:00	178	175	154	186
13:00	187	170	147	175
14:00	170	155	123	198
15:00	90	83	83	82
15:30	68	94	81	112
16:00	102	127	83	100
16:30	126	120	96	104
17:00	182	124	116	120
17:30	143	111	83	120
18:00	231	235	182	254
19:00	176	168	126	171
20:00	115	105	92	118
21:00	106	88	78	93
22:00	66	72	54	81
23:00	35	32	33	38

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday							Tuesday	Wednesday	Thursday	Friday
00:00	2	6	6	4	2	2	7	2	8	4	2	4	1	2	2	2	3	1	2	3	2.077	1	54	18	3
01:00	2	2	1	1	2	0	3	0	2	0	1	1	2	1	3	3	2	3	0	0	1.073	0	29	19	2
02:00	1	1	1	1	0	0	0	0	1	1	4	1	1	1	0	1	0	0	0	0	0.933	1	10	18	1
03:00	3	4	1	0	1	1	4	2	1	0	0	3	2	2	1	1	0	0	1	1	1.305	0	27	19	1
04:00	0	1	1	2	6	2	2	2	1	1	1	1	3	5	2	4	4	1	2	2	1.573	1	35	18	2
05:00	5	5	4	9	4	2	5	7	7	6	4	8	2	9	4	7	5	5	11	6	2.377	1	98	18	5
06:00	17	28	33	27	27	16	30	25	26	26	16	23	22	22	13	18	18	21	20	23	5.389	0	428	19	23
07:00	54	55	58	55	47	129	121	102	95	111	40	43	46	46	44	44	42	51	42	64	30.067	1	1096	18	61
08:00	131	114	145	69	118	212	233	238	267	258	86	101	101	109	87	94	90	106	96	140	65.503	0	2655	19	140
09:00	99	88	95	84	84	158	151	157	146	118	66	68	67	76	71	66	62	67	95	96	33.650	0	1818	19	96
10:00	69	90	75	77	81	126	102	134	44	68	71	73	60	67	71	52	85	68	88	79	22.348	2	1241	17	73
11:00	75	106	62	81	72	115	143	134	25	77	66	72	55	74	76	53	69	67	73	79	28.093	1	1352	18	75
12:00	61	68	99	65	70	121	115	137	144	62	62	57	42	60	51	47	66	53	54	75	31.274	1	1290	18	72
13:00	63	62	70	59	58	130	101	114	124	67	67	57	63	48	58	40	53	56	47	70	26.422	2	1083	17	64
14:00	60	62	62	51	59	113	101	128	112	57	67	49	65	62	52	48	52	64	66	70	24.198	1	1202	18	67
15:00	31	38	45	33	32	48	67	65	51	35	24	31	32	31	36	20	30	36	36	38	12.331	2	589	17	35
15:30	33	44	28	29	34	64	62	50	66	23	27	24	21	36	27	17	29	26	24	35	15.054	1	598	18	33
16:00	30	34	33	38	29	64	39	36	31	36	17	25	24	27	33	17	40	23	24	32	10.421	1	536	18	30
16:30	21	33	24	30	20	69	54	41	63	19	30	25	23	22	30	18	25	20	28	31	14.967	2	463	17	27
17:00	33	29	19	26	25	47	49	44	58	30	22	21	21	29	24	24	25	27	26	30	10.921	1	521	18	29
17:30	11	26	19	17	18	42	39	38	50	27	28	21	27	25	16	25	18	22	20	26	10.032	1	439	18	24
18:00	42	36	53	34	30	87	66	82	84	41	26	30	38	36	46	31	29	44	39	46	19.434	1	787	18	44
19:00	35	39	32	47	24	55	55	83	65	30	21	38	30	23	27	30	30	37	24	38	16.232	1	642	18	36
20:00	32	22	24	39	27	39	27	58	52	31	27	21	43	36	21	22	29	36	25	32	10.452	1	553	18	31
21:00	28	40	19	20	22	36	45	28	31	32	12	19	14	20	20	10	14	14	24	24	9.788	1	403	18	22
22:00	7	24	14	14	7	14	37	23	24	26	10	13	19	16	12	8	14	12	8	16	7.852	1	265	18	15
23:00	3	13	5	1	6	16	11	8	10	16	9	4	3	5	6	2	5	3	10	7	4.525	0	136	19	7

	W1	W2	W3	W4
00:00	4	5	2	2
01:00	2	1	1	2
02:00	1	0	2	0
03:00	2	2	2	1
04:00	2	2	3	3
05:00	5	5	6	6
06:00	26	25	21	18
07:00	54	112	44	45
08:00	115	242	99	95
09:00	90	146	69	72
10:00	78	95	68	73
11:00	79	99	67	68
12:00	73	116	55	54
13:00	62	107	59	51
14:00	59	102	61	56
15:00	36	53	30	32
15:30	34	53	27	25
16:00	33	41	23	27
16:30	26	49	25	24
17:00	26	46	23	25
17:30	18	39	25	20
18:00	39	72	33	38
19:00	35	58	28	30
20:00	29	41	32	27
21:00	26	34	16	16
22:00	13	25	15	11
23:00	6	12	5	5



Start Hour	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016						
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	12	4	2	8	6	18	5	8	10	10	18	11	14	15	23	11	11	12	18	11	5.408	1	193	18	11
01:00	5	5	4	3	1	4	3	3	5	3	6	10	9	10	5	10	9	8	14	6	3.387	1	103	18	6
02:00	2	2	3	2	3	7	2	3	4	5	1	7	7	8	2	3	3	7	7	4	2.208	0	74	19	4
03:00	7	2	3	2	9	6	5	2	0	2	7	7	2	7	4	5	4	6	4	4	2.411	0	84	19	4
04:00	7	4	2	2	3	2	2	1	1	2	3	5	2	7	5	4	4	10	3	4	2.338	1	59	18	3
05:00	10	3	4	6	7	6	2	3	4	3	13	15	8	11	9	11	15	6	13	8	4.259	0	149	19	8
06:00	27	17	17	16	17	27	17	9	9	17	30	35	37	35	37	36	31	35	37	26	10.079	0	486	19	26
07:00	58	37	39	38	30	47	53	34	40	32	72	71	62	72	94	79	68	76	84	57	19.873	0	1086	19	57
08:00	90	71	91	79	88	95	80	89	84	103	172	165	165	180	151	151	169	168	158	124	40.683	0	2349	19	124
09:00	63	71	58	69	122	109	88	82	83	147	160	145	153	162	194	148	134	160	162	122	41.924	0	2310	19	122
10:00	92	130	113	118	154	118	104	106	124	156	215	199	180	207	224	156	210	162	207	157	43.728	0	2975	19	157
11:00	140	149	136	128	193	145	163	159	140	208	233	249	211	251	229	176	244	212	195	187	42.161	0	3561	19	187
12:00	172	171	187	128	218	172	178	143	134	228	253	285	253	255	274	298	269	228	243	215	53.180	0	4089	19	215
13:00	127	168	162	82	240	132	133	150	145	247	252	224	232	277	228	231	243	242	277	200	58.540	1	3710	18	206
14:00	134	176	161	141	269	150	115	195	121	244	309	318	281	329	308	289	297	295	321	234	78.827	0	4453	19	234
15:00	83	85	87	78	160	80	85	68	71	155	140	133	179	162	162	141	181	148	159	124	40.781	0	2357	19	124
15:30	60	99	71	70	146	74	88	89	62	139	139	146	143	172	127	159	163	164	161	120	39.963	0	2272	19	120
16:00	89	104	89	82	142	81	52	79	72	150	138	180	186	175	177	160	194	174	161	131	46.638	0	2485	19	131
16:30	62	117	88	75	147	87	78	65	78	166	227	213	208	173	208	167	227	198	164	145	60.302	0	2748	19	145
17:00	70	107	88	74	163	75	85	53	84	194	197	240	220	204	231	210	207	211	171	152	66.343	0	2884	19	152
17:30	35	91	80	58	128	58	64	61	49	140	142	172	181	145	154	134	145	163	116	111	46.807	0	2116	19	111
18:00	87	108	113	72	198	73	76	114	112	182	184	211	197	234	193	199	195	218	198	156	56.431	0	2964	19	156
19:00	61	88	63	62	156	56	84	117	74	180	146	165	148	188	145	125	175	177	174	125	47.674	0	2384	19	125
20:00	38	43	51	55	132	48	34	74	54	158	107	126	105	147	122	115	151	120	137	96	43.098	0	1817	19	96
21:00	36	38	53	35	128	50	49	45	40	141	76	91	86	129	100	78	119	97	125	80	36.497	0	1516	19	80
22:00	28	30	29	21	93	21	29	34	26	117	56	66	85	110	66	83	69	68	119	61	33.682	0	1150	19	61
23:00	8	20	11	9	48	14	12	11	20	84	43	27	35	60	46	48	45	52	64	35	22.132	1	573	18	32

Start Hour	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016						
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	13	10	7	6	17	15	1	6	11	7	10	8	12	11	17	10	11	14	7	10	4.072	1	192	18	11
01:00	6	3	3	10	4	3	0	2	2	3	6	9	4	11	4	7	11	6	7	5	3.198	0	101	19	5
02:00	4	1	4	1	5	5	0	3	0	2	1	2	4	4	1	3	2	5	4	3	1.701	0	51	19	3
03:00	1	3	0	0	4	4	3	0	2	0	1	1	1	3	0	0	1	4	1	2	1.504	0	29	19	2
04:00	2	6	4	3	9	6	3	4	1	1	3	4	5	10	6	5	8	5	3	5	2.477	1	78	18	4
05:00	9	8	11	9	10	9	3	3	5	6	17	11	9	9	11	15	20	8	18	10	4.672	1	171	18	10
06:00	67	48	44	45	48	61	28	8	12	15	53	63	52	68	68	64	53	65	81	50	20.568	1	935	18	52
07:00	218	206	220	217	217	77	48	37	29	35	258	266	242	248	252	262	262	255	250	189	90.733	0	3599	19	189
08:00	367	372	370	404	359	132	105	94	72	80	428	456	453	406	461	465	448	464	402	334	149.857	0	6338	19	334
09:00	236	223	237	218	228	88	94	71	52	168	251	278	233	264	300	261	281	267	258	211	77.237	1	3956	18	220
10:00	178	373	187	216	209	129	88	90	55	185	236	213	204	218	287	264	271	210	261	204	75.974	1	3501	18	195
11:00	191	221	193	187	178	97	96	86	72	192	214	224	237	231	248	212	265	258	254	192	61.036	0	3656	19	192
12:00	167	220	205	194	213	98	84	92	64	158	224	192	240	231	219	218	231	223	205	183	56.493	1	3414	18	190
13:00	155	207	156	168	159	92	105	60	57	166	228	226	226	177	194	212	212	196	208	169	54.254	2	3087	17	182
14:00	164	174	162	167	162	92	61	89	51	162	182	206	237	204	217	179	193	204	194	163	52.539	1	3049	18	169
15:00	90	115	133	115	124	57	56	45	51	104	104	132	130	119	111	94	126	131	130	104	30.001	0	1967	19	104
15:30	93	130	119	146	121	54	46	46	40	110	142	142	152	131	143	117	139	143	141	113	38.351	0	2155	19	113
16:00	83	107	82	90	120	37	36	35	21	119	87	107	108	104	118	74	104	110	101	86	31.616	1	1622	18	90
16:30	89	80	110	100	92	57	32	34	34	104	81	97	132	109	123	84	108	133	106	90	31.032	0	1705	19	90
17:00	76	70	79	92	95	35	47	59	28	82	94	106	113	113	90	76	86	105	101	81	24.697	1	1519	18	84
17:30	77	76	83	72	85	35	37	30	23	73	86	96	99	85	81	89	102	91	86	74	24.166	1	1383	18	77
18:00	123	162	146	140	140	50	49	89	48	156	123	170	164	178	181	159	179	187	186	138	46.881	0	2630	19	138
19:00	101	105	129	123	151	50	44	40	42	141	129	134	138	173	138	131	143	146	153	116	41.591	0	2211	19	116
20:00	58	73	71	77	83	33	26	38	22	109	66	87	80	118	106	73	106	96	85	74	28.309	0	1407	19	74
21:00	53	52	42	54	83	29	19	15	21	116	43	60	54	98	51	53	68	74	87	56	26.844	1	956	18	53
22:00	31	36	37	30	84	12	17	16	15	89	35	52	60	76	36	39	59	53	66	44	23.312	0	843	19	44
23:00	18	15	17	16	47	7	5	10	12	45	16	19	16	41	34	26	27	29	53	24	14.163	1	400	18	22

Site	AM Peak				IP Average				PM Peak		
	Car	LGV	HGV		Car	LGV	HGV		Car	LGV	HGV
<b>AECOM ATC AN7 EB</b>	195	34	9		163	16	5		191	22	2
<b>AECOM ATC AN7 WB</b>	214	27	3		178	20	6		266	29	5

Site	Site For Comparison	AM						IP						PM								
		Car	LGV	HGV	Total	Car %	LGV %	HGV %	Car	LGV	HGV	Total	Car %	LGV %	HGV %	Car	LGV	HGV	Total	Car %	LGV %	HGV %
AECOM ATC AN7 WB	Junction 14 (A143 Beccles Road East) WB	167	29	8	204	82%	14%	4%	233	23	8	263	88%	9%	3%	386	44	4	434	89%	10%	1%
AECOM ATC AN7 EB	Junction 14 (A143 Beccles Road East) EB	195	24	2	222	88%	11%	1%	145	16	5	166	87%	10%	3%	160	18	3	181	89%	10%	2%

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday									Tuesday	Wednesday	Thursday	Friday	
00:00	5	8	13	7	14	7	8	10	12	19											10	4.218	1	84	9	9	AM	239
01:00	2	10	6	8	7	5	6	5	3	11											6	2.830	0	63	10	6	IP	184.1859
02:00	0	2	1	3	2	10	4	2	3	4											3	2.726	1	21	9	2	PM	215
03:00	2	2	3	3	2	0	3	3	1	1											2	1.054	0	20	10	2		
04:00	5	6	2	6	3	6	8	7	5	7											6	1.841	0	55	10	6		
05:00	16	14	18	12	15	16	13	21	13	13											15	2.767	1	130	9	14		
06:00	53	52	49	47	47	37	46	40	49	35											46	6.151	0	455	10	46		
07:00	143	149	152	141	129	143	148	141	140	156											144	7.525	1	1313	9	146		
08:00	253	238	257	237	248	230	211	226	247												239	14.587	0	2147	9	239		
09:00	199	189	194	233	205	212	183	205	212	202											203	13.994	1	1801	9	200		
10:00	170	182	164	197	182	194	169	179	130	194											176	19.762	1	1631	9	181		
11:00	165	173	165	172	179	192	179	172	165	155											172	10.188	0	1717	10	172		
12:00	197	176	209	195	197	182	162	178	149	216											186	20.755	0	1861	10	186		
13:00	181	186	166	181	198	194	199	177	169	192											184	11.567	0	1843	10	184		
14:00	170	168	185	147	170	177	159	194	145	207											172	19.578	0	1722	10	172		
15:00	120	115	110	132	124	120	107	113	111	123											118	7.678	0	1175	10	118		
15:30	104	123	119	116	131	105	121	121	101	129											117	10.446	0	1170	10	117		
16:00	100	121	123	113	117	101	132	88	117	129											114	13.900	0	1141	10	114		
16:30	113	118	99	116	98	100	95	110	105	117											107	8.749	0	1071	10	107		
17:00	105	98	112	123	127	104	109	92	91	118											108	12.351	0	1079	10	108		
17:30	103	105	131	99	98	93	97	79	81	95											98	14.333	1	850	9	94		
18:00	139	182	174	143	175	133	156	171	164	168											161	16.926	0	1605	10	161		
19:00	109	111	129	152	155	136	110	125	114	157											130	19.315	0	1298	10	130		
20:00	82	111	79	94	102	65	73	81	110	101											90	15.992	0	898	10	90		
21:00	64	47	68	63	70	74	76	69	76	101											71	13.588	1	607	9	67		
22:00	40	54	51	37	66	31	42	53	51	56											48	10.418	0	481	10	48		
23:00	13	18	16	21	28	13	15	14	21	28											19	5.697	0	187	10	19		

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday									Tuesday	Wednesday	Thursday	Friday	
00:00	3	10	12	10	9	9	8	8	7	9											9	2.369	1	82	9	9	AM	243
01:00	7	4	5	5	4	15	4	5	2	7											6	3.553	1	43	9	5	IP	203.4061
02:00	1	1	4	6	3	7	1	7	4	4											4	2.348	0	38	10	4	PM	300
03:00	9	10	12	10	10	10	10	8	10	12											10	1.197	0	101	10	10		
04:00	11	12	8	13	11	12	15	13	12	12											12	1.792	1	111	9	12		
05:00	28	17	22	20	25	23	20	21	22	23											22	2.998	0	221	10	22		
06:00	58	54	59	71	66	52	56	58	57	58											59	5.607	1	518	9	58		
07:00	157	155	140	146	130	146	143	138	146	148											145	7.880	0	1449	10	145		
08:00	231	229	244	237	230	257	255	245	261	261											243	12.316	0	2189	9	243		
09:00	164	175	163	196	198	167	152	156	182	167											172	15.677	0	1720	10	172		
10:00	171	184	175	178	185	186	163	167	167	195											177	10.300	0	1771	10	177		
11:00	173	193	182	186	196	197	197	189	182	222											192	13.217	1	1695	9	188		
12:00	221	190	161	195	212	185	186	181	179	193											190	16.872	0	1903	10	190		
13:00	194	189	190	178	175	197	183	183	202	200											189	9.243	0	1891	10	189		
14:00	219	271	231	268	252	246	232	229	207	281											244	24.204	0	2436	10	244		
15:00	106	128	133	122	142	127	140	133	121	151											130	12.632	0	1303	10	130		
15:30	115	138	135	146	137	142	113	132	130	162											135	14.259	0	1350	10	135		
16:00	146	134	145	154	152	144	134	176	123	154											146	14.474	1	1286	9	143		
16:30	152	158	145	156	155	145	144	119	158	169											150	13.337	1	1382	9	154		
17:00	151	147	152	152	138	144	147	84	146	141											140	20.275	1	1318	9	146		
17:30	121	128	124	147	128	110	124	68	102	138											119	21.939	1	1122	9	125		
18:00	164	196	182	192	185	174	176	152	170	182											177	13.132	0	1773	10	177		
19:00	135	160	156	147	133	140	115	140	146	141											141	12.579	1	1298	9	144		
20:00	86	106	103	96	93	83	108	105	103	91											97	8.859	0	974	10	97		
21:00	62	73	69	84	70	75	70	92	77	94											77	10.373	0	766	10	77		
22:00	39	31	40	40	56	38	40	37	39	52											41	7.315	1	356	9	40		
23:00	15	15	23	16	31	7	15	18	23	29											19	7.285	0	192	10	19		



Site	AM Peak				IP Average				PM Peak		
	Car	LGV	HGV		Car	LGV	HGV		Car	LGV	HGV
AECOM ATC AN5 NB	602	91	16		481	62	19		477	40	12
AECOM ATC AN5 SB	343	73	15		437	55	17		640	73	12
AECOM ATC AN8 WB	241	54	27		301	40	18		471	61	6
AECOM ATC AN8 EB	467	46	19		273	44	22		346	41	19
AECOM ATC AN12 NB	525	56	22		288	44	22		336	49	12
AECOM ATC AN12 SB	264	49	21		299	39	18		475	56	9
AECOM ATC AN2 NB	1151	171	51		935	109	54		1263	129	26
AECOM ATC AN2 SB	1252	174	53		1141	130	58		1319	198	36
AECOM ATC AN4 NB	1367	256	42		1017	191	50		1202	186	21
AECOM ATC AN4 SB	1113	214	67		1136	192	47		1527	242	20

Site	Site For Comparison	AM							IP							PM						
		Car	LGV	HGV	Total	Car %	LGV %	HGV %	Car	LGV	HGV	Total	Car %	LGV %	HGV %	Car	LGV	HGV	Total	Car %	LGV %	HGV %
AECOM ATC AN5 NB	Junction 15 (Beccles Road) NB	584	88	16	688	85%	13%	2%	467	60	19	546	86%	11%	3%	446	37	11	494	90%	8%	2%
AECOM ATC AN5 SB	Junction 15 (Beccles Road) SB	323	69	14	407	79%	17%	4%	388	49	15	452	86%	11%	3%	559	64	10	633	88%	10%	2%
AECOM ATC AN8 WB	Junction 14 (Beccles Road) WB	240	54	27	321	75%	17%	9%	369	49	22	440	84%	11%	5%	630	82	8	720	87%	11%	1%
AECOM ATC AN8 EB	Junction 14 (Beccles Road) EB	491	49	20	560	88%	9%	4%	285	47	23	355	81%	13%	6%	320	38	17	376	85%	10%	5%
AECOM ATC AN12 NB	Junction 23 (Beccles Road) NB	591	64	24	679	87%	9%	4%	401	61	30	493	81%	12%	6%	562	82	20	664	85%	12%	3%
AECOM ATC AN12 SB	Junction 23 (Beccles Road) SB	427	79	35	541	79%	15%	6%	424	55	26	506	84%	11%	5%	660	77	12	750	88%	10%	2%
AECOM ATC AN2 NB	Junction 12 (A12 at Broadland Rugby Club) NB	1089	162	48	1300	84%	12%	4%	880	103	50	1033	85%	10%	5%	1167	119	24	1309	89%	9%	2%
AECOM ATC AN2 SB	Junction 12 (A12 at Broadland Rugby Club) SB	1178	164	50	1392	85%	12%	4%	1090	124	55	1269	86%	10%	4%	1250	188	34	1471	85%	13%	2%
AECOM ATC AN4 NB	AECOM 2015 MCC Site 6 (A12 south of roundabout)	1260	236	39	1535	82%	15%	3%	787	147	38	973	81%	15%	4%	1064	164	18	1247	85%	13%	1%
AECOM ATC AN4 SB	AECOM 2015 MCC Site 6 (A12 south of roundabout)	1008	194	61	1264	80%	15%	5%	855	144	35	1035	83%	14%	3%	1430	227	19	1676	85%	14%	1%

Start Hour	Date																	Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean						
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016									12/05/2016	13/05/2016		
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday										
00:00	25	42	33	39	37	29	36	35	37	45	35	40	36								36	5.204	1	444	12	37			
01:00	18	19	22	11	25	18	18	16	21	30	14	21	14								19	5.000	1	217	12	18		AM	709
02:00	9	7	13	12	5	16	12	12	12	9	14	9	10								11	2.976	0	140	13	11		IP	562
03:00	9	8	9	7	13	10	10	12	12	12	16	13	11								11	2.431	1	126	12	11		PM	529
04:00	21	21	15	19	19	28	24	17	19	22	26	16	27								21	4.173	0	274	13	21			
05:00	64	69	76	71	73	79	65	76	72	68	71	79	70								72	4.781	0	933	13	72			
06:00	201	200	205	226	215	206	202	211	202	213	219	209	215								210	7.881	1	2498	12	208			
07:00	524	505	517	480	506	523	552	518	506	495	545	548	519								518	20.970	0	6738	13	518			
08:00	708	679	714	704	682	692	694	733	713	738	714	744	707								709	20.164	0	9222	13	709			
09:00	549	606	582	603	559	555	540	575	557	587	569	636	600								578	27.475	1	6882	12	574			
10:00	520	547	564	530	556	516	542	575	496	620	588	567	573								553	33.311	0	7194	13	553			
11:00	591	579	544	540	560	565	530	561	552	592	611	595	564								568	24.156	0	7384	13	568			
12:00	503	567	581	561	555	591	532	569	586	607	582	609	609								573	30.939	1	6949	12	579			
13:00	555	595	596	609	603	546	567	563	573	628	576	554	585								581	24.414	0	7550	13	581			
14:00	501	519	506	560	539	557	521	503	483	595	563	552	572								536	33.322	0	6971	13	536			
15:00	263	264	276	268	305	249	265	270	295	291	311	259	274								276	18.725	0	3590	13	276			
15:30	305	303	315	259	320	314	314	294	304	362	343	316	282								310	25.392	2	3410	11	310			
16:00	261	268	314	290	287	278	272	261	270	302	277	317	293								284	18.659	0	3690	13	284			
16:30	251	291	266	271	306	251	257	216	274	276	262	270	251								265	21.761	1	3226	12	269			
17:00	227	251	260	304	262	216	260	239	271	289	251	268	285								260	24.526	0	3383	13	260			
17:30	218	236	250	239	224	216	236	159	223	226	221	229	229								224	21.555	1	2747	12	229			
18:00	365	404	395	397	419	334	375	398	367	447	362	376									387	29.816	1	4192	11	381			
19:00	271	309	295	326	308	266	256	294	314	354	248	331									298	32.371	0	3572	12	298			
20:00	193	203	192	253	193	174	203	186	246	235	206	215									208	24.581	0	2499	12	208			
21:00	189	172	186	181	197	192	149	200	223	209	163	192									188	19.951	0	2253	12	188			
22:00	123	103	114	108	187	89	96	126	116	171	118	120									123	28.732	1	1284	11	117			
23:00	50	61	77	59	108	46	48	62	65	114	69	63									69	21.749	1	708	11	64			

Start Hour	Date																Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016									11/05/2016	12/05/2016	13/05/2016		
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday									Wednesday	Thursday	Friday		
00:00	33	37	36	42	40	24	30	31	24	40	24	37	30								<b>33</b>	6.357	0	428	13	<b>33</b>			
01:00	27	16	21	12	15	19	13	20	19	18	9	16	20									<b>17</b>	4.590	1	198	12	<b>17</b>	AM	431
02:00	6	5	8	11	9	8	2	17	11	8	11	7	7									<b>8</b>	3.620	1	93	12	<b>8</b>	IP	509
03:00	13	15	22	10	16	12	15	13	12	23	12	11	9									<b>14</b>	4.232	1	160	12	<b>13</b>	PM	725
04:00	14	23	22	20	27	15	20	18	23	22	21	21	19									<b>20</b>	3.429	0	265	13	<b>20</b>		
05:00	36	31	36	36	35	37	41	30	40	57	46	33	41									<b>38</b>	7.101	1	442	12	<b>37</b>		
06:00	88	74	99	99	93	77	72	95	83	80	80	93	94									<b>87</b>	9.490	0	1127	13	<b>87</b>		
07:00	230	229	214	212	232	227	246	246	218	233	239	245	232									<b>231</b>	11.387	0	3003	13	<b>231</b>		
08:00	424	406	436	423	432	406	437	433	392	441	438	449	449									<b>428</b>	17.421	1	5174	12	<b>431</b>		
09:00	420	436	404	450	426	388	449	408	443	414	448	410	434									<b>425</b>	19.843	0	5530	13	<b>425</b>		
10:00	413	437	441	430	458	466	428	410	440	447	479	459	495									<b>446</b>	24.680	0	5803	13	<b>446</b>		
11:00	453	483	454	467	475	447	496	467	500	513	535	461	550									<b>485</b>	32.418	1	5751	12	<b>479</b>		
12:00	518	484	505	522	511	530	474	552	536	549	551	573	515									<b>525</b>	28.085	0	6820	13	<b>525</b>		
13:00	474	470	470	463	470	480	468	491	491	577	515	525	549									<b>496</b>	35.662	1	5866	12	<b>489</b>		
14:00	489	572	609	554	592	601	552	563	567	617	590	554	568									<b>571</b>	32.931	1	6939	12	<b>578</b>		
15:00	270	241	280	284	301	263	253	288	263	324	308	317	310									<b>285</b>	26.049	0	3702	13	<b>285</b>		
15:30	278	328	299	293	318	306	295	393	299	343	312	284	305									<b>312</b>	30.037	1	3660	12	<b>305</b>		
16:00	331	349	336	305	338	335	342	380	309	379	343	349	341									<b>341</b>	21.577	0	4437	13	<b>341</b>		
16:30	347	352	359	397	384	346	365	277	358	365	337	355	401									<b>357</b>	30.886	1	4366	12	<b>364</b>		
17:00	336	388	378	352	322	351	362	231	376	350	358	384	373									<b>351</b>	40.757	1	4330	12	<b>361</b>		
17:30	284	277	272	308	255	277	252	197	249	270	290	288	269									<b>268</b>	27.001	1	3291	12	<b>274</b>		
18:00	413	428	410	422	427	344	373	428	414	426	421	428	434									<b>413</b>	25.815	1	5024	12	<b>419</b>		
19:00	320	313	329	326	340	307	306	343	346	344	301	332										<b>326</b>	16.076	0	3907	12	<b>326</b>		
20:00	219	261	225	234	230	198	231	240	279	242	234	249										<b>237</b>	20.471	1	2563	11	<b>233</b>		
21:00	155	199	198	220	186	183	174	193	214	219	171	182										<b>191</b>	20.058	0	2294	12	<b>191</b>		
22:00	109	116	133	143	190	109	111	109	133	177	119	128										<b>131</b>	26.929	1	1387	11	<b>126</b>		
23:00	52	61	75	63	102	50	66	60	98	126	57	64										<b>73</b>	23.448	1	748	11	<b>68</b>		

Start Hour	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean			
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016									13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday									Friday
00:00	13	13	10	14	18	15	14	6	20	12	14									14	3.698	1	143	10	14	AM	322
01:00	12	8	8	10	13	17	9	5	10	12	5									10	3.534	1	92	10	9	IP	359
02:00	7	10	6	7	10	8	7	6	8	7	6									7	1.440	0	82	11	7	PM	538
03:00	28	29	26	27	28	26	30	28	24	28	29									28	1.695	1	279	10	28		
04:00	42	45	42	44	45	50	40	38	45	46	48									44	3.448	0	485	11	44		
05:00	72	75	85	71	83	82	88	69	79	71	75									77	6.467	0	850	11	77		
06:00	152	148	165	156	138	157	141	140	142	151	156									150	8.617	0	1646	11	150		
07:00	290	303	287	306	269	290	310	290	295	269	278									290	13.727	0	3187	11	290		
08:00	308	332	334	318	327	326	341	290	269	329	313									317	21.321	1	3218	10	322		
09:00	293	286	251	325	271	277	253	260	271	270	285									277	20.892	1	2717	10	272		
10:00	326	359	297	287	317	311	268	292	281	345	274									305	29.325	0	3357	11	305		
11:00	337	342	324	348	334	352	330	341	287	360	341									336	19.100	1	3409	10	341		
12:00	374	386	329	319	388	354	350	344	335	370	291									349	29.777	0	3840	11	349		
13:00	346	357	369	310	338	343	319	332	331	378										342	21.229	0	3423	10	342		
14:00	424	484	407	445	438	457	432	428	416	447										438	22.070	1	3894	9	433		
15:00	227	218	221	194	213	192	191	197	173	215										204	17.123	0	2041	10	204		
15:30	181	211	227	227	201	249	209	231	217	246										220	20.626	0	2199	10	220		
16:00	262	264	260	256	265	238	220	302	256	246										257	21.147	1	2267	9	252		
16:30	279	263	275	257	248	257	265	241	227	259										257	15.452	0	2571	10	257		
17:00	293	278	301	296	268	268	277	192	285	261										272	30.985	1	2527	9	281		
17:30	231	214	252	229	225	232	203	132	235	251										220	34.397	1	2072	9	230		
18:00	325	333	329	361	364	339	319	324	334	318										335	16.119	0	3346	10	335		
19:00	204	273	245	233	248	213	217	216	250	243										234	21.421	0	2342	10	234		
20:00	145	183	154	178	163	129	140	196	198	179										167	23.950	0	1665	10	167		
21:00	114	126	155	139	129	126	120	146	140	146										134	13.076	0	1341	10	134		
22:00	83	70	83	78	112	79	76	87	92	111										87	14.193	0	871	10	87		
23:00	29	33	41	39	64	17	26	33	46	92										42	21.659	1	328	9	36		

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday									
00:00	10	45	53	41	47	9	32	43	42	51	46										<b>38</b>	15.162	0	419	11	<b>38</b>	AM	533
01:00	5	42	31	40	31	7	38	25	17	28	13										<b>25</b>	13.022	0	277	11	<b>25</b>	IP	339
02:00	1	6	8	4	6	8	10	2	18	3	3										<b>6</b>	4.798	1	51	10	<b>5</b>	PM	405
03:00	5	10	4	6	9	9	10	4	8	6	8										<b>7</b>	2.272	0	79	11	<b>7</b>		
04:00	21	12	12	10	9	17	8	16	17	12	12										<b>13</b>	3.977	0	146	11	<b>13</b>		
05:00	63	71	53	55	65	54	70	69	62	66	60										<b>63</b>	6.440	0	688	11	<b>63</b>		
06:00	198	211	198	187	177	183	201	196	185	171	183										<b>190</b>	11.781	0	2090	11	<b>190</b>		
07:00	416	422	405	407	380	423	465	456	406	433	456										<b>424</b>	26.051	0	4669	11	<b>424</b>		
08:00	547	547	517	531	499	567	551	552	456	511	508										<b>526</b>	31.856	1	5330	10	<b>533</b>		
09:00	376	358	391	404	379	383	390	384	361	394	353										<b>379</b>	16.139	0	4173	11	<b>379</b>		
10:00	369	341	367	331	366	419	309	360	298	357	394										<b>356</b>	34.987	0	3911	11	<b>356</b>		
11:00	325	358	366	376	362	365	346	399	338	344	333										<b>356</b>	21.276	1	3513	10	<b>351</b>		
12:00	367	320	349	333	390	337	329	305	285	373	275										<b>333</b>	35.936	0	3663	11	<b>333</b>		
13:00	342	328	330	303	331	320	315	317	303	352											<b>324</b>	15.765	0	3241	10	<b>324</b>		
14:00	289	309	349	307	333	323	322	347	278	375											<b>323</b>	29.230	0	3232	10	<b>323</b>		
15:00	158	168	168	192	178	174	173	185	182	205											<b>178</b>	13.458	0	1783	10	<b>178</b>		
15:30	184	195	176	176	243	179	209	211	175	241											<b>199</b>	26.287	0	1989	10	<b>199</b>		
16:00	204	238	237	247	246	215	204	196	241	275											<b>230</b>	24.802	0	2303	10	<b>230</b>		
16:30	227	235	177	248	203	217	194	183	220	240											<b>214</b>	24.350	0	2144	10	<b>214</b>		
17:00	186	191	205	190	203	182	208	181	173	230											<b>195</b>	16.763	1	1719	9	<b>191</b>		
17:30	167	164	206	179	181	164	179	163	172	172											<b>175</b>	12.893	1	1541	9	<b>171</b>		
18:00	285	338	316	336	384	275	263	344	323	398											<b>326</b>	44.065	0	3262	10	<b>326</b>		
19:00	182	228	246	233	301	201	198	207	207	301											<b>230</b>	41.602	0	2304	10	<b>230</b>		
20:00	142	195	125	144	172	134	120	130	167	167											<b>150</b>	24.419	0	1496	10	<b>150</b>		
21:00	109	112	126	111	117	111	95	106	123	149											<b>116</b>	14.510	1	1010	9	<b>112</b>		
22:00	67	75	73	72	92	64	83	82	82	108											<b>80</b>	12.943	1	690	9	<b>77</b>		
23:00	24	25	24	24	40	26	29	29	35	46											<b>30</b>	7.685	1	256	9	<b>28</b>		

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday									
00:00	14	44	51	42	52	11	39	43	39	50	43	39	49								<b>40</b>	12.919	1	505	12	<b>42</b>	AM	603
01:00	5	44	33	40	28	8	36	24	19	27	12	29	16								<b>25</b>	12.161	0	321	13	<b>25</b>	IP	353
02:00	2	5	6	4	6	6	11	4	18	3	3	6	2								<b>6</b>	4.356	1	58	12	<b>5</b>	PM	398
03:00	4	9	4	6	9	8	8	4	7	5	7	7	8								<b>7</b>	1.850	0	86	13	<b>7</b>		
04:00	15	12	12	8	9	18	10	15	14	10	12	12	14								<b>12</b>	2.785	1	143	12	<b>12</b>		
05:00	55	52	40	44	53	48	60	61	55	52	55	43	42								<b>51</b>	6.821	0	660	13	<b>51</b>		
06:00	168	169	164	177	155	161	173	174	164	162	171	165	169								<b>167</b>	6.034	1	2017	12	<b>168</b>		
07:00	418	418	412	393	389	434	435	435	430	423	458	441	438								<b>425</b>	19.172	0	5524	13	<b>425</b>		
08:00	594	595	614	601	582	609	606	638	555	589	588	603	618								<b>599</b>	19.919	1	7237	12	<b>603</b>		
09:00	386	356	375	407	346	359	369	357	346	375	353	340	373								<b>365</b>	18.611	1	4335	12	<b>361</b>		
10:00	361	338	336	344	346	410	299	335	285	352	388	340	388								<b>348</b>	34.273	0	4522	13	<b>348</b>		
11:00	323	347	380	356	368	366	317	387	325	347	354	395	394								<b>358</b>	26.472	0	4659	13	<b>358</b>		
12:00	354	317	363	348	384	351	321	285	276	384	338	354	357								<b>341</b>	33.255	0	4432	13	<b>341</b>		
13:00	345	332	360	315	315	316	309	333	301	363	327	345	366								<b>333</b>	21.563	0	4327	13	<b>333</b>		
14:00	328	333	338	338	366	336	348	365	316	426	384	346	383								<b>354</b>	29.840	1	4181	12	<b>348</b>		
15:00	217	211	207	220	237	216	133	212	202	237	204	201	207								<b>208</b>	25.371	1	2571	12	<b>214</b>		
15:30	170	190	193	178	240	187	185	213	183	217	204	200	208								<b>198</b>	18.875	1	2328	12	<b>194</b>		
16:00	221	246	241	238	249	206	196	206	226	249	200	254	226								<b>228</b>	20.374	0	2958	13	<b>228</b>		
16:30	185	213	178	224	218	192	187	180	205	252	190	212	200								<b>203</b>	20.985	1	2384	12	<b>199</b>		
17:00	201	206	209	189	194	186	213	192	175	225	200	185	211								<b>199</b>	13.799	0	2586	13	<b>199</b>		
17:30	181	167	201	178	191	159	167	161	175	198	183	185	198								<b>180</b>	14.180	0	2344	13	<b>180</b>		
18:00	303	352	343	326	370	297	289	353	326	386	330	311	309								<b>330</b>	29.225	0	4295	13	<b>330</b>		
19:00	189	254	251	218	287	192	237	238	236	298	219	211									<b>236</b>	33.550	0	2830	12	<b>236</b>		
20:00	137	196	131	150	171	109	115	131	159	171	155	147									<b>148</b>	24.945	0	1772	12	<b>148</b>		
21:00	91	112	127	128	120	95	87	104	122	141	113	102									<b>112</b>	16.530	0	1342	12	<b>112</b>		
22:00	69	76	69	77	91	67	77	81	98	104	69	77									<b>80</b>	12.041	1	851	11	<b>77</b>		
23:00	28	30	26	31	37	27	30	29	36	43	31	35									<b>32</b>	4.926	1	340	11	<b>31</b>		

Start Hour	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean		
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016								
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday								
00:00	11	11	13	17	16	10	12	9	17	13	13	13	16							13	2.641	0	171	13	13	AM	335
01:00	9	10	8	8	9	15	9	5	9	12	4	3	6							8	3.244	1	92	12	8	IP	356
02:00	7	9	6	6	7	9	6	6	8	6	7	5	3							7	1.613	1	82	12	7	PM	540
03:00	22	23	25	26	29	25	31	26	23	26	27	29	26							26	2.582	0	338	13	26		
04:00	40	43	36	38	42	47	43	41	41	45	42	39	40							41	2.898	0	537	13	41		
05:00	76	78	89	77	87	88	96	68	77	76	87	78	68							80	8.382	0	1045	13	80		
06:00	154	155	162	147	140	150	141	151	150	157	155	155	153							152	6.146	0	1970	13	152		
07:00	263	270	260	266	249	277	297	276	261	240	254	275	251							265	14.875	1	3142	12	262		
08:00	324	331	330	352	329	332	350	319	319	346	334	351	379							338	16.876	1	4017	12	335		
09:00	303	291	243	303	266	275	261	236	254	289	292	274	274							274	21.523	0	3561	13	274		
10:00	295	352	291	288	327	298	277	269	283	344	272	305	309							301	26.275	0	3910	13	301		
11:00	322	341	316	340	330	356	301	321	278	341	319	313	346							325	20.886	1	3946	12	329		
12:00	359	361	326	339	398	360	325	347	349	363	371	362	421							360	26.478	1	4260	12	355		
13:00	358	356	364	308	327	351	303	336	313	361	346	347	371							342	22.430	0	4441	13	342		
14:00	383	444	375	418	423	447	387	425	384	409	430	360	423							408	27.651	0	5308	13	408		
15:00	257	225	232	206	227	179	136	230	219	251	217	219	222							217	30.920	1	2684	12	224		
15:30	220	239	230	218	216	246	243	235	200	266	273	258	251							238	21.199	0	3095	13	238		
16:00	254	257	250	262	257	238	204	305	260	269	262	243	257							255	22.155	2	2809	11	255		
16:30	279	274	269	270	248	283	265	238	253	238	272	264	272							263	14.723	0	3425	13	263		
17:00	299	279	314	280	270	266	271	174	284	245	244	286	275							268	34.069	1	3313	12	276		
17:30	233	227	262	244	217	226	224	141	248	221	236	243	243							228	29.027	1	2824	12	235		
18:00	330	334	330	343	356	323	322	315	342	317	322	318	324							329	12.045	1	3920	12	327		
19:00	200	263	254	249	276	196	222	233	248	243	206	240								236	25.283	0	2830	12	236		
20:00	161	198	177	185	160	147	171	218	204	167	169	170								177	20.468	0	2127	12	177		
21:00	132	145	148	157	127	125	141	143	150	147	150	154								143	10.288	0	1719	12	143		
22:00	77	72	89	83	100	66	72	83	81	91	72	92								82	10.158	0	978	12	82		
23:00	27	35	37	36	66	19	24	37	46	84	38	36								40	18.068	1	401	11	36		



Start Hour	Date																	Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean					
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016									12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday									
00:00	25	64	58	65	73	49	51		75	66											<b>58</b>	15.331	1	501	8	<b>63</b>	AM	1373
01:00	18	41	32	30	34	33	37		47	46											<b>35</b>	8.888	0	318	9	<b>35</b>	IP	1098
02:00	20	24	30	18	20	33	24		27	18											<b>24</b>	5.357	0	214	9	<b>24</b>	PM	1418
03:00	38	31	27	30	37	39	39		34	40											<b>35</b>	4.690	0	315	9	<b>35</b>		
04:00	116	103	93	108	83	112	99		95	93											<b>100</b>	10.521	0	902	9	<b>100</b>		
05:00	268	231	237	242	240	273	225		251	232											<b>244</b>	16.613	0	2199	9	<b>244</b>		
06:00	810	724	798	846	772	814	762		788	755											<b>785</b>	36.541	0	7069	9	<b>785</b>		
07:00	1398	1365	1405	1393	1323	1377	1375		1400	1274											<b>1368</b>	43.182	1	11036	8	<b>1380</b>		
08:00	1358	1374	1400	1394	1343	1411	1331		1478	1371											<b>1384</b>	43.810	1	10982	8	<b>1373</b>		
09:00	1198	1118	1107	1246	1248	1143	1004		1153	1260											<b>1164</b>	83.426	0	10477	9	<b>1164</b>		
10:00	1146	1035	1063	1089	1111	1037	1004		1076	1183											<b>1083</b>	56.897	0	9744	9	<b>1083</b>		
11:00	1013	1001	1083	1019	1195	1011	971		1054	1147											<b>1055</b>	74.008	0	9494	9	<b>1055</b>		
12:00	1062	1082	1069	1047	1149	1065	975		1101	1121											<b>1075</b>	49.250	1	8696	8	<b>1087</b>		
13:00	1067	1065	1092	1140	1222	1058	1072	1088	1141	1209											<b>1115</b>	60.318	0	11154	10	<b>1115</b>		
14:00	1081	1086	1149	1195	1191	1093	1055	1135	1132	1189											<b>1131</b>	50.711	0	11306	10	<b>1131</b>		
15:00	587	565	574	518	569	580	563	532	578	608											<b>567</b>	25.967	0	5674	10	<b>567</b>		
15:30	630	629	624	643	693	588	568	591	648	672											<b>629</b>	38.546	0	6286	10	<b>629</b>		
16:00	655	690	698	631	671	746	701	700	716	668											<b>688</b>	32.644	0	6876	10	<b>688</b>		
16:30	680	751	792	726	722	631	705	734	743	623											<b>711</b>	52.915	0	7107	10	<b>711</b>		
17:00	720	675	735	749	644	777	701	695	660	718											<b>707</b>	40.986	0	7074	10	<b>707</b>		
17:30	644	602	678	670	685	651	687	706	650	647											<b>662</b>	29.484	1	6018	9	<b>669</b>		
18:00	939	924	1031	1008	1019	889	928	1032	1019	1151											<b>994</b>	76.168	1	8789	9	<b>977</b>		
19:00	600	669	739	683	732	572	597	653	665	776											<b>669</b>	66.782	0	6686	10	<b>669</b>		
20:00	425	475	489	447	472	424	401	471	475	539											<b>462</b>	39.350	0	4618	10	<b>462</b>		
21:00	326	319	399	346	359	303	280	378	398	376											<b>348</b>	40.664	0	3484	10	<b>348</b>		
22:00	212	238	240	228	292	226	244	248	267	323											<b>252</b>	33.562	1	2195	9	<b>244</b>		
23:00	86	95	108	116	212	99	88	119	120	188											<b>123</b>	42.686	1	1019	9	<b>113</b>		

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean					
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
00:00	43	63	69	61	74	63	63		61	73											<b>63</b>	9.110	1	527	8	<b>66</b>
01:00	36	37	50	29	39	46	38		55	31											<b>40</b>	8.609	0	361	9	<b>40</b>
02:00	23	33	32	40	36	32	33		26	32											<b>32</b>	4.986	0	287	9	<b>32</b>
03:00	28	26	36	24	30	38	38		29	40											<b>32</b>	5.925	0	289	9	<b>32</b>
04:00	53	50	52	65	55	56	61		47	58											<b>55</b>	5.563	0	497	9	<b>55</b>
05:00	178	176	179	179	181	179	189		175	178											<b>179</b>	4.031	1	1425	8	<b>178</b>
06:00	579	539	596	618	646	605	598		608	580											<b>597</b>	29.589	0	5369	9	<b>597</b>
07:00	1406	1434	1369	1368	1340	1395	1346		1388	1371											<b>1380</b>	29.542	0	12417	9	<b>1380</b>
08:00	1452	1489	1476	1515	1472	1473	1435		1489	1512											<b>1479</b>	25.845	0	13313	9	<b>1479</b>
09:00	1301	1245	1350	1452	1350	1341	1095		1388	1294											<b>1313</b>	100.698	1	10721	8	<b>1340</b>
10:00	1285	1118	1263	1271	1383	1231	1231		1335	1310											<b>1270</b>	75.012	1	10309	8	<b>1289</b>
11:00	1361	1170	1269	1256	1362	1239	1237		1297	1359											<b>1283</b>	67.121	0	11550	9	<b>1283</b>
12:00	1380	1290	1313	1339	1406	1269	1214		1353	1273											<b>1315</b>	60.452	0	11837	9	<b>1315</b>
13:00	1359	1281	1341	1410	1460	1326	1191	1364	1353	1458											<b>1354</b>	80.391	1	12352	9	<b>1372</b>
14:00	1365	1362	1447	1323	1466	1427	1254	1333	1348	1424											<b>1375</b>	65.555	0	13749	10	<b>1375</b>
15:00	704	655	705	700	630	686	609	670	668	738											<b>677</b>	38.425	0	6765	10	<b>677</b>
15:30	714	692	710	715	713	720	706	738	701	683											<b>709</b>	15.194	0	7092	10	<b>709</b>
16:00	730	758	779	678	773	740	761	754	745	632											<b>735</b>	45.891	1	6718	9	<b>746</b>
16:30	781	781	785	754	784	744	754	791	785	647											<b>761</b>	43.157	1	6959	9	<b>773</b>
17:00	790	792	806	770	762	777	769	773	794	769											<b>780</b>	14.297	0	7802	10	<b>780</b>
17:30	790	784	797	765	762	742	736	758	798	768											<b>770</b>	21.823	0	7700	10	<b>770</b>
18:00	1262	1307	1331	1333	1490	1163	1183	1329	1458	1400											<b>1326</b>	106.120	0	13256	10	<b>1326</b>
19:00	729	805	817	859	884	734	760	817	878	1044											<b>833</b>	92.535	1	7283	9	<b>809</b>
20:00	512	524	559	619	643	489	483	606	621	724											<b>578</b>	77.770	0	5780	10	<b>578</b>
21:00	398	458	531	492	575	435	456	464	496	651											<b>496</b>	73.710	1	4305	9	<b>478</b>
22:00	296	323	364	339	455	301	342	366	373	469											<b>363</b>	58.461	0	3628	10	<b>363</b>
23:00	127	161	193	197	263	111	125	154	187	339											<b>186</b>	69.908	1	1518	9	<b>169</b>

AM 1479  
IP 1329  
PM 1553

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday									
00:00	29	90	84	72	100	65	74	83	101	91											<b>79</b>	21.084	1	760	9	<b>84</b>	AM	1665
01:00	29	64	59	62	55	43	55	52	61	54											<b>53</b>	10.469	1	505	9	<b>56</b>	IP	1257
02:00	25	24	31	18	27	30	28	21	38	26											<b>27</b>	5.554	1	230	9	<b>26</b>	PM	1408
03:00	32	34	24	34	32	44	34	24	32	41											<b>33</b>	6.262	0	331	10	<b>33</b>		
04:00	92	93	86	90	76	93	88	98	101	78											<b>90</b>	7.920	0	895	10	<b>90</b>		
05:00	266	245	255	240	269	274	232	263	258	267											<b>257</b>	13.796	0	2569	10	<b>257</b>		
06:00	831	740	784	791	735	775	748	797	779	767											<b>775</b>	29.040	0	7747	10	<b>775</b>		
07:00	1451	1418	1440	1461	1382	1394	1437	1436	1299	1367											<b>1409</b>	49.260	1	12786	9	<b>1421</b>		
08:00	1681	1622	1691	1681	1591	1749	1618	1683	1680	1656											<b>1665</b>	45.225	0	16652	10	<b>1665</b>		
09:00	1402	1302	1474	1416	1448	1332	1263	1325	1328	1532											<b>1382</b>	85.701	0	13822	10	<b>1382</b>		
10:00	1340	1215	1336	1289	1312	1324	1205	1269	1288	1415											<b>1299</b>	61.745	0	12993	10	<b>1299</b>		
11:00	1222	1188	1285	1100	1406	1253	1175	1342	1342	1373											<b>1269</b>	98.274	0	12686	10	<b>1269</b>		
12:00	1217	1217	1236	1248	1313	1233	1163	1293	1297	1249											<b>1247</b>	44.905	0	12466	10	<b>1247</b>		
13:00	1205	1157	1262	1297	1347	1206	1134	1116	1343	1383											<b>1245</b>	95.378	0	12450	10	<b>1245</b>		
14:00	1168	1168	1247	1227	1311	1199	1170	1204	1195	1341											<b>1223</b>	60.406	0	12230	10	<b>1223</b>		
15:00	615	594	663	600	676	623	591	618	663	691											<b>633</b>	36.567	0	6334	10	<b>633</b>		
15:30	711	679	732	692	714	712	712	704	688	733											<b>708</b>	17.607	0	7077	10	<b>708</b>		
16:00	735	801	718	701	632	710	708	773	727	708											<b>721</b>	44.875	0	7213	10	<b>721</b>		
16:30	705	739	738	715	705	670	720	703	729	621											<b>705</b>	35.635	1	6424	9	<b>714</b>		
17:00	695	728	718	693	697	691	660	653	711	767											<b>701</b>	32.786	1	6246	9	<b>694</b>		
17:30	605	653	653	698	696	583	674	680	684	724											<b>665</b>	43.218	0	6650	10	<b>665</b>		
18:00	1047	1034	1098	1130	1152	966	1009	1137	1116	1289											<b>1098</b>	90.865	1	9689	9	<b>1077</b>		
19:00	693	748	792	771	842	628	636	706	800	918											<b>753</b>	90.888	0	7534	10	<b>753</b>		
20:00	474	531	516	517	494	489	432	465	531	623											<b>507</b>	51.380	1	4449	9	<b>494</b>		
21:00	362	371	438	417	432	364	307	410	479	470											<b>405</b>	53.726	0	4050	10	<b>405</b>		
22:00	262	243	252	258	336	233	259	277	286	351											<b>276</b>	38.942	0	2757	10	<b>276</b>		
23:00	97	106	118	117	215	95	120	124	140	207											<b>134</b>	42.741	0	1339	10	<b>134</b>		

Start Hour	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean							
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016									10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday									
00:00	38	60	57	71	94	89	69	70	67	76											<b>69</b>	15.878	0	691	10	<b>69</b>	AM	1395
01:00	38	43	46	36	49	57	35	41	55	56											<b>46</b>	8.356	0	456	10	<b>46</b>	IP	1374
02:00	32	34	38	34	45	37	37	22	29	44											<b>35</b>	6.779	0	352	10	<b>35</b>	PM	1790
03:00	44	42	44	36	57	48	56	50	28	61											<b>47</b>	10.058	0	466	10	<b>47</b>		
04:00	73	70	67	77	72	73	74	61	72	70											<b>71</b>	4.383	1	648	9	<b>72</b>		
05:00	178	180	210	183	185	179	190	176	175	165											<b>182</b>	11.836	1	1611	9	<b>179</b>		
06:00	525	496	533	721	538	537	513	553	551	523											<b>549</b>	62.789	1	4769	9	<b>530</b>		
07:00	1156	1193	1127	1456	1104	1080	1117	1148	1139	1088											<b>1161</b>	109.015	1	10152	9	<b>1128</b>		
08:00	1379	1392	1481	1495	1355	1330	1348	1373	1402	1398											<b>1395</b>	53.992	0	13953	10	<b>1395</b>		
09:00	1294	1172	1282	1391	1220	1246	1120	1203	1323	1209											<b>1246</b>	78.740	0	12460	10	<b>1246</b>		
10:00	1233	1180	1312	1250	1321	1222	1198	1209	1249	1285											<b>1246</b>	47.494	0	12459	10	<b>1246</b>		
11:00	1279	1244	1336	1228	1292	1311	1241	1266	1304	1319											<b>1282</b>	36.539	0	12820	10	<b>1282</b>		
12:00	1356	1303	1368	1388	1375	1311	1316	1442	1421	1332											<b>1361</b>	47.010	0	13612	10	<b>1361</b>		
13:00	1372	1384	1461	1412	1502	1425	1264	1350	1422	1493											<b>1409</b>	70.978	1	12821	9	<b>1425</b>		
14:00	1429	1496	1587	1448	1558	1586	1407	1535	1528	1567											<b>1514</b>	66.038	0	15141	10	<b>1514</b>		
15:00	758	712	773	708	695	736	652	750	705	811											<b>730</b>	45.181	0	7300	10	<b>730</b>		
15:30	741	751	763	781	789	756	755	733	724	772											<b>757</b>	20.603	0	7565	10	<b>757</b>		
16:00	857	827	826	780	771	798	799	835	831	790											<b>811</b>	27.661	0	8114	10	<b>811</b>		
16:30	901	892	918	890	909	843	843	926	867	804											<b>879</b>	39.107	0	8793	10	<b>879</b>		
17:00	937	897	963	894	880	892	915	924	920	884											<b>911</b>	26.205	0	9106	10	<b>911</b>		
17:30	805	785	852	868	759	776	790	848	819	805											<b>811</b>	35.715	0	8107	10	<b>811</b>		
18:00	1129	1357	1384	1372	1457	1231	1231	1329	1438	1441											<b>1337</b>	108.039	0	13369	10	<b>1337</b>		
19:00	783	881	921	959	943	804	817	905	986	1130											<b>913</b>	102.514	1	7999	9	<b>889</b>		
20:00	578	615	658	669	652	569	546	715	738	774											<b>651</b>	75.675	0	6514	10	<b>651</b>		
21:00	455	526	537	528	585	490	480	517	526	695											<b>534</b>	66.731	1	4644	9	<b>516</b>		
22:00	335	349	374	388	508	325	344	403	368	505											<b>390</b>	65.920	0	3899	10	<b>390</b>		
23:00	138	173	219	196	295	119	152	156	225	358											<b>203</b>	74.736	1	1673	9	<b>186</b>		

SITE	DIRECTION	AM	IP	PM
		TOTAL	TOTAL	TOTAL
Site A2	NB	506	747	956
Site A2	SB	589	642	513
Site A3	NB	211	259	486
Site A3	SB	690	325	283
Site A4	NB	177	176	265
Site A4	SB	345	163	161
Site A5	NB	172	250	413
Site A5	SB	540	268	219
Site A6	NB	1172	1235	1191
Site A6	SB	1021	911	983
Site A11	NB	555	684	841
Site A11	SB	405	342	341
Site AN3	WB	705	956	1207
Site AN3	EB	915	914	795
Site AN10	WB	226	178	275
Site AN10	EB	277	186	338
Site AN11	NB	492	543	575
Site AN11	SB	483	452	338

SITE	DIRECTION	AM				IP				PM		
		CAR	LGV	HGV		CAR	LGV	HGV		CAR	LGV	HGV
Site A2	NB	389	79	38		676	39	33		846	95	15
Site A2	SB	512	58	18		548	76	18		431	71	12
Site A3	NB	154	35	22		204	34	22		405	59	22
Site A3	SB	603	75	12		276	45	4		252	28	4
Site A4	NB	156	17	4		150	19	6		167	87	11
Site A4	SB	308	30	6		141	18	4		108	49	3
Site A5	NB	144	22	6		211	30	9		375	31	6
Site A5	SB	458	65	17		229	33	6		194	20	5
Site A6	NB	988	125	60		1053	130	52		1022	144	25
Site A6	SB	840	136	45		749	126	36		843	118	22
Site A11	NB	452	63	39		583	61	39		769	59	13
Site A11	SB	341	47	16		294	35	14		278	45	18
Site AN3	WB	539	133	32		794	136	26		1061	133	14
Site AN3	EB	771	126	18		780	110	24		701	83	10
Site AN10	WB	147	48	31		114	34	30		185	58	32
Site AN10	EB	250	25	2		157	27	2		300	38	1
Site AN11	NB	411	69	12		466	72	5		522	47	5
Site AN11	SB	373	94	17		384	53	15		296	38	5

ATC	MCC		AM			IP			PM		
			CAR	LGV	HGV	CAR	LGV	HGV	CAR	LGV	HGV
Site A2	Site 8	NB	553	113	54	685	39	33	994	112	18
Site A2	Site 8	SB	1002	114	36	745	103	25	745	122	20
Site A3	M1	NB	106	24	15	152	25	16	290	42	16
Site A3	M1	SB	298	37	6	123	20	2	143	16	2
Site A4	Junction 4	NB	121	13	3	140	18	6	44	23	3
Site A4	Junction 4	SB	297	29	6	148	19	4	33	15	1
Site A5	Junction 1	NB	143	22	6	190	27	8	334	28	5
Site A5	Junction 1	SB	343	49	13	186	27	5	153	16	4
Site A6	Site 8	NB	979	124	59	951	117	47	1082	153	26
Site A6	Site 8	SB	817	132	44	753	127	36	980	137	26
Site A11	Site 9	NB	379	53	33	506	53	34	731	56	12
Site A11	Site 9	SB	361	50	17	281	33	13	259	42	17
Site AN3	6	WB	501	124	30	773	132	25	1089	136	14
Site AN3	6	EB	809	132	19	751	106	23	682	81	10
Site AN10	M2	WB	187	61	40	151	45	40	234	73	40
Site AN10	M2	EB	275	27	2	164	28	2	271	34	1
Site AN11	6	NB	491	83	14	554	85	6	609	55	6
Site AN11	6	SB	223	56	10	411	57	16	391	50	6

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016 Monday	19/04/2016 Tuesday	20/04/2016 Wednesday	21/04/2016 Thursday	22/04/2016 Friday	25/04/2016 Monday	26/04/2016 Tuesday	27/04/2016 Wednesday	28/04/2016 Thursday	29/04/2016 Friday	03/05/2016 Tuesday	04/05/2016 Wednesday	05/05/2016 Thursday	06/05/2016 Friday	09/05/2016 Monday							10/05/2016 Tuesday
00:00	44	36	40	48	51	38	42	46	49	54	32	39	47	52	35	34	43	6.923	0	687	16	43
01:00	13	19	17	10	20	17	16	19	28	30	20	17	24	40	17	22	21	7.220	1	289	15	19
02:00	10	9	11	11	9	18	15	14	11	13	7	11	14	24	6	9	12	4.427	1	168	15	11
03:00	21	13	16	11	15	12	16	9	17	15	12	10	10	42	9	17	15	7.889	1	203	15	14
04:00	24	21	16	22	28	21	29	30	24	25	20	22	29	21	31	26	24	4.238	0	389	16	24
05:00	64	67	68	63	54	69	75	57	62	52	73	67	65	59	78	66	65	7.169	0	1039	16	65
06:00	221	212	234	250	197	200	204	227	240	213	203	225	256	214	218	226	221	17.330	1	3284	15	219
07:00	465	427	429	451	420	446	399	438	427	455	480	399	438	436	414	429	435	21.872	1	6473	15	432
08:00	511	479	406	469	504	600	396	509	565	479	430	431	582	602	574	562	506	69.009	0	8099	16	506
09:00	489	627	561	560	522	523		539	529	462	456	490	651	531	487	561	533	54.904	1	7337	14	524
10:00	665	577	636	674	529	601	591	555	641	624	670	679	685	624	723	618	631	51.767	0	10092	16	631
11:00	693		696	748	728	712	699	684	679	756	656	675	702	777	766	716	712	35.763	0	10687	15	712
12:00	709	683	706	781	786	702	720	744	735	826	790	795	723	809	771	729	751	43.448	0	12009	16	751
13:00	705		723	714	866	728	707	758	799	829	725	756	722	860	775	699	758	56.327	0	11366	15	758
14:00	838		822	827	835	823	770	799	853	910	848	783	785	929	899	839	837	46.364	0	12560	15	837
15:00	490		439	424	388	409	402	404	345	483	388	398	415	490	441	412	422	40.954	0	6328	15	422
15:30	433			402		408	395	401	435	398	431	433	448	379	397	439	415	21.777	0	5399	13	415
16:00	453		390	431	289	465	488	503	469	284	487	467	405	414	493	468	434	68.384	2	5933	13	456
16:30	511		506	392	380	523	505	496	491	380	509	531	513	438	504		477	54.760	0	6679	14	477
17:00	408		519	440	458	462	552	505	458	503	485	521	502	483	413		479	41.708	0	6709	14	479
17:30	464	476	479	483	480	447	465	524	392	494	482	539	490	489	460		478	33.222	1	6772	14	484
18:00	642	609	728	685	744	625	653	728	690	885	626	678	736	817	705		703	74.800	1	9666	14	690
19:00	470	496	523	501	598	419	434	478	503	653	433	517	546	631	488		513	69.519	1	7037	14	503
20:00	348	388	373	353	379	345	341	373	427	487	354	368	373	398	348		377	38.174	1	5168	14	369
21:00	279	318	357	330	297	263	276	333	363	381	264	309	285	338	281		312	37.679	0	4674	15	312
22:00	174	167	187	200	238	185	188	205	213	293	151	192	218	219	172		200	34.355	1	2709	14	194
23:00	85	94	100	71	150	79	77	81	104	161	89	91	103	140	86		101	27.606	1	1350	14	96

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean						
	18/04/2016 Monday	19/04/2016 Tuesday	20/04/2016 Wednesday	21/04/2016 Thursday	22/04/2016 Friday	25/04/2016 Monday	26/04/2016 Tuesday	27/04/2016 Wednesday	28/04/2016 Thursday	29/04/2016 Friday	03/05/2016 Tuesday	04/05/2016 Wednesday	05/05/2016 Thursday	06/05/2016 Friday	09/05/2016 Monday							10/05/2016 Tuesday	11/05/2016 Wednesday	12/05/2016 Thursday	13/05/2016 Friday		
00:00	30	18	30	24	16	23	26	26	29	32	22	27	32	42	41	24						28	7.070	1	400	15	27
01:00	14	14	19	10	9	24	11	17	24	15	12	16	22	17	11	18						16	4.750	0	253	16	16
02:00	11	12	15	15	17	7	16	14	12	18	4	11	11	21	11	7						13	4.410	0	202	16	13
03:00	15	7	15	6	11	19	11	13	14	12	22	8	14	16	11	13						13	4.155	1	185	15	12
04:00	31	34	35	42	35	33	31	35	33	42	37	31	34	24	37	35						34	4.301	1	525	15	35
05:00	142	123	135	137	119	130	130	133	129	123	138	147	139	123	143	130						133	8.140	0	2121	16	133
06:00	414	449	440	425	429	428	421	422	423	424	426	442	400	443	430	410						427	12.712	1	6426	15	428
07:00	839	780	713	825	789	780	677	791	748	826	858	720	764	782	804	829						783	49.491	1	11848	15	790
08:00	519	529		419	541	681		649	503	497		700	711	644	674							589	97.739	0	7067	12	589
09:00	606	523	665	518	677	648		728	687	604		651	715	524	450	730						623	88.807	0	8726	14	623
10:00	736	582	653	699	525	679	681	554	768	589	649	697	669	564	780	754						661	79.330	0	10579	16	661
11:00	676		651	685	665	710	675	668	704		692	672	705	695	671	707						684	18.389	0	9576	14	684
12:00	634		633	627	636	659	602	617	660	630	601	631	665	606	641	673						634	22.512	0	9515	15	634
13:00	638		609	626	629	639	602	615	631	658	668	651	660	630	633	632						635	18.630	0	9521	15	635
14:00	591		608	584	621	644		642	614	618	633	609	604	614	637	622						617	17.863	0	8641	14	617
15:00			290	293		298	287	307		308		311	317	287	279	302						298	11.912	0	3279	11	298
15:30	341	277	290	347		368	358	369	285	274	325	307	356	245	321	348						321	39.006	0	4811	15	321
16:00	301	214	210	309	39	269	280	265	308		321	289	326	267	300	256						264	71.082	1	3915	14	280
16:30	246	204	250	294	224	226	239	301	293	253	217	247	268	249	268							252	28.774	0	3779	15	252
17:00	250		269	291		236	235	270	274	254	254	278	287	227	274							261	20.456	0	3399	13	261
17:30	278	253	278	255	270	206	259	258	298	275	275	265	272	311	304							270	24.928	1	3851	14	275
18:00	535	534	517	522	564	498	455	534	544	555	505	595	580	593	541							538	37.190	1	7617	14	544
19:00	372	354	419	392	406	362	348	403	387	447	345	404	394	408	396							389	28.387	1	5390	14	385
20:00	182	235	230	264	272	189	204	296	260	272	218	304	260	278	229							246	37.335	0	3693	15	246
21:00	177	196	235	212	229	193	203	240	237	270	166	249	233	238	199							218	28.856	0	3277	15	218
22:00	133	115	148	142	199	115	114	137	148	169	113	164	157	181	137							145	25.879	1	1973	14	141
23:00	50	58	85	63	98	45	52	66	76	140	59	65	82	135	75							77	28.523	2	874	13	67



Hour Starting	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016							13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	13	11	16	16	17	16	16	16	14	14	10	16	17	17	12	18	15	12	22	15	2.794	1	266	18	15
01:00	5	2	5	5	10	4	8	2	5	11	3	4	4	8	9	9	5	12	10	6	3.113	0	121	19	6
02:00	3	4	3	5	3	6	5	11	4	5	2	4	5	3	2	6	6	4	4	4	2.010	1	74	18	4
03:00	4	6	6	3	7	6	7	3	5	6	4	5	6	14	2	8	3	4	5	5	2.611	1	90	18	5
04:00	8	10	9	9	10	9	5	2	5	10	6	7	6	9	11	6	8	6	4	7	2.409	1	138	18	8
05:00	14	10	18	11	10	18	13	11	13	14	13	13	14	17	20	12	13	10	9	13	3.056	1	233	18	13
06:00	62	57	60	53	52	47	53	44	52	51	46	49	46	50	55	44	38	47	57	51	6.019	1	925	18	51
07:00	109	120	125	110	100	117	117	94	116	100	114	116	111	145	117	110	123	108	106	114	11.027	1	2013	18	112
08:00	214		217	217	200	213	226	205	213	204	212	220		207	224	196	207	205	211	8.418	0	3380	16	211	
09:00	187	165	185	203	198	188		214	204	197	218	206	192	193	196	191	179	176	187	193	13.150	1	3314	17	195
10:00	190		196	195	190	182	192	205	183	209	216	223	207	222	217	203	185	195	214	201	13.403	0	3624	18	201
11:00	246	219	257	241	235	215	220	235	240	233	255	218	218		258	218	223	233	257	235	15.290	0	4221	18	235
12:00	262	248	277	261	269	250	240	277	278	292	287	302	280	262	266	234	287	260	311	271	20.312	0	5143	19	271
13:00	256	280	284	246	262	269	251	290	264	295	259	289	250	269	259	264	260	262	300	269	16.048	0	5109	19	269
14:00	300	310	276	289	323	285	279	300	267		298	314	295		278	306	287	285	318	295	15.944	0	5010	17	295
15:00	138		181	158		164	144	184	159	166	138	154	148	165		156	140	131	184	157	16.693	0	2510	16	157
15:30	157	134	160	179	206	143	142	165	127	190	175	163	144	172	144	136	134	134	172	157	21.784	1	2771	18	154
16:00	208	251	183	185	217	197	193	175	190	298	192	226	204	200	175	186	188	179	208	203	29.741	1	3557	18	198
16:30	254		268	285		216	244	230	193	254	222	210	217	257	208	215	203	184	187	226	29.489	0	3847	17	226
17:00			243	279		274	244	290	263	260	271	231	256	240		250	286	252	250	259	17.568	0	3889	15	259
17:30	152	202	191	209	158	199	175	180	162	176	179	171	142	160	193	138	201	168	163	175	20.597	0	3319	19	175
18:00	203	218	233	204	219	201	221	218	212	235	207	207	195	213	190	202	236	225	211	213	13.086	0	4050	19	213
19:00	112	123	137	128	122	115	118	125	132	154	105	105	143	139	142	115	129	145	152	128	14.905	0	2441	19	128
20:00	90	106	93	120	104	91	99	94	119	141	101	106	129	120	90	102	91	110	106	106	14.337	1	1871	18	104
21:00	72	72	95	91	89	69	89	96	82	101	98	110	85	100	83	85	89	106	98	90	11.358	0	1710	19	90
22:00	44	44	71	47	62	45	43	50	56	76	30	47	82	53	41	43	68	59	62	54	13.525	1	941	18	52
23:00	28	24	28	33	45	21	27	22	33	34	38	34	32	45	20	30	34	28	37	31	7.099	0	593	19	31

Hour Starting	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016							13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	20	12	17	12	15	14	13	19	12	14	11	19	14	22	12	17	10	11	22	15	3.822	0	286	19	15
01:00	7	6	13	6	11	6	9	5	8	10	4	12	6	11	9	9	7	12	11	9	2.674	0	162	19	9
02:00	1	1	4	4	1	5	5	6	3	6	3	1	1	6	5	3	1	6	6	4	2.063	0	68	19	4
03:00	9	8	4	6	11	4	5	8	4	6	6	5	2	8	2	6	3	3	5	6	2.435	1	94	18	5
04:00	21	20	20	15	14	13	15	12	15	14	11	13	19	19	19	16	13	16	16	16	3.005	0	301	19	16
05:00	41	39	36	31	30	39	36	30	35	35	35	41	32	34	36	32	31	31	36	35	3.525	0	660	19	35
06:00	88	82	91	83	84	103	88	91	100	92	89	78	85	92	87	89	84	99	106	90	7.412	1	1605	18	89
07:00	337	359	374	341	289	318	393	372	324	315	343	389	342	304	331	323	310	306	277	334	32.283	0	6347	19	334
08:00	672	715	721	707	661	627	749	725	699	701	745	705	645	630	642	676	711	688	686	690	36.325	0	13105	19	690
09:00	505	406	476	461	431	461	606	429	411	548	653	542	469	512	605	369	491	426	636	497	82.344	0	9437	19	497
10:00	327	349	357	372	453	357	334	431	361	426	430	364	353	447	407	311	381	377	450	384	44.443	0	7287	19	384
11:00	284	277	357	335	413	270	323	356	325	385	379	353	361	382	374	330	336	338		343	38.674	0	6178	18	343
12:00	306	295	319	291	349	308	325	316	337		323	323	331	355	335	296	327	329		321	18.090	0	5465	17	321
13:00		282	280	297	298	289	268	299	289	339	324	320	305	342	294	313	280	309	334	303	21.582	0	5462	18	303
14:00	272	249	278	297	306	302	257	280	290	295	290	277	276		253	255	271	278	304	279	17.932	0	5030	18	279
15:00	152	141	168	155		166	165	152	145	177	153	159	155	178	172	156	153	146	168	159	10.849	0	2861	18	159
15:30	161	155	205	174		163	166	175	143		189	188	173		179	151	180	198		173	17.360	0	2600	15	173
16:00	168	168	164	175	269	159	148	190	148	200	175	170	141	203	184	142	163	148	181	173	29.457	1	3027	18	168
16:30	168	141	137	156	156	128	150	134	127		147	148	119	165	142	125	132	157	157	144	14.431	0	2589	18	144
17:00	135	144		140	148	133		141	131		133	148	129				141	143	149	140	6.826	0	1815	13	140
17:30	117	101	115	122	131	117	125	122	127	127	135	130	128	130	122	130	109	136	129	124	8.902	1	2252	18	125
18:00	176	187	225	188	242	184	173	212	195	250	182	197	217	236	184	167	207	216	223	203	24.532	0	3861	19	203
19:00	149	144	182	158	167	127	131	140	157	197	135	140	186	192	135	139	138	192	172	157	23.430	0	2981	19	157
20:00	86	80	102	105	113	83	91	89	114	124	91	111	106	122	96	78	92	96	117	100	14.234	0	1896	19	100
21:00	69	90	83	83	98	58	85	73	75	98	67	81	91	97	81	77	70	96	86	82	11.489	1	1500	18	83
22:00	51	52	56	48	63	63	43	44	46	83	51	52	61	61	40	48	63	75	67	56	11.271	1	984	18	55
23:00	37	27	29	40	51	36	38	33	28	44	33	25	45	45	30	27	32	30	36	35	7.291	1	615	18	34

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016 Monday	19/04/2016 Tuesday	20/04/2016 Wednesday	21/04/2016 Thursday	22/04/2016 Friday	25/04/2016 Monday	26/04/2016 Tuesday	27/04/2016 Wednesday	28/04/2016 Thursday	29/04/2016 Friday	03/05/2016 Tuesday	04/05/2016 Wednesday	05/05/2016 Thursday	06/05/2016 Friday	09/05/2016 Monday							10/05/2016 Tuesday	11/05/2016 Wednesday	12/05/2016 Thursday	13/05/2016 Friday
00:00											14	12	15	13	12	13	13	8	16	13	2.261	1	108	8	14
01:00											4	9	8	10	3	10	7	7	9	7	2.506	0	67	9	7
02:00											2	5	1	4	3	4	5	7	2	4	1.871	0	33	9	4
03:00											4	7	7	8	0	4	1	2	4	4	2.804	0	37	9	4
04:00											9	7	8	10	8	11	7	10	12	9	1.764	0	82	9	9
05:00											9	13	8	16	13	13	11	16	10	12	2.848	0	109	9	12
06:00											18	28	25	34	23	23	16	31	28	25	5.840	0	226	9	25
07:00											75	72	67	64	74	65	72	68	69	70	3.909	0	626	9	70
08:00											183	174	180	172	170	184	165	178	185	177	6.942	0	1591	9	177
09:00											117	128	127	137	131	123	130	118	138	128	7.416	0	1149	9	128
10:00											140	127	123	135	144	150	146	150	133	139	9.798	0	1248	9	139
11:00											158	152	167	142	160	142	158	146	179	156	12.155	0	1404	9	156
12:00											200	164	165	172	168	142	168	155	187	169	16.815	0	1521	9	169
13:00											169	178	172		166	158	166	170		168	6.161	0	1179	7	168
14:00											232	223	242	262	212	208	192	217	228	224	20.378	0	2016	9	224
15:00											104	100	115	114	100	117	125	118	108	111	8.700	0	1001	9	111
15:30											124	104	97	106	98	105	99	113	106	106	8.452	1	828	8	104
16:00											116	117	103	126	123	127	109	109	127	117	8.946	0	1057	9	117
16:30											130	126	124	136	136	110	114	134	117	125	9.744	0	1127	9	125
17:00											142	153	148	137	127	121	141	141	149	140	10.362	0	1259	9	140
17:30											106	116	108	107	117	108	111	113	102	110	4.893	0	988	9	110
18:00											166	144	145	156	142	142	138	158	132	147	10.794	0	1323	9	147
19:00											102	108	126	145	104	108	78	112	97	109	18.624	0	980	9	109
20:00											60	67	78	105	66	47	74	86	77	73	16.447	0	660	9	73
21:00											48	65	58	66	60	53	63	62	71	61	6.964	0	546	9	61
22:00											40	43	44	73	34	31	37	38	62	45	13.838	1	329	8	41
23:00											16	12	20	33	23	17	32	20	35	23	8.283	0	208	9	23

Hour Starting	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016						
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	6	18	9	8	13	9	13	13	12	13	13	9	10	14	9	15	10	10	8	11	2.949	1	194	18	11
01:00	6	8	8	12	8	3	6	4	5	12	3	7	6	6	5	3	3	11	9	7	2.931	0	125	19	7
02:00	0	1	2	2	1	2	4	2	1	0	4	2	2	2	4	3	4	2	3	2	1.259	0	41	19	2
03:00	7	6	5	3	3	2	4	2	5	4	6	4	5	6	4	5	5	5	5	5	1.349	0	86	19	5
04:00	14	14	12	10	16	13	19	7	16	17	11	11	13	17	17	13	13	12	15	14	2.926	1	253	18	14
05:00	12	10	20	17	11	13	16	14	14	13	16	18	14	15	14	12	14	17	12	14	2.540	1	252	18	14
06:00	34	44	36	35	40	39	43	37	35	42	25	35	31	32	34	37	27	34	30	35	5.054	1	645	18	36
07:00	176	190	196	179	141	151	170	174	172	174	146	154	147	144	173	145	144	147	133	161	18.383	0	3056	19	161
08:00	337	358	383	372	317	318				378	362	330	357	318	354	360	337	318	318	345	23.413	0	5517	16	345
09:00	224	241	233	235	239	203		253	221	282	226	233	188	233	184	202	214	157	197	220	28.682	2	3526	16	220
10:00	177		189	187		163	159	172	163	182	156	145	158	175	192	157	158	144		167	15.085	0	2677	16	167
11:00	160	198	155	172	177	159	151	189	181	180	161	168	175	188	147	141	161		165	168	15.490	0	3028	18	168
12:00	158	167	152	167		159	172	152	169		149	153	139	144	155	155	144	138	162	155	10.283	0	2635	17	155
13:00	120		164		167	155	159	137	157	147	148	137	153	128	142	129	166	140	146	147	13.881	0	2495	17	147
14:00	137	176	152	154	140	157	126	161	156	158	142	152	156	172	157	122	132	146	141	149	14.229	0	2837	19	149
15:00	94	126	103	129	133	108	122	112	112	115	110	102	116	108	90		87	115	119	111	12.711	0	2001	18	111
15:30	94	147	97	120	126	121	95	86	90	96	101	89	78	96	118	88	99	92	102	102	17.001	1	1788	18	99
16:00	92	113	111	105	103	70	91	100	78	88	93	93	74	102	92	79	96	89	89	93	11.730	0	1758	19	93
16:30	89		79	78	97	95	91	94	77	99	66	72	89	99	92	78	89	69	87	86	10.382	0	1540	18	86
17:00	64	78	68	74	90	61	93	91	86	80	66	63	78	65	90	65	73	72	78	76	10.548	0	1435	19	76
17:30	92	100	97	85	87	72	93	77	84	84	99	95	119	99	92	116	109	106	98	95	12.213	0	1804	19	95
18:00	116	130	118	120	153	118	125	126	128	144	118	108	150	141	113	122	126	112	123	126	12.729	1	2238	18	124
19:00	87	114	95	96	113	85	116	109	97	106	94	101	97	109	98	107	90	92	114	101	9.721	0	1920	19	101
20:00	48	61	79	83	58	53	59	53	53	88	61	64	65	75	56	52	57	64	59	63	11.112	1	1100	18	61
21:00	36	49	50	38	52	44	38	49	52	70	41	51	45	67	39	46	50	44	57	48	9.111	2	781	17	46
22:00	29	33	31	27	26	43	36	35	32	41	23	26	31	41	40	26	32	20	43	32	6.914	0	615	19	32
23:00	24	13	15	11	30	14	13	12	21	21	11	16	12	24	19	12	16	23	22	17	5.558	1	299	18	17

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00											13	12	13	17	20	14	10	15	18	15	3.162	0	132	9	15
01:00											4	12	8	10	4	9	8	8	14	9	3.283	0	77	9	9
02:00											1	5	6	7	3	1	3	1	7	4	2.539	0	34	9	4
03:00											6	6	1	6	3	5	3	8	3	5	2.186	0	41	9	5
04:00											3	5	3	5	5	4	5	9	2	5	2.007	1	32	8	4
05:00											10	13	13	12	8	11	9	6	13	11	2.506	0	95	9	11
06:00											26	29	27	23	33	30	24	29	30	28	3.180	0	251	9	28
07:00											68	70	64	79	85	83	70	75	87	76	8.216	0	681	9	76
08:00											167	177	163	171	163	174	183	186	167	172	8.352	0	1551	9	172
09:00											148	132	166	162	184	147	136	147	176	155	17.741	0	1398	9	155
10:00											189	185	164	203	209	146	187	159	221	185	24.631	0	1663	9	185
11:00											225	220	193	225	205	175	234	208	190	208	19.506	0	1875	9	208
12:00											246	257	250	247	277	290	265	238	236	256	18.095	0	2306	9	256
13:00											251	245	217	258	235	225	259	248	277	246	18.395	0	2215	9	246
14:00											334	336	287	328	309	292	310	288	307	310	19.114	0	2791	9	310
15:00											157	152	188	173	162	171	179	160	176	169	11.683	0	1518	9	169
15:30											146	163	159	169	135	178	168	100	168	154	24.083	1	1286	8	161
16:00											153	186	198	187	183	160	214	186	161	181	19.662	0	1628	9	181
16:30											226	216	214	182	209	161	208	213	177	201	21.829	0	1806	9	201
17:00											205	243	217	206	222	202	212	219	181	212	16.885	0	1907	9	212
17:30											134	172	173	147	158	134	151	149	124	149	16.841	0	1342	9	149
18:00											190	191	194	227	199	191	188	207	193	198	12.377	1	1553	8	194
19:00											140	163	148	174	134	135	174	156	160	154	15.466	0	1384	9	154
20:00											124	119	118	135	121	120	150	131	129	127	10.309	1	997	8	125
21:00											80	112	83	121	96	68	117	101	110	99	18.330	0	888	9	99
22:00											54	64	85	104	70	88	74	69	117	81	20.063	0	725	9	81
23:00											39	38	40	64	43	48	41	49	64	47	10.173	0	426	9	47

Hour Starting	Date																Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean			
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016							11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00											8	8	8	13	19	7	10	11	12	11	3.742	1	77	8	10
01:00											3	7	5	9	5	6	8	3	6	6	2.048	0	52	9	6
02:00											1	1	3	4	1	3	1	6	4	3	1.803	0	24	9	3
03:00											1	2	2	2	0	1	1	3	1	1	0.882	0	13	9	1
04:00											2	2	3	9	5	6	7	4	4	5	2.345	0	42	9	5
05:00											13	12	7	9	15	17	14	12	20	13	3.930	0	119	9	13
06:00											65	73	59	73	75	69	64	70	79	70	6.185	0	627	9	70
07:00											291	286	280	270	288	286	285	276	275	282	6.990	0	2537	9	282
08:00											531	551	548	519	539	554	533	570	517	540	17.254	0	4862	9	540
09:00											312	327	294	319	356	308	344	320	340	324	19.456	0	2920	9	324
10:00											320	283	268	320	348	303	344	280	340	312	29.819	0	2806	9	312
11:00											287	297	282	289	314	248	324	329	306	297	24.779	0	2676	9	297
12:00											273		270	268	272	251	272	271	251	266	9.381	0	2128	8	266
13:00											236	234	234	219	219	245	234	243	228	232	9.153	0	2092	9	232
14:00											229	228	256	226	242	193	200	238	230	227	19.643	0	2042	9	227
15:00											118	161	145	140	140	120	143	137	157	140	14.391	0	1261	9	140
15:30											154	162	158	159	174	143	156	102	173	153	21.483	1	1279	8	160
16:00											85	119	126	130	114	90	117	121	111	113	15.371	0	1013	9	113
16:30											95	113	130	114	131	102	118	140	109	117	14.547	0	1052	9	117
17:00											97	100	118	104	109	89	92	112	100	102	9.421	0	921	9	102
17:30											99	95	119	99	92	116	109	106	98	104	9.407	0	933	9	104
18:00											164	195	180	203	208	180	203	212	217	196	17.591	0	1762	9	196
19:00											133	145	151	188	155	145	165	151	171	156	16.401	0	1404	9	156
20:00											68	88	91	134	102	69	93	104	88	93	19.805	1	703	8	88
21:00											40	60	57	100	58	55	75	68	87	67	18.221	0	600	9	67
22:00											36	49	52	60	33	38	60	40	60	48	11.069	0	428	9	48
23:00											20	27	15	41	35	23	29	25	49	29	10.677	0	264	9	29

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016 Monday	19/04/2016 Tuesday	20/04/2016 Wednesday	21/04/2016 Thursday	22/04/2016 Friday	25/04/2016 Monday	26/04/2016 Tuesday	27/04/2016 Wednesday	28/04/2016 Thursday	29/04/2016 Friday	03/05/2016 Tuesday	04/05/2016 Wednesday	05/05/2016 Thursday	06/05/2016 Friday	09/05/2016 Monday							10/05/2016 Tuesday	11/05/2016 Wednesday	12/05/2016 Thursday	13/05/2016 Friday
00:00					70	40	63	60	64	64					40	48	59	66	62	58	10.362	0	636	11	58
01:00					47	19	40	42	46	30					27	44	36	31	47	37	9.347	0	409	11	37
02:00					21	15	24	19	30	23					13	21	20	32	26	22	5.741	0	244	11	22
03:00					14	18	20	13	13	20					12	14	12	22	19	16	3.727	0	177	11	16
04:00					39	31	37	35	38	44					38	44	43	39	51	40	5.356	1	388	10	39
05:00					129	132	123	126	125	153					114	103	125	127	127	126	12.082	1	1231	10	123
06:00					320	308	324	331	314	306					333	326	312	323	340	322	10.792	0	3537	11	322
07:00					689	677	662	671	652	705					663	639	720	685	687	677	23.380	0	7450	11	677
08:00					918	943	871	937	894	938					963	858	937	922	888	915	33.161	0	10069	11	915
09:00					915	902	834	906	814	929					959	912	956	906	912	904	44.289	1	9131	10	913
10:00					946	935	872	937	901						910	898	962	906	954	922	28.888	0	9221	10	922
11:00					992	901	900	994	964	967					941	955	990	915	993	956	36.765	0	10512	11	956
12:00					1000	958	916	974	973	1017					950	935	1034	913	991	969	39.494	0	10661	11	969
13:00					937	877	805	869	947	967					864	886	924	880	962	902	49.864	0	9918	11	902
14:00					943	775	804	874	829	965					854	815	925	862	877	866	59.708	0	9523	11	866
15:00					446	387	404	389	426	444					396	381	399	410	449	412	25.205	0	4531	11	412
15:30					430	442	429	430	421	431					426	389	423	440	472	430	19.586	2	3872	9	430
16:00					423	376	400	448	402	401					396	370	417	352	426	401	27.546	0	4411	11	401
16:30					401	377	391	374	398	369					406	375	397	401	378	388	13.412	0	4267	11	388
17:00					423	390	406	431	393	446					408	393	372	397	419	407	21.225	0	4478	11	407
17:30					418	372	400	412	378	460					396	360	432	389	458	407	33.090	0	4475	11	407
18:00					771	626	612	753	719	823					657	650	701	705	789	710	69.163	0	7806	11	710
19:00					579	490	442	518	574	672					503	532	511	627	645	554	71.714	0	6093	11	554
20:00					384	318	308	277	352	438					378	327	347	382	408	356	47.221	0	3919	11	356
21:00					307	210	213	230	287	348					263	226	262	295	280	266	43.297	0	2921	11	266
22:00					185	142	155	164	176	194					139	162	162	198	210	172	23.084	0	1887	11	172
23:00					103	64	74	74	83	136					73	81	76	105	123	90	23.241	0	992	11	90

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	42	44	30	50	61	48									60	44	35	37	57	46	10.216	0	508	11	46
01:00	19	23	20	25	52	26									19	36	28	31	41	29	10.339	1	268	10	27
02:00	20	17	22	19	29	24									24	21	16	27	28	22	4.367	0	247	11	22
03:00	30	31	29	28	39	25									26	25	25	28	39	30	5.106	0	325	11	30
04:00	54	62	46	53	48	61									54	43	53	42	55	52	6.580	0	571	11	52
05:00	106	113	114	91	84	101									98	112	116	108	108	105	10.171	1	1067	10	107
06:00	268	276	281	267	258	255									277	270	282	295	294	275	12.952	0	3023	11	275
07:00	578	561	535	530	538	527									537	516	547	545	574	544	19.464	0	5988	11	544
08:00		695	724	691	698										688	717	715	714	704	705	12.850	0	6346	9	705
09:00	739	683	675	720	687	691									738	654	694	689	736	701	28.451	0	7706	11	701
10:00	767	839	795	832	850	796									899	805	789	818	916	828	46.249	0	9106	11	828
11:00	827	910	971	889	898	884									965	928	954	890	979	918	46.541	0	10095	11	918
12:00	939	926	1003	945	980	980									1021	975	1010	1012		979	33.288	0	9791	10	979
13:00	929	973	1010	973	1072	993									1017	1020	1000	924	1063	998	47.122	0	10974	11	998
14:00	972	1036	1050	1055	1076	1041									1076	1058	1084	986	1103	1049	39.809	0	11537	11	1049
15:00	499	460	542	451	535	471									470	447	477	456	518	484	34.026	0	5326	11	484
15:30	461	496	516	490	521	492									495	503	523	491	534	502	20.381	1	5061	10	506
16:00	575	532	557	548	612	547									534	529	564	544	584	557	25.328	1	5514	10	551
16:30	583	583	634	566	608	589									553	552	598	618	557	586	27.325	0	6441	11	586
17:00	645		637	639	628	613									596	585	636	634	603	622	20.828	0	6216	10	622
17:30	494	479	496	514	443	494									552	487	492	502	448	491	29.543	1	4849	10	485
18:00	738	744	756	739	806	714									813	740	793	782	779	764	32.243	0	8404	11	764
19:00	545	607	592	653	579	533									542	548	572	553	669	581	45.611	0	6393	11	581
20:00	376	429	419	348	419	219									394	434	483	414	448	398	69.396	1	4164	10	416
21:00	269	348	289	308	339	168									298	245	296	336	333	294	52.313	1	3061	10	306
22:00	208	182	203	237	276	101									171	205	223	243	273	211	49.561	1	2221	10	222
23:00	85	93	103	106	150	31									100	115	98	127	192	109	40.116	1	1008	10	101



Hour Starting	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016							13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00					53	60	59	53	54	52	51	57	59	93	61	53	67	50	72	60	11.083	1	801	14	57
01:00					40	47	39	32	40	35	37	30	37	52	30	46	38	45	53	40	7.245	0	601	15	40
02:00					37	27	33	35	35	31	31	32	32	50	25	26	27	34	29	32	6.076	1	434	14	31
03:00					37	59	41	42	43	36	46	32	34	67	38	47	33	38	31	42	10.048	1	557	14	40
04:00					105	119	101	107	122	120	119	95	110	110	118	106	132	104	138	114	11.714	1	1568	14	112
05:00					219	222	241	221	226	215	238	230	218	233	242	222	231	235	224	228	8.629	0	3417	15	228
06:00					622	600	596	590	609	616	610	602	598	614	619	617	584	643	595	608	14.975	1	8472	14	605
07:00					1099	1125	1118	1139	1080	1135	1179	1163	1139	1106	1105	1105	1120	1142	1052	1120	31.733	1	15755	14	1125
08:00					1178	1204	1172	1185		1194	1167	1169	1155		1162	1164	1139	1148	1203	1172	20.052	0	15240	13	1172
09:00					1259	1231	1033	1121	1203	1281	1216	1167	1181	1251	1215	1098	1116	1198	1229	1187	68.288	1	16766	14	1198
10:00					1317	1164	1102	1182	1217	1297		1110	1185	1152	1287	1139	1124	1202	1312	1199	75.878	0	16790	14	1199
11:00						1235	1190	1153	1218	1301	1238	1190	1230	1282	1228	1217	1223	1264		1228	39.212	0	15969	13	1228
12:00						1222	1177	1208	1214	1227	1163	1237	1260	1248	1266	1211	1220	1268	1289	1229	35.147	0	17210	14	1229
13:00					1287	1237		1195	1226	1278	1269	1257	1206	1268	1251	1220	1215	1220	1293	1244	31.663	0	17422	14	1244
14:00					1319	1309	1174	1286	1198	1284	1262	1210	1278	1358	1257	1242	1277	1167	1301	1261	54.593	0	18922	15	1261
15:00					668	607	585	601		679	611	632	627	677	647	566	630	617	643	628	33.376	0	8790	14	628
15:30					417	627	653	643	623	570	688	679	691	671	654	590	613	631	600	623	67.396	1	8933	14	638
16:00					483	691	644	669	700	276	668	483	545	546	689	561	638	649	632	592	113.751	1	8598	14	614
16:30					468	642	548	576	653	447	627	531	521	590	599	525	641	636	634	576	66.300	0	8638	15	576
17:00					610	639	629		687	541	568	675	575	620		645	574	589	643	615	43.715	0	7995	13	615
17:30					613	545	576	514	649	620	553	558	575	600	563	574	582	540	578	576	34.203	1	7991	14	571
18:00					996	820	819	915	920	1009	915	953	1038	1055	952	846	936	993	938	940	72.404	0	14105	15	940
19:00					747	596	610	657	705	793	635	681	750	748	633	618	651	760	678	684	62.655	0	10262	15	684
20:00					484	414	377	556	528	498	451	490	508	561	451	448	552	560	516	493	56.002	1	7017	14	501
21:00					479	379	428	422	446	612	359	477	440	545	390	359	476	448	480	449	68.138	1	6128	14	438
22:00					355	232	252	267	274	383	233	275	353	381	281	226	319	355	356	303	56.904	0	4542	15	303
23:00					228	92	97	107	152	309	129	128	177	272	153	154	203	169	248	175	65.301	1	2309	14	165

Hour Starting	Date																			Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016	13/05/2016						
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	57	61	69	82	68	52	59	61	78	70	64	69	79	91	51	78	75	75	89	70	11.508	0	1328	19	70
01:00	28	38	37	29	39	31	42	29	45	36	28	33	39	59	25	34	32	36	39	36	7.738	1	620	18	34
02:00	25	19	20	24	21	33	30	24	24	22	25	25	28	38	23	25	18	24	22	25	4.817	1	432	18	24
03:00	28	45	40	41	50	30	47	41	40	43	37	45	43	45	15	48	41	43	46	40	8.262	1	753	18	42
04:00	45	52	51	50	50	50	56	54	43	62	47	47	53	60	56	37	59	54	53	52	6.095	1	942	18	52
05:00	123	118	116	105	116	121	120	105	116	115	108	117	114	127	116	119	121	111	112	116	5.779	0	2200	19	116
06:00	343	348	358	379	332	339	323	369	332	346	318	368	359	358	341	365	351	380	330	349	18.145	0	6639	19	349
07:00	745	762	773	777	770	782	771	773	772	741	769	785	785	772	757	745	789	773	786	770	14.182	1	13886	18	771
08:00	1016	1029	1055	991	1053	979	984	1029	1061	995	1056	1018	1036	1013	1012		1038	998	1020	1021	25.511	0	18383	18	1021
09:00	1013	912	983	997	931	953	888	909	995	941	1023	991	936	940	1024	951	918	1024	966	963	42.877	0	18295	19	963
10:00	947		983	983	893	854	903	899	929	907		936	1007	945	963	856	974	973	972	937	45.285	0	15924	17	937
11:00	880		902	904	922	916	877	958	976	943	925	885	919	964		910	940	878	918	919	30.189	0	15617	17	919
12:00	851	894	911	897	954	925	864	913	921		914	937	913		864	900	903	946	906	907	27.899	0	15413	17	907
13:00	949	928	855	909	983	922	890	850	936	963	894		880	950	899	874	878	907	954	912	38.254	0	16421	18	912
14:00	875	848	936	946	911	861	873		859	915	886	891	909	933	900	942	876	840	845	891	34.396	0	16046	18	891
15:00	409	427	453	429	419	451	435	459			459	437	475	434	492	457	422	429	484	445	23.566	0	7571	17	445
15:30	456	466	502	420	461	366	449	416	429	485	408	469	443	457	423	426	440	433	453	442	30.431	1	8036	18	446
16:00	502	467	473	432	532	472	489	500	477	509	489	464	514	478	486	477	475	518	446	484	24.648	1	8768	18	487
16:30	490		508	489	498		485	505	497			522	497	520		488	504	515		501	12.251	0	6518	13	501
17:00			468	483	471	436	468	529	505	460	445	506	490	478	528	504	501	466	446	481	27.821	0	8184	17	481
17:30	500	480	473	405	454	417	466	503	500	478	452	499	455	486	473	433	428	475	496	467	29.520	1	8468	18	470
18:00	848	870	893	854	998	806	858	976	949	1068	846	874	923	1037	842	854	944	922	971	912	72.781	1	16265	18	904
19:00	618	670	719	683	817	594	620	660	675	918	600	670	770	903	682	633	707	767	897	716	102.655	0	13603	19	716
20:00	429	495	472	487	558	452	412	464	501	739	462	457	524	617	463	442	457	549	529	500	76.459	1	8770	18	487
21:00	319	336	373	343	409	305	306	356	365	505	327	342	360	465	337	321	379	371	417	365	52.629	1	6431	18	357
22:00	220	243	241	241	316	220	237	240	265	421	201	253	291	343	225	217	310	281	271	265	53.361	1	4615	18	256
23:00	108	107	127	115	232	113	103	117	153	252	127	133	152	203	110	119	157	148	178	145	43.279	2	2270	17	134

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean					
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
00:00	4	5	3	5	10	6	1	6	6	3											5	2.424	1	39	9	4
01:00	5	1	2	2	1	3	1	0	0	0											2	1.581	1	10	9	1
02:00	3	4	7	3	3	3	4	3	3	6											4	1.449	1	32	9	4
03:00	2	2	2	3	1	0	2	1	3	0											2	1.075	0	16	10	2
04:00	1	2	2	0	2	3	3	1	2	5											2	1.370	1	16	9	2
05:00	18	23	23	22	18	10	10	13	14	13											16	5.103	0	164	10	16
06:00	33	37	38	37	42	42	38	38	44	46											40	3.894	0	395	10	40
07:00	144	164	146	157	133	160	159	154	142	139											150	10.369	0	1498	10	150
08:00	303	262	281	274	288	262	283	274	243	295											277	17.621	0	2765	10	277
09:00	179	202	163	203	180	194	153	168	203	207											185	19.321	0	1852	10	185
10:00	166	162	165	192	184	154	170	176	167												171	11.630	0	1536	9	171
11:00	172	183	187	203	192	169	167	161	180	197											181	13.836	0	1811	10	181
12:00	174	177	191	187	160	198	178	170	207	206											185	15.697	0	1848	10	185
13:00	150	196	185	180	200	187	172	162	190	212											183	18.338	0	1834	10	183
14:00	188	196	204	199	222	188	192	190	195	222											200	12.808	0	1996	10	200
15:00	96	98	94	105	122	100	101	108	86	125											104	12.150	0	1035	10	104
15:30	88	85	112	107	135	89	99	116	116	115											106	15.852	0	1062	10	106
16:00	110	130	138	132	126	133	134	134	119	131											129	8.367	1	1177	9	131
16:30	155	167	176	191	140	153	166	151	172	166											164	14.530	0	1637	10	164
17:00	164	192	206	166	141	179	186	194	165	152											175	20.365	0	1745	10	175
17:30	111	122	128	137	135	122	117	110	118	122											122	9.041	0	1222	10	122
18:00	177	195	201	195	197	173	171	167	185	196											186	12.667	0	1857	10	186
19:00	108	157	134	135	145	119	118	147	123	147											133	15.854	0	1333	10	133
20:00	74	92	77	69	80	66	76	79	75	108											80	12.158	1	688	9	76
21:00	42	56	68	74	60	49	44	53	35	56											54	11.879	0	537	10	54
22:00	26	30	26	46	31	22	34	35	44	50											34	9.407	0	344	10	34
23:00	9	15	10	15	31	9	7	16	22	35											17	9.608	0	169	10	17

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean				
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	5	3	8	2	7	3	4	5	4	2										4	2.003	0	43	10	4
01:00	2	0	0	1	2	4	0	1	3	4										2	1.567	0	17	10	2
02:00	0	3	1	1	1	0	1	2	2	2										1	0.949	0	13	10	1
03:00	0	2	2	2	2	2	4	1	0	1										2	1.174	1	12	9	1
04:00	4	2	1	3	3	4	6	3	5	7										4	1.814	0	38	10	4
05:00	19	19	24	19	18	11	14	15	10	22										17	4.533	0	171	10	17
06:00	49	46	59	56	57	46	53	57	52	51										53	4.648	0	526	10	53
07:00	144	163	158	150	156	143	162	142	154	152										152	7.633	0	1524	10	152
08:00	221	220	229	221	229	230	232	230		226										226	4.613	0	2038	9	226
09:00	161	184	143	169	143	167	154	157	142	145										157	13.970	0	1565	10	157
10:00	168	156	147	161	167	168	162	138	164	182										161	12.175	0	1613	10	161
11:00	165	181	145	165	146	190	175	156	159	161										164	14.415	0	1643	10	164
12:00	186	168	196	193	177		169	172	206	191										184	13.396	0	1658	9	184
13:00	164	181	197	181	189	154	190	154	187	209										181	18.155	0	1806	10	181
14:00	171	179	166	181	161	154	147	180	177	196										171	14.513	0	1712	10	171
15:00	132	140	109	114	117	117	118	114	108	95										116	12.465	0	1164	10	116
15:30	107	153	124	124	143	131	112	126	128	134										128	13.448	0	1282	10	128
16:00	116	134	135	145	121	123	117	148	134	144										132	11.870	0	1317	10	132
16:30	120	131	136	137	124	129	131	126	126											129	5.533	0	1160	9	129
17:00	138	149	152	148	141	137	152	145	146	151										146	5.587	0	1459	10	146
17:30	100	103	131	121	103	108	101	126	104	106										110	11.314	0	1103	10	110
18:00	154	187	181	175	182	174	160	171	141	186										171	15.044	1	1570	9	174
19:00	134	151	155	141	159	111	127	145	128	163										141	16.440	0	1414	10	141
20:00	81	97	73	89	71	76	78	72	98	83										82	9.920	0	818	10	82
21:00	61	61	71	66	54	64	43	59	55	63										60	7.704	1	554	9	62
22:00	31	31	39	44	39	36	34	35	38	44										37	4.630	0	371	10	37
23:00	5	15	18	26	31	16	20	13	18	27										19	7.578	0	189	10	19

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean					
	18/04/2016 Monday	19/04/2016 Tuesday	20/04/2016 Wednesday	21/04/2016 Thursday	22/04/2016 Friday	25/04/2016 Monday	26/04/2016 Tuesday	27/04/2016 Wednesday	28/04/2016 Thursday	29/04/2016 Friday	03/05/2016 Tuesday	04/05/2016 Wednesday	05/05/2016 Thursday	06/05/2016 Friday	09/05/2016 Monday							10/05/2016 Tuesday	11/05/2016 Wednesday	12/05/2016 Thursday	13/05/2016 Friday	
00:00	24	21	30	28	31	25	23	21	28	33											26	4.222	0	264	10	26
01:00	15	14	17	13	26	16	18	13	18	8											16	4.662	1	132	9	15
02:00	2	9	7	8	9	9	6	4	10	6											7	2.539	0	70	10	7
03:00	4	9	8	9	9	10	6	9	10	15											9	2.846	1	74	9	8
04:00	9	11	11	8	11	12	14	6	9	17											11	3.120	0	108	10	11
05:00	46	39	44	40	32	41	37	37	41	41											40	3.910	0	398	10	40
06:00	153	160	149	148	155	129	139	138	138	153											146	9.739	0	1462	10	146
07:00	532	537	498	524	497	518	506	496	522	476											511	19.132	0	5106	10	511
08:00	450	523	517	428	529	514	559	499	391	513											492	52.152	0	4923	10	492
09:00	440	415	439	447	429	432	384	422	356	396											416	28.967	1	3804	9	423
10:00	417	412	416	499	502	428	463	447	484	507											458	38.440	0	4575	10	458
11:00	472	477	519	529	498	456	438	506	523	564											498	37.900	0	4982	10	498
12:00	559	512	600	537	600	565	512	581	596	562											562	33.411	0	5624	10	562
13:00	563	559	570	650	607	548	571	591	671	633											596	42.319	0	5963	10	596
14:00		581	611	605	620	543	573	549	599	579											584	26.810	0	5260	9	584
15:00	297	277	301	285	290	270	281	280	295												286	10.256	0	2576	9	286
15:30	268	301	297	286	268	278	296	325	314	327											296	21.458	0	2960	10	296
16:00	322	264	341	274	266	342	334	338	355	227											306	44.239	0	3063	10	306
16:30	237	248	220	261	230	294	322	342	309	232											270	43.691	0	2695	10	270
17:00	303	293	323	281	316		309	308		309											305	13.145	0	2442	8	305
17:30	301	296	294	307	301	308	276	311	287	284											297	11.385	0	2965	10	297
18:00	451	413	443	484	520	404	417	453	496	538											462	46.107	0	4619	10	462
19:00	302	342	330	379	342	289	297	336	341	430											339	41.667	1	2958	9	329
20:00	190	229	216	230	247	177	200	257	244	283											227	32.414	0	2273	10	227
21:00	147	184	185	173	179	160	148	200	173	213											176	21.076	0	1762	10	176
22:00	110	123	120	121	176	100	133	132	152	182											135	27.094	0	1349	10	135
23:00	55	60	73	66	87	47	53	55	77	116											69	20.642	1	573	9	64

Hour Starting	Date															Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean					
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016							10/05/2016	11/05/2016	12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
00:00	15	11	11	16	18	10	17	14	11	10											13	3.057	0	133	10	13
01:00	4	5	4	6	6	9	8	6	11	7											7	2.221	0	66	10	7
02:00	6	9	13	4	6	7	4	7	9	6											7	2.685	1	58	9	6
03:00	9	8	6	4	13	14	10	11	12	10											10	3.093	0	97	10	10
04:00	31	20	23	25	20	29	28	13	25	33											25	5.982	0	247	10	25
05:00	92	77	65	71	73	69	69	71	76	76											74	7.385	1	647	9	72
06:00	239	224	242	236	214	216	211	230	212	223											225	11.557	0	2247	10	225
07:00	493	515	556	535	499	488	493	512	488	512											509	22.193	1	4535	9	504
08:00	434	554	597	291	627	547	539	445	357	440											483	107.723	0	4831	10	483
09:00	505	492	479	550	528	480	466	495	394	429											482	45.166	0	4818	10	482
10:00	486	449	472	462	474	423	451	439	477	472											461	19.614	0	4605	10	461
11:00	426	393	432	472	478	413	455	493	500	454											452	35.198	0	4516	10	452
12:00	447	485	498	451	506	502	467	469	505	478											481	21.989	0	4808	10	481
13:00	407	450	464	461	514	428	452	435	479	490											458	31.227	0	4580	10	458
14:00	440	415	427	445	430	392	397	427	431												423	18.090	0	3804	9	423
15:00	192	201	226	204	230	191	227	200	223												210	15.868	0	1894	9	210
15:30	218	225	221	253	192	211	221	197	230	260											223	21.436	0	2228	10	223
16:00	277	225	258	207	180	284	279	288	280	96											237	62.036	1	2278	9	253
16:30	141	79	109	146	51	203	282	201	162	59											143	72.595	0	1433	10	143
17:00	167	140	153	162	186	187	228	248	229	246											195	40.084	0	1946	10	195
17:30	216	239	228	227	228	215	231	247	245	237											231	10.884	0	2313	10	231
18:00	329	337	369	411	350	301	315	355	360	427											355	39.554	0	3554	10	355
19:00	224	216	244	257	253	211	217	239	244	278											238	21.365	0	2383	10	238
20:00	116	143	131	117	142	137	124	142	133	154											134	12.206	0	1339	10	134
21:00	90	111	113	91	124	97	91	114	118	123											107	13.612	0	1072	10	107
22:00	52	66	63	58	71	54	56	58	64	75											62	7.469	0	617	10	62
23:00	21	27	23	33	45	20	19	28	32	48											30	10.135	0	296	10	30

Hour	Date																	Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean			
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016							12/05/2016	13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
01:00	19	32	53	38	53	23	35	35	35	57											<b>38</b>	12.737	0	380	10	<b>38</b>
02:00	26	23	15	23	24	17	18	19	31	24											<b>22</b>	4.784	0	220	10	<b>22</b>
03:00	13	14	12	17	17	14	23	18	16	13											<b>16</b>	3.268	1	134	9	<b>15</b>
04:00	13	20	23	18	17	19	18	12	24	21											<b>19</b>	3.866	0	185	10	<b>19</b>
05:00	51	53	47	46	45	52	48	50	58	52											<b>50</b>	3.882	1	444	9	<b>49</b>
06:00	70	60	76	72	63	65	81	72	75	66											<b>70</b>	6.498	0	700	10	<b>70</b>
07:00	150	186	197	179	169	143	168	176	199	192											<b>176</b>	18.894	0	1759	10	<b>176</b>
08:00	367	348	402	369	345	352	352	393	365	342											<b>364</b>	20.294	0	3635	10	<b>364</b>
09:00	586	565	525	559	554	535		555	543	570											<b>555</b>	18.527	0	4992	9	<b>555</b>
10:00	563	562	569	537	607	533	552	571	570	614											<b>568</b>	26.148	0	5678	10	<b>568</b>
11:00	615	623	603	574	607	577	594	582	604	640											<b>602</b>	20.968	0	6019	10	<b>602</b>
12:00	699	609	691	660	696	628	683	617	641	663											<b>659</b>	33.556	0	6587	10	<b>659</b>
13:00	742	681	713	616	700	707	704	602	670	694											<b>683</b>	43.501	0	6829	10	<b>683</b>
14:00	775	647	743	642	706	678	663	721	692	770											<b>704</b>	48.079	0	7037	10	<b>704</b>
15:00	774	704	727	748	781	732	750	722	718	790											<b>745</b>	29.110	0	7446	10	<b>745</b>
15:30	407	319	372	367	415	346	324	366	345	429											<b>369</b>	37.730	0	3690	10	<b>369</b>
16:00	379	336	354	394	405	361	342	354	358	415											<b>370</b>	27.046	0	3698	10	<b>370</b>
16:30	405	410	409	389	402	427	432	413	447	343											<b>408</b>	28.123	1	3734	9	<b>415</b>
17:00	426	418	380	405	415		426	400	410	386											<b>407</b>	16.348	0	3666	9	<b>407</b>
17:30	459	414	423	430	433	459	464	408	415	428											<b>433</b>	20.429	0	4333	10	<b>433</b>
18:00	363	397	408	438	358	379	389	398	349	398											<b>388</b>	26.475	0	3877	10	<b>388</b>
19:00	450	502	552	518	534	466	481	531	511	625											<b>517</b>	49.466	1	4545	9	<b>505</b>
20:00	354	407	409	378	425	322	380	363	434	448											<b>392</b>	39.480	0	3920	10	<b>392</b>
21:00	253	314	261	292	267	226	250	272	295	277											<b>271</b>	25.404	0	2707	10	<b>271</b>
22:00	171	200	240	244	234	219	216	219	236	252											<b>223</b>	23.979	1	2060	9	<b>229</b>
23:00	114	118	140	129	170	118	122	142	135	206											<b>139</b>	28.617	1	1188	9	<b>132</b>
00:00	49	78	73	75	103	53	54	48	74	125											<b>73</b>	24.935	1	607	9	<b>67</b>

Hour	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean		
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016							13/05/2016	
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday							
01:00	19	10	19	19	12	14	11	17	20	19											16	3.859	0	160	10	16
02:00	6	6	5	9	12	7	10	5	9	11											8	2.539	0	80	10	8
03:00	6	2	5	8	5	8	8	3	6	5											6	2.066	0	56	10	6
04:00	7	11	15	10	9	6	6	12	11	12											10	2.923	0	99	10	10
05:00	7	13	19	16	16	16	17	16	13	19											15	3.521	1	145	9	16
06:00	44	42	40	36	42	31	39	40	44	43											40	4.040	1	370	9	41
07:00	119	126	113	115	103	99	115	123	125	126											116	9.466	0	1164	10	116
08:00	269	248	264	260	265	268	286	311	297	270											274	18.772	0	2738	10	274
09:00	397	410	374	377	375	426	397	424	431	436											405	24.120	0	4047	10	405
10:00	406	368	366	361	345	352	351	408	424	374											376	27.448	0	3755	10	376
11:00	350	327	330	349	312	356	415	316	377	385											352	32.857	0	3517	10	352
12:00	313	322	370	350	364	311	356	396	391	363											354	30.078	0	3536	10	354
13:00	288	321	357	301	367	345	357	303	374	388											340	34.556	0	3401	10	340
14:00	295	346	349	320	325	351	375	345	387	389											348	29.955	0	3482	10	348
15:00	305	316	319	319	316	331	315	327	351	357											326	16.568	0	3256	10	326
15:30	141	138	159	162	168	162	154	193	165	193											164	18.362	0	1635	10	164
16:00	159	138	160	148	230	190	182	166	176	203											175	27.373	1	1522	9	169
16:30	174	151	179	181	213	176	159	175	158	236											180	25.969	1	1566	9	174
17:00	201	134	180	216	207	145	190	157	133	219											178	33.555	0	1782	10	178
17:30	203	126	158	182	165	123	143	193	149	188											163	28.048	0	1630	10	163
18:00	156	128	134	159	110	120	124	160	154	144											139	18.114	0	1389	10	139
19:00	180	184	189	214	204	191	180	205	223	250											202	22.321	1	1770	9	197
20:00	129	153	161	146	159	124	148	155	149	222											155	26.555	1	1324	9	147
21:00	75	101	91	104	114	97	87	86	110	114											98	13.102	0	979	10	98
22:00	56	90	83	77	91	63	87	73	93	131											84	20.490	1	713	9	79
23:00	50	52	51	67	78	53	51	64	56	87											61	12.914	1	522	9	58
00:00	24	19	31	33	46	22	25	34	43	58											34	12.286	0	335	10	34



Hour Starting	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016 Monday	19/04/2016 Tuesday	20/04/2016 Wednesday	21/04/2016 Thursday	22/04/2016 Friday	25/04/2016 Monday	26/04/2016 Tuesday	27/04/2016 Wednesday	28/04/2016 Thursday	29/04/2016 Friday	03/05/2016 Tuesday	04/05/2016 Wednesday	05/05/2016 Thursday	06/05/2016 Friday	09/05/2016 Monday	10/05/2016 Tuesday	11/05/2016 Wednesday	12/05/2016 Thursday							13/05/2016 Friday
00:00	20	12	17	12	15	14	13	19	12	14	11	19	14	22	12	17	10	11	22	15	3.822	0	286	19	15
01:00	7	6	13	6	11	6	9	5	8	10	4	12	6	11	9	9	7	12	11	9	2.674	0	162	19	9
02:00	1	1	4	4	1	5	5	6	3	6	3	1	1	6	5	3	1	6	6	4	2.063	0	68	19	4
03:00	9	8	4	6	11	4	5	8	4	6	6	5	2	8	2	6	3	3	5	6	2.435	1	94	18	5
04:00	21	20	20	15	14	13	15	12	15	14	11	13	19	19	19	16	13	16	16	16	3.005	0	301	19	16
05:00	41	39	36	31	30	39	36	30	35	35	35	41	32	34	36	32	31	31	36	35	3.525	0	660	19	35
06:00	88	82	91	83	84	103	88	91	100	92	89	78	85	92	87	89	84	99	106	90	7.412	1	1605	18	89
07:00	337	359	374	341	289	318	393	372	324	315	343	389	342	304	331	323	310	306	277	334	32.283	0	6347	19	334
08:00	672	715	721	707	661	627	749	725	699	701	745	705	645	630	642	676	711	688	686	690	36.325	0	13105	19	690
09:00	505	406	476	461	431	461	606	429	411	548	653	542	469	512	605	369	491	426	636	497	82.344	0	9437	19	497
10:00	327	349	357	372	453	357	334	431	361	426	430	364	353	447	407	311	381	377	450	384	44.443	0	7287	19	384
11:00	284	277	357	335	413	270	323	356	325	385	379	353	361	382	374	330	336	338	434	348	42.969	1	6178	18	343
12:00	306	295	319	291	349	308	325	316	337	379	323	323	331	355	335	296	327	329	397	328	27.202	1	5844	18	325
13:00	249	282	280	297	298	289	268	299	289	339	324	320	305	342	294	313	280	309	334	301	24.412	1	5462	18	303
14:00	272	249	278	297	306	302	257	280	290	295	290	277	276	337	253	255	271	278	304	282	21.864	1	5030	18	279
15:00	152	141	168	155	204	166	165	152	145	177	153	159	155	178	172	156	153	146	168	161	14.765	1	2861	18	159
15:30	161	155	205	174	304	163	166	175	143	250	189	188	173	279	179	151	180	198	227	193	43.551	1	3356	18	186
16:00	168	168	164	175	269	159	148	190	148	200	175	170	141	203	184	142	163	148	181	173	29.457	1	3027	18	168
16:30	168	141	137	156	156	128	150	134	127	188	147	148	119	165	142	125	132	157	157	146	17.302	1	2589	18	144
17:00	135	144	170	140	148	133	173	141	131	183	133	148	129	119	100	108	141	143	149	140	20.359	1	2485	18	138
17:30	117	101	115	122	131	117	125	122	127	127	135	130	128	130	122	130	109	136	129	124	8.902	1	2252	18	125
18:00	176	187	225	188	242	184	173	212	195	250	182	197	217	236	184	167	207	216	223	203	24.532	0	3861	19	203
19:00	149	144	182	158	167	127	131	140	157	197	135	140	186	192	135	139	138	192	172	157	23.430	0	2981	19	157
20:00	86	80	102	105	113	83	91	89	114	124	91	111	106	122	96	78	92	96	117	100	14.234	0	1896	19	100
21:00	69	90	83	83	98	58	85	73	75	98	67	81	91	97	81	77	70	96	86	82	11.489	1	1500	18	83
22:00	51	52	56	48	63	63	43	44	46	83	51	52	61	61	40	48	63	75	67	56	11.271	1	984	18	55
23:00	37	27	29	40	51	36	38	33	28	44	33	25	45	45	30	27	32	30	36	35	7.291	1	615	18	34

Hour Starting	Date																		Mean	Standard Deviation	No. of Outliers	SUMIF	COUNTIF	New Mean	
	18/04/2016	19/04/2016	20/04/2016	21/04/2016	22/04/2016	25/04/2016	26/04/2016	27/04/2016	28/04/2016	29/04/2016	03/05/2016	04/05/2016	05/05/2016	06/05/2016	09/05/2016	10/05/2016	11/05/2016	12/05/2016							13/05/2016
	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday						
00:00	13	11	16	16	17	16	16	16	14	14	10	16	17	17	12	18	15	12	22	15	2.794	1	266	18	15
01:00	5	2	5	5	10	4	8	2	5	11	3	4	4	8	9	9	5	12	10	6	3.113	0	121	19	6
02:00	3	4	3	5	3	6	5	11	4	5	2	4	5	3	2	6	6	4	4	4	2.010	1	74	18	4
03:00	4	6	6	3	7	6	7	3	5	6	4	5	6	14	2	8	3	4	5	5	2.611	1	90	18	5
04:00	8	10	9	9	10	9	5	2	5	10	6	7	6	9	11	6	8	6	4	7	2.409	1	138	18	8
05:00	14	10	18	11	10	18	13	11	13	14	13	13	14	17	20	12	13	10	9	13	3.056	1	233	18	13
06:00	62	57	60	53	52	47	53	44	52	51	46	49	46	50	55	44	38	47	57	51	6.019	1	925	18	51
07:00	109	120	125	110	100	117	117	94	116	100	114	116	111	145	117	110	123	108	106	114	11.027	1	2013	18	112
08:00	214	241	217	217	200	213	226	205	213	204	212	220	188	179	207	224	196	207	205	210	13.932	2	3568	17	210
09:00	187	165	185	203	198	188	420	214	204	197	218	206	192	193	196	191	179	176	187	205	53.561	1	3479	18	193
10:00	190	356	196	195	190	182	192	205	183	209	216	223	207	222	217	203	185	195	214	209	37.798	1	3624	18	201
11:00	246	219	257	241	235	215	220	235	240	233	255	218	218	293	258	218	223	233	257	238	20.023	1	4221	18	235
12:00	262	248	277	261	269	250	240	277	278	292	287	302	280	262	266	234	287	260	311	271	20.312	0	5143	19	271
13:00	256	280	284	246	262	269	251	290	264	295	259	289	250	269	259	264	260	262	300	269	16.048	0	5109	19	269
14:00	300	310	276	289	323	285	279	300	267	354	298	314	295	341	278	306	287	285	318	300	22.534	1	5351	18	297
15:00	138	218	181	158	206	164	144	184	159	166	138	154	148	165	114	156	140	131	184	160	25.743	1	2830	18	157
15:30	157	134	160	179	206	143	142	165	127	190	175	163	144	172	144	136	134	134	172	157	21.784	1	2771	18	154
16:00	208	251	183	185	217	197	193	175	190	298	192	226	204	200	175	186	188	179	208	203	29.741	1	3557	18	198
16:30	254	340	268	285	305	216	244	230	193	254	222	210	217	257	208	215	203	184	187	236	41.559	1	4152	18	231
17:00	345	343	243	279	317	274	244	290	263	260	271	231	256	240	316	250	286	252	250	274	34.149	2	4522	17	266
17:30	152	202	191	209	158	199	175	180	162	176	179	171	142	160	193	138	201	168	163	175	20.597	0	3319	19	175
18:00	203	218	233	204	219	201	221	218	212	235	207	207	195	213	190	202	236	225	211	213	13.086	0	4050	19	213
19:00	112	123	137	128	122	115	118	125	132	154	105	105	143	139	142	115	129	145	152	128	14.905	0	2441	19	128
20:00	90	106	93	120	104	91	99	94	119	141	101	106	129	120	90	102	91	110	106	106	14.337	1	1871	18	104
21:00	72	72	95	91	89	69	89	96	82	101	98	110	85	100	83	85	89	106	98	90	11.358	0	1710	19	90
22:00	44	44	71	47	62	45	43	50	56	76	30	47	82	53	41	43	68	59	62	54	13.525	1	941	18	52
23:00	28	24	28	33	45	21	27	22	33	34	38	34	32	45	20	30	34	28	37	31	7.099	0	593	19	31

wkt_geom	NAME	X	Y	TYPE	COMPANY	STARTDATE	FINISHDATE
POINT(652359 311047)	A1	652359	311047	ATC	AECOM	18/04/2016	01/05/2016
POINT(652208.22720332909375429 308818.11709040467394516)	A2	652242	308813	ATC	AECOM	15/04/2016	10/05/2016
POINT(652429.87593211513012648 308799.0702542428043671)	A3	652479	308796	ATC	AECOM	15/04/2016	03/05/2016
POINT(652779.66516938665881753 308786.04683616186957806)	A4	652838	308784	ATC	AECOM	15/04/2016	14/05/2016
POINT(653072.73542362952139229 308783)	A5	653128	308783	ATC	AECOM	15/04/2016	14/05/2016
POINT(652105 308130)	A6	652105	308130	ATC	AECOM	15/04/2016	14/05/2016
POINT(652753 307929)	A7	652753	307929	ATC	AECOM	15/04/2016	14/05/2016
POINT(652846 307930)	A8	652846	307930	ATC	AECOM	15/04/2016	14/05/2016
POINT(652956 307942)	A9	652956	307942	ATC	AECOM	15/04/2016	14/05/2016
POINT(653137 307946)	A10	653137	307946	ATC	AECOM	15/04/2016	14/05/2016
POINT(652078.45862151740584522 307726.81524822377832606)	A11	652073	307814	ATC	AECOM	18/04/2016	01/05/2016
POINT(652164 307504)	A12	652164	307504	ATC	AECOM	18/04/2016	01/05/2016
POINT(652543 306742)	A13	652543	306742	ATC	AECOM	15/04/2016	14/05/2016
POINT(652700.50751130434218794 306762.49237518350128084)	A14	652691	306762	ATC	AECOM	15/04/2016	14/05/2016
POINT(652901 306786)	A15	652901	306786	ATC	AECOM	15/04/2016	14/05/2016
POINT(653083 306788)	A16	653083	306788	ATC	AECOM	15/04/2016	14/05/2016
POINT(649280 308921)	AN1	649280	308921	ATC	AECOM	18/04/2016	01/05/2016
POINT(651458.4888115341309458 307614.54739804397104308)	AN2	651817	308424	ATC	AECOM	18/04/2016	01/05/2016
POINT(651677 306677)	AN3	651677	306677	ATC	AECOM	15/04/2016	14/05/2016
POINT(651785 306379)	AN4	651785	306379	ATC	AECOM	18/04/2016	01/05/2016
POINT(652423.6959809442050755 305605.81162228476023301)	AN5	652424	305729	ATC	AECOM	15/04/2016	05/05/2016
POINT(652043 307329)	AN6	652043	307329	ATC	AECOM	18/04/2016	03/05/2016
POINT(652110 304971)	AN7	652110	304971	ATC	AECOM	15/04/2016	03/05/2016
POINT(651913.53500612021889538 304894.15823730354895815)	AN8	651970	304918	ATC	AECOM	15/04/2016	03/05/2016
POINT(652526.96605815144721419 303447.36863984464434907)	AN9	652055	304755	ATC	AECOM	18/04/2016	01/05/2016
POINT(651389.89067223912570626 305165.06086763250641525)	AN10	651388	305174	ATC	AECOM	15/04/2016	03/05/2016
POINT(651429 306019)	AN11	651429	306019	ATC	AECOM	15/04/2016	03/05/2016
POINT(651458.20767962816171348 304663.06782762979855761)	AN12	651457	304668	ATC	AECOM	15/04/2016	05/05/2016
POINT(652040 304702)	AN13	652040	304702	ATC	AECOM		
POINT(647566 313415)	B1	647566	313415	ATC	AECOM	15/04/2016	05/05/2016
POINT(631775 301894)	B2	631775	301894	ATC	AECOM	15/04/2016	14/05/2016
POINT(637950 295852)	B3	637950	295852	ATC	AECOM	18/04/2016	06/05/2016
POINT(642412 297032)	B4	642412	297032	ATC	AECOM	15/04/2016	14/05/2016
POINT(642790 294212)	B5	642790	294212	ATC	AECOM	15/04/2016	05/05/2016
POINT(650440 290578)	B6	650440	290578	ATC	AECOM	15/04/2016	05/05/2016
POINT(651049 296858)	B7	651049	296858	ATC	AECOM	15/04/2016	05/05/2016
POINT(652897 297387)	B8	652897	297387	ATC	AECOM	18/04/2016	01/05/2016
POINT(650294.43960543547291309 303298.7865724756848067)	B9	649547	302721	ATC	AECOM	15/04/2016	05/05/2016

Used Sector - Sector comparisons to find illogical records and also removed movements contained inside sectors away from the peninsula  
All intra-sector movements have been disregarded as they would necessitate multiple bridge crossings; deemed illogical due to layout

OB/IB logic: Holiday Home --> Permanent Home is classified as inbound rather than outbound

Zone allocation replaced 30/12/2016 after finding that prior zone system was superceded













Category lookup used for number to description conversion.

These categories do not match the 'readme' in the raw data - the summary counts and general sense checks show that the key in the readme is not correct

Vehicle Category

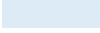
- 1 Car
- 2 LGV
- 3 OGV1
- 4 OGV2
- 5 Bus / Coach
- 6 Motorcycle

Site 4 Banned Movements

O	D	OD	Review?
1		1 1_1	
1	10	1 1_10	
2		1 2_1	
2	10	2 2_10	
2		2 2_2	
2	9	2 2_9	
3		1 3_1	
3	10	3 3_10	
3		2 3_2	
3		3 3_3	
3		5 3_5	
3		6 3_6	
3		8 3_8	
3		9 3_9	
4		1 4_1	
4	10	4 4_10	
4		2 4_2	
4		3 4_3	
4		4 4_4	
4		5 4_5	
4		6 4_6	
4		7 4_7	
4		8 4_8	
4		9 4_9	
5		1 5_1	
5	10	5 5_10	
5		2 5_2	
5		3 5_3	
5		4 5_4	
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5		6 5_6	
5		7 5_7	
5		8 5_8	
5		9 5_9	
6		1 6_1	
6	10	6 6_10	
6		2 6_2	
6		3 6_3	
6		5 6_5	
6		6 6_6	
6		8 6_8	
6		9 6_9	
7		1 7_1	
7	10	7 7_10	
7		2 7_2	
7		3 7_3	
7		4 7_4	
7		5 7_5	
7		6 7_6	
7		7 7_7	
7		8 7_8	
7		9 7_9	
8		1 8_1	
8	10	8 8_10	
8		2 8_2	
8		8 8_8	
8		9 8_9	
9		1 9_1	
9	10	9 9_10	
9		2 9_2	
9		8 9_8	
9		9 9_9	
10		1 10_1	
10	10	10 10_10	
2		8 2_8	
10		2 10_2	

Site 3 Banned Movements

O	D	OD
1		5 1_5
1		4 1_4
2		1 2_1
2		2 2_2
2		3 2_3
2		4 2_4
2		5 2_5
2		6 2_6
2		7 2_7
2		8 2_8
2		9 2_9
2	10	2 2_10
6		1 6_1
6	10	6 6_10
7		1 7_1
8		1 8_1
8		2 8_2
8	10	8 8_10
9		1 9_1
9		2 9_2
9		3 9_3
9		4 9_4
9		5 9_5
9		6 9_6
9		7 9_7
9		8 9_8
9		9 9_9
9	10	9 9_10
10		1 10_1
10		4 10_4
10		5 10_5
10		7 10_7
1		1 1_1
3		1 3_1
3		3 3_3
3		6 3_6
3		8 3_8
4		1 4_1
4		4 4_4
4		5 4_5
4		7 4_7
5		1 5_1
5		4 5_4
5		5 5_5
5		7 5_7
5	10	5 5_10
6		3 6_3
6		6 6_6
7		4 7_4
7		5 7_5
7		7 7_7
8		3 8_3
8		4 8_4
8		5 8_5
8		6 8_6
8		7 8_7
8		8 8_8
8		9 8_9
10	10	10 10_10

Used Sector - Sector comparisons to find illogical records and also removed movements contained inside sectors away from the peninsula  
Inside sector movement within 1 and 2 near the RSI sites have been evaluated individually to see if they were reasonable  
These are indicated by blue coloured cells 

Henry: I have amended OB/IB logic so that now Holiday Home --> Permanent Home is classified as inbound rather than outbound

Henry: Sector 10 added into model, sectoring and logic list updated accordingly

Henry: Sample too poor for site 4 so all sites have had illogical trips reversed if appropriate (i.e. reversed OD is logical movement). Corresponding columns have been added along with updates to logic check formula













Origin	Destinator	Sector_Sec	Logic
Illogical Sector Movements Site 1			
2	3	2_3	I
2	4	2_4	I
2	5	2_5	I
2	6	2_6	I
2	9	2_9	I
2	2	2_2	I
2	8	2_8	I
3	1	3_1	I
3	2	3_2	I
3	4	3_4	I
3	7	3_7	I
3	9	3_9	I
3	3	3_3	I
3	10	3_10	I
3	6	3_6	I
3	8	3_8	I
4	1	4_1	I
4	7	4_7	I
4	4	4_4	I
4	3	4_3	I
4	5	4_5	I
4	6	4_6	I
4	8	4_8	I
4	9	4_9	I
5	1	5_1	I
5	2	5_2	I
5	4	5_4	I
5	7	5_7	I
5	8	5_8	I
5	9	5_9	I
5	5	5_5	I
5	10	5_10	I
6	2	6_2	I
6	3	6_3	I
6	4	6_4	I
6	7	6_7	I
6	6	6_6	I
6	10	6_10	I
6	9	6_9	I
7	1	7_1	I
7	3	7_3	I
7	4	7_4	I
7	5	7_5	I
7	6	7_6	I
7	9	7_9	I
7	7	7_7	I
7	8	7_8	I
8	1	8_1	I
8	2	8_2	I
8	3	8_3	I
8	4	8_4	I
8	7	8_7	I
8	9	8_9	I
8	8	8_8	I
8	10	8_10	I
8	5	8_5	I
9	2	9_2	I
9	4	9_4	I
9	6	9_6	I
9	8	9_8	I
9	9	9_9	I
9	10	9_10	I
9	3	9_3	I
9	5	9_5	I
10	10	10_10	I
10	3	10_3	I
10	4	10_4	I
10	5	10_5	I
10	6	10_6	I
10	9	10_9	I
10	2	10_2	I
4	2	4_2	I
2	7	2_7	I
4	10	4_10	I
7	10	7_10	I
7	2	7_2	I
9	7	9_7	I
2	10	2_10	I
10	7	10_7	I
10	8	10_8	I
10	1	10_1	I
2	1	2_1	I

Origin	Destinator	Sector_Sec	Logic
Logical Sector Movements Site 1			
1	1	1_1	L
1	10	1_10	L
1	2	1_2	L
1	3	1_3	L
1	4	1_4	L
1	5	1_5	L
1	6	1_6	L
1	7	1_7	L
1	8	1_8	L
1	9	1_9	L

Origin	Destinator	Sector_Sec	Logic
Illogical Sector Movements Site 2			
2	3	2_3	I
2	4	2_4	I
2	5	2_5	I
2	6	2_6	I
2	8	2_8	I
2	9	2_9	I
2	2	2_2	I
3	1	3_1	I
3	2	3_2	I
3	5	3_5	I
3	6	3_6	I
3	7	3_7	I
3	8	3_8	I
3	9	3_9	I
3	3	3_3	I
3	10	3_10	I
4	1	4_1	I
4	5	4_5	I
4	7	4_7	I
4	8	4_8	I
4	4	4_4	I
5	1	5_1	I
5	2	5_2	I
5	6	5_6	I
5	8	5_8	I
5	9	5_9	I
5	5	5_5	I
5	10	5_10	I
5	3	5_3	I
5	4	5_4	I
5	7	5_7	I
6	2	6_2	I
6	8	6_8	I
6	9	6_9	I
6	6	6_6	I
6	10	6_10	I
6	3	6_3	I
6	5	6_5	I
6	7	6_7	I
7	1	7_1	I
7	3	7_3	I
7	5	7_5	I
7	6	7_6	I
7	8	7_8	I
7	7	7_7	I
7	4	7_4	I
8	1	8_1	I
8	2	8_2	I
8	7	8_7	I
8	9	8_9	I
8	8	8_8	I
8	10	8_10	I
8	3	8_3	I
8	4	8_4	I
8	5	8_5	I
8	6	8_6	I
9	1	9_1	I
9	2	9_2	I
9	3	9_3	I
9	7	9_7	I
9	8	9_8	I
9	9	9_9	I
9	10	9_10	I
9	5	9_5	I
9	6	9_6	I
10	10	10_10	I
10	3	10_3	I
10	4	10_4	I
10	5	10_5	I
10	6	10_6	I
10	8	10_8	I
10	9	10_9	I
2	10	2_10	I
2	7	2_7	I
4	10	4_10	I
4	2	4_2	I
7	10	7_10	I
7	2	7_2	I
7	9	7_9	I
10	2	10_2	I
10	7	10_7	I
10	1	10_1	I
2	1	2_1	I

Origin	Destinator	Sector_Sec	Logic
Logical Sector Movements Site 2			
1	1	1_1	L
1	10	1_10	L
1	2	1_2	L
1	3	1_3	L
1	4	1_4	L
1	5	1_5	L
1	6	1_6	L
1	7	1_7	L
1	8	1_8	L
1	9	1_9	L