

A303 Amesbury to Berwick Down

TR010025

Transport Data Package, Appendix A to the Combined
Modelling and Appraisal Report (Application Document
7.5)

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Foreword

The A303 Amesbury to Berwick Down scheme (“the Scheme”) forms part of a programme of improvements for upgrading the A303/A358 corridor, improving this vital connection between the South West and London and the South East and including the upgrade of remaining single carriageway sections on the route to dual carriageway. This investment is stated as a priority project in the National Infrastructure Plan and Government’s commitment is confirmed in the Road Investment Strategy (2015-2020). Subject to achieving an approved Development Consent Order (DCO), preliminary works are planned to start in 2020 with the main construction works following in 2021, and the Scheme is due to open to traffic in 2026.

Objectives for the Scheme have been formulated both to address identified problems and to take advantage of the opportunities that new infrastructure would provide. The objectives are defined by the Department for Transport (DfT):

- a. **Transport:** To create a high quality reliable route between the South East and the South West that meets the future needs of traffic;
- b. **Economic Growth:** To enable growth in jobs and housing by providing a free flowing and reliable connection between the South East and the South West.
- c. **Cultural Heritage:** To help conserve and enhance the World Heritage Site and to make it easier to reach and explore; and
- d. **Environment and Community:** To improve biodiversity and provide a positive legacy for nearby communities.

The objectives would be achieved by providing a high quality, two-lane dual carriageway on the A303 trunk road between Amesbury and Berwick Down in Wiltshire. The Scheme would resolve traffic problems and, at the same time, protect and enhance the Stonehenge, Avebury and Associated Sites World Heritage Site (“WHS”). The Scheme would be approximately 8 miles (13km) long and comprise the following key components:

- a. a northern bypass of Winterbourne Stoke with a viaduct over the River Till valley;
- b. a new junction between the A303 and A360 to the west of and outside the WHS, replacing the existing Longbarrow roundabout;
- c. a tunnel approximately 2 miles (3.3km) in length past Stonehenge; and
- d. a new junction between the A303 and A345 at the existing Countess roundabout.

The Transport Data Package provides a record of the data collection and initial analysis of the data upon which the transport model is being built. The Transport Data Package is one element of the Combined Modelling and Appraisal (ComMA) Report (Application Document 7.5) which documents the transport modelling and economic assessment process for transport schemes.

Executive Summary

The A303 Amesbury to Berwick Down scheme involves the dualling of the first single-carriageway section of A303 encountered after the M3, including the construction of a tunnel approximately 2 miles (3.3km) long as the road passes Stonehenge, the construction of a northern bypass of Winterbourne Stoke and the construction of a flyover at Countess roundabout. The Scheme is one of three A303 / A358 corridor schemes that have been prioritised within the first Road Investment Strategy (RIS) period. Delivery of the RIS is the responsibility of Highways England.

Transport models of the A303 corridor are required to enable traffic forecasts to be developed, which can then form the basis of the planning and forecasting processes for the A303 Amesbury to Berwick Down scheme. The models will also need to be capable of considering the impacts of the other improvements proposed on the A303/A358 corridor.

The strategic model developed at Project Control Framework (PCF) Stage 2 will be refined for PCF Stage 3. The model will be updated using the latest version of Highways England's South West Regional Traffic Model (SWRTM) as a base. The local area enhancement will build on that undertaken at PCF Stage 2. The strategic model will be known as the 'A303 Stonehenge SWRTM (DCO)'.

This report describes the range of traffic data sources that have been used to facilitate the refinement of the SWRTM and the development of operational traffic models. The data will be used to update the trip matrices, journey times as well as contributing to the calibration and validation of each model. The traffic survey specification was tailored to address the particular requirements of the modelling. The completed models will be used to provide input to the operational modelling, economic appraisal and environmental assessments.

A data collection strategy was developed that identified additional data required for PCF stage 3 to that assembled during PCF Stage 2.

The data collection was guided by the requirements set out in the Interim Advice Note (IAN106/08), and WebTAG Unit M1.2 'Data Sources and Surveys' and considers the following main sources of data:

- a. Automatic Number Plate Recognition (ANPR) survey;
- b. Automatic Traffic Counts (ATCs);
- c. Manual Classified Turning Counts (MCTCs);
- d. Journey time data (Trafficmaster);
- e. Trip information system (UK mobile phone data);
- f. Interviews at Stonehenge Visitor Centre; and
- g. Freight surveys

1 Introduction

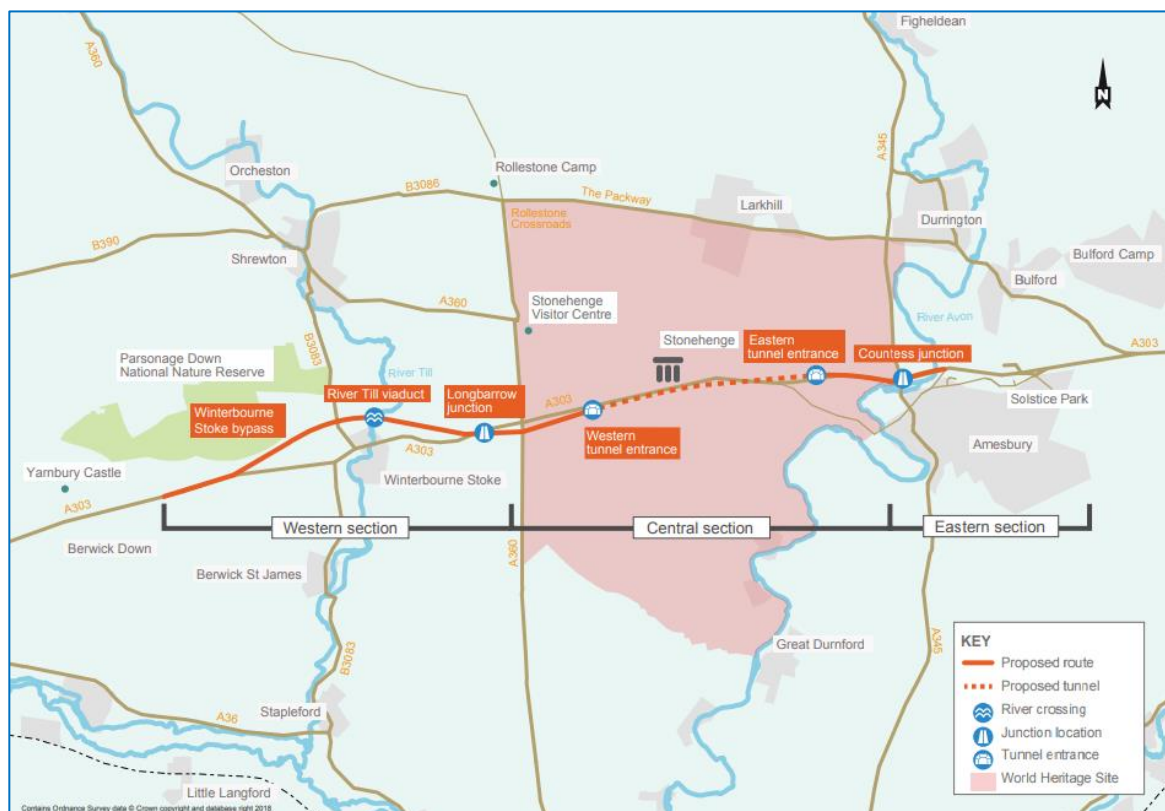
1.1 The Scheme

Overview of the Scheme

1.1.1 The Scheme would be approximately 8 miles (13km) long and comprise the following key components:

- a northern bypass of Winterbourne Stoke with a viaduct over the River Till valley;
- a new junction between the A303 and A360 to the west of and outside the WHS, replacing the existing Longbarrow roundabout;
- a twin-bore tunnel approximately 2 miles (3.3km) long, past Stonehenge; and
- a new junction between the A303 and A345 at the existing Countess roundabout.

1.1.2 The Scheme is described briefly below in three route sections as shown in Figure 1-1.



Source: Figure 5.1 Scheme sections, A303 Amesbury to Berwick Down Public Consultation Booklet (February 2018)

Figure 1-1: Overview of the Scheme

- Western section – Winterbourne Stoke bypass to Longbarrow junction
- Central section – within the World Heritage Site

c. Eastern section – Countess junction to just beyond the Solstice Park junction

Western section

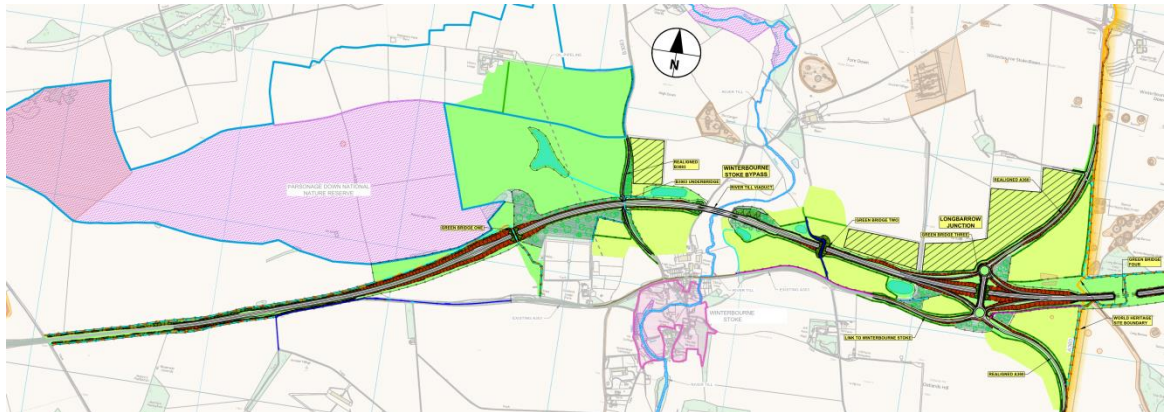


Figure 1-2: Western section

- 1.1.3 The Scheme would commence on the existing A303 approximately at Yarnbury Castle and would closely follow the existing A303 alignment, south of Parsonage Down NNR. It would then continue in a north easterly direction providing a bypass to the north of the village of Winterbourne Stoke.
- 1.1.4 A 'green bridge' would be constructed over the new A303 north-west of Scotland Lodge Farm near the south-east corner of Parsonage Down. This bridge would provide ecological and landscape connectivity across the Scheme and would form part of a non-motorised user (NMU) route and agricultural access route which would run from adjacent to a layby on the existing A303 to Parsonage Down and Yarnbury Castle. An area east of Parsonage Down would be used to create chalk grassland habitat using excavated chalk material arising from construction.
- 1.1.5 Local access from Winterbourne Stoke, northwards towards Shrewton, would be provided by the B3083. This access would be maintained by the provision of a single span bridge to carry the new A303 over the B3083. The proposed new bridge would be located approximately 50m to the west of the existing B3083. This location would necessitate the realignment of some 400m of the B3083 but would enable the B3083 to be kept open to traffic throughout the construction period other than for discrete periods to allow short duration specific activities to be undertaken (e.g. construction of tie-ins etc.). The clear span of the bridge would accommodate both the re-aligned B3083 and a segregated verge on the east side to allow cattle movements and equestrian use across the new alignment. The minimum headroom would be 5.35m.
- 1.1.6 The Scheme would continue in an easterly direction, crossing the River Till valley on a new twin deck viaduct. The River Till viaduct would carry the proposed A303 over the River Till SAC and SSSI and its floodplain. The viaduct would be designed to minimise impacts on the river below while balancing other environmental considerations, such as landscape and visual impacts. It would be a twin deck structure, with each deck approximately 14m wide and 210m long, and with a gap of approximately 7m between the decks. The road level on the bridge would be approximately 10m above the River Till where it crosses the river channel. The location of the piers would not be within the SAC or SSSI and would allow the existing bridleway (WST04) from Winterbourne Stoke to remain at its

current location. An environmental screen, approximately 1.5m in height, would be installed on the southern parapet to help screen vehicle movements from locations to the south.

- 1.1.7 A second green bridge at the Winterbourne Stoke Public Right of Way (PRoW) WST06B would maintain the existing PRoW over the new A303 alignment and as with other green bridges would provide for ecological and landscape connectivity across the Scheme.
- 1.1.8 Continuing to the east, the Scheme would cross the line of the existing A303 approximately 700m west of the existing A360 Longbarrow roundabout. A new grade separated junction with the A360 is proposed to the west of the WHS boundary. This junction, known as the Longbarrow junction, would accommodate free-flowing traffic movements between the A360 and the A303. The junction would consist of two roundabouts connected by a short length of dual carriageway, carried over the A303 on a new green bridge with earth bunds on each side, to help mitigate visual impact and to provide ecological connectivity. The structure would be a single span bridge, with headroom of at least 5.35m. The roundabouts would be set below existing ground level.
- 1.1.9 Traffic lights would be required at the Longbarrow junction. The traffic lights could be used during both day and night. A link to the de-trunked A303 to the west, accessing Winterbourne Stoke, would also be provided from the new Longbarrow junction.

Central section



Figure 1-3: Central section

- 1.1.10 As the Scheme crosses the line of the existing A360, it would enter into the WHS where it then follows closely the line of the existing A303.
- 1.1.11 The proposed alignment over the first c.1.0km of this section would generally be in a cutting varying in depth between approximately 7m and 10m. Approximately 2.5m to the top of the cutting would have a 1 in 2 grassed slope. The bottom of the cutting would comprise vertical retaining walls.
- 1.1.12 However, shortly after entering the WHS there would be a further green bridge (also known as a 'land bridge') that would be approximately 150m in length and would start approximately 150m from the western boundary of the WHS. In addition to an NMU route, this bridge would also provide visual and landscape

connectivity between barrow groups to the north and south of the Scheme. The existing A303 through the WHS would be converted to a restricted byway.

- 1.1.13 The western tunnel portal would be located within the WHS, north west of Normanton Gorse, approximately 1.0km east of the existing Longbarrow roundabout and immediately to the south of the existing A303. The tunnel would commence with a fully grassed approximately 200m long over cut and cover tunnel before it becomes a bored tunnel. Tunnel service buildings would be located outside the tunnel portal.
- 1.1.14 The Scheme would then continue in tunnel in an easterly direction following an alignment that is broadly similar to the existing A303 but at a depth of up to approximately 50m.
- 1.1.15 The tunnel would be a twin-bore structure, approximately 1.9 miles (approximately 3 km) in length, and each tunnel bore would have an internal diameter of approximately 11.5m.
- 1.1.16 The two bores would be connected underground by a series of cross passages at regular intervals to allow for the safe evacuation of road users in the event of an incident in one of the bores.
- 1.1.17 The tunnel would contain a number of mechanical and electrical, operational and safety systems. The items of plant required to power and control these systems would predominantly be housed at the tunnel service buildings located outside of the tunnel.
- 1.1.18 The tunnel would emerge at the eastern tunnel portal through a short section of cut and cover tunnel approximately 85m in length extending eastwards from the bored tunnel section. The eastern tunnel portal would be located to the east of the King Barrow Ridge and The Avenue and just to the north of the existing A303. The portal approach would be in deep cutting formed with 1 in 2 grassed slopes.
- 1.1.19 The Scheme would then closely follow the line of the existing A303 to Countess roundabout.

Eastern section

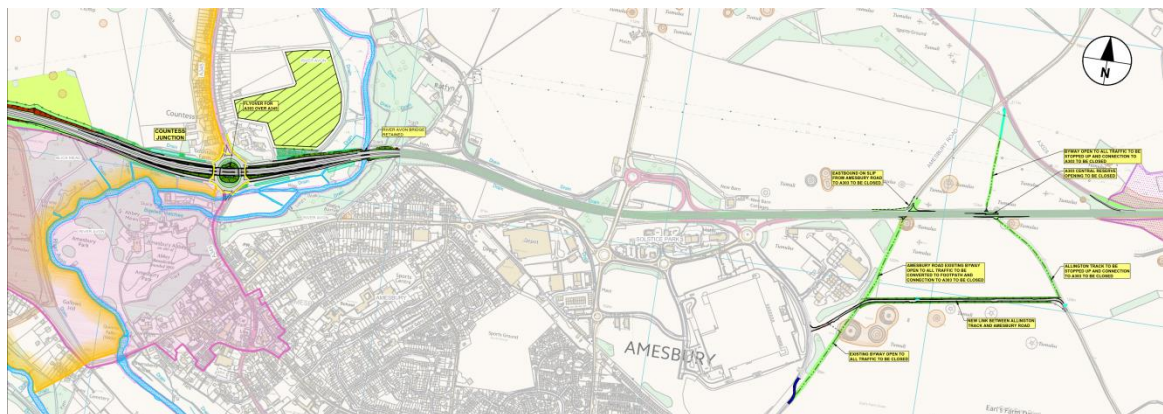


Figure 1-4: Eastern section

- 1.1.20 A new flyover above the existing roundabout would separate traffic going east-west along the A303 from traffic going north-south along the A345 Countess

Road, with slip roads accommodating traffic movements between the two roads. The new flyover would include two single span bridges that would accommodate the existing roundabout traffic lanes. The minimum headroom of the bridges would be 5.35m.

- 1.1.21 Retaining walls would be required at this junction to support the A303 between the slip-roads. Noise barriers, approximately 1.8m high, would be installed along both sides of the flyover to help screen vehicles and to help attenuate vehicle noise at nearby houses.
- 1.1.22 There are two existing subways between the proposed eastern tunnel portal and Countess junction, which would be removed. Two new pedestrian crossings would be created around the existing Countess roundabout to provide north-south connectivity along Countess Road under the A303.
- 1.1.23 The Scheme would tie in with the existing A303 close to the existing River Avon Bridge, to the west of Solstice Park junction.
- 1.1.24 To the east of the Solstice Park junction there would be a number of changes to existing rights of way and to points of access to and from the A303.

1.2 Objectives of the Scheme

- 1.2.1 Objectives for the Scheme have been formulated both to address identified problems and to take advantage of the opportunities the new infrastructure would provide. The objectives are defined in the Department for Transport's (DfT's) Client Scheme Requirements (CSRs) which respond directly to the need for change:
 - a. **Transport:** To create a high quality route between the South East and the South West that meets the future needs of traffic;
 - b. **Economic Growth:** To enable growth in jobs and housing by providing a free flowing and reliable connection between the South East and the South West;
 - c. **Cultural Heritage:** To help conserve and enhance the World Heritage Site (WHS) and make it easier to reach and explore; and
 - d. **Environment and Community:** To improve biodiversity and provide a positive legacy for nearby communities.

1.3 Background to transport modelling

- 1.3.1 The strategic model developed at PCF Stage 2 will be refined for PCF Stage 3. The model will be updated using the latest version of Highways England's South West Regional Traffic Model (SWRTM) as a base. The local area enhancement will build on that undertaken at PCF Stage 2. The strategic model will be known as the 'A303 Stonehenge SWRTM (DCO)'.
- 1.3.2 The additional traffic surveys that are described in this report were carried out in order to enhance the representation of local trips within the area of detailed modelling (AoDM) – the area over which impacts of the Scheme are likely to be material. A programme of Automatic Number Plate Recognition (ANPR) surveys, interviews at Stonehenge visitor centre, freight interviews at Solstice Park, and traffic counts at key locations throughout the network was planned. These data

will also be used for development of the operational models. The surveys were undertaken during the summer (August) and neutral (September and October) months.

1.4 Structure of the report

- 1.4.1 Following the consideration of the overall data requirements in Section 2, the individual data sources are described separately in the subsequent chapters, listed below:
- a. **Chapter 3** – provides a description of the automatic number plate recognition surveys together with some analysis of journey times
 - b. **Chapter 4** – provides a description of the automatic traffic count surveys
 - c. **Chapter 5** – provides a description of the manual classified turning count data
 - d. **Chapter 6** – provides a description of the Trafficmaster data that has been provided by the DfT
 - e. **Chapter 7** – provides a description of the trip information system (TIS) data that is generated from UK mobile phone data
 - f. **Chapter 8** – provides a description of the visitor interviews that were undertaken at the Stonehenge Visitor Centre
 - g. **Chapter 9** – provides a description of how existing freight movements have been captured
- 1.4.2 Interim advice note (IAN 106/08) provides a set of typical requirements for a data report. Table 1-1 lists these elements which have been used as a checklist, and provides a guide to where this information is contained within this package report. Advice contained in WebTAG Unit M1.2 '*Data Sources and Surveys*' and unit M3.1 '*Highway Assignment Modelling*' on survey methodology and best practice for data processing has been followed.

Table 1-1: Traffic survey report checklist

| Content | Section | Comments |
|--|--|---|
| Study overview | | |
| Statement of scheme objectives | §1.2 | |
| Statement of why data required | §2.1 | |
| Definition of data requirements | | |
| Statement of context and justification of why the data is required by the study. | §2.1 | |
| Review of existing data sources, with reference to whether the data will be used in the study. | §2.2, §2.3, §2.4 | |
| Details of existing location, type and date of surveys, shown on a plan or map. | Figure 2-1 (summer survey dates) Figure 2-2 (autumn survey dates) Figure 3-1 (ANPR sites) Figure 4-1 & Figure 4-3 (ATC sites) Figure 5-1 (MCTC sites) Figure 8-1 (Interview site) Figure 9-1 & Figure 9-2 (freight survey sites) | |
| Summary of why the data is being collected, with reference to usage later in the study. | §2.1 | |
| Details of survey programme highlighting the types of data to be collected. | Figure 2-1 (summer survey dates) Figure 2-2 (autumn survey dates) | |
| Details of any 'Pilot Surveys', including information on how the pilot informed the main surveys. | N/A | Survey methodologies are well established – no need for pilot surveys |
| If a large scale survey programme, a summary description of the types of survey undertaken with supporting plans illustrating the different survey types on a common plan. | N/A | Plan would look cluttered – separate plans have been provided |
| General details of each survey | | |
| Plan of survey locations. | Figure 3-1 (ANPR sites) Figure 4-1 & Figure 4-3 (ATC sites) Figure 5-1 (MCTC sites) Figure 8-1 (Interview site) Figure 9-1 & Figure 9-2 (freight survey sites) | |
| Tabulation of surveys giving date, day of week, duration of survey and location including OSGR. | Table 3-1 (ANPR sites) Table 4-1 and Table 4-2 (ATC sites) Table 5-1 (MCTC sites) | |

| Content | Section | Comments |
|---|--|---|
| Commentary on survey process. | | |
| Commentary on conditions, weather, known accidents, road closures, maintenance works, variable speed limits. | §2.5.3 (road closures) §3.1.3 (accident) | Issues affecting data collection have been set out in data summary tables |
| Statement on accuracy of the data (qualitative and quantitative). | §3.1.3 §4.1.2 | |
| Details of any factoring or adjustments applied to data set. | N/A | Any factors used will be described in the Transport Model Package, Appendix B to the Combined Modelling and Appraisal Report (Application Document 7.5) |
| Details of data format, file formats, file names, for each survey type as listed below. | Appendix E | |
| Traffic flow data | | |
| Details for each survey the count method, ATC, MCC, Video etc. | §3.1.1 – ANPR §4.1 – ATC §5.1.1 – MCC | |
| Graphical presentation showing daily flow variation by vehicle type (split by weekday, weekend or average day) for specific survey locations or across cordons / screenlines. | Figure 4-2 (daily flow and speeds) Figure 4-8 (daily profile) | |
| Graphical presentation of monthly flow variation by vehicle type, either for a specific hour, period or daily (split by weekday, weekend or average day) for specific survey locations or across cordons / screenlines, or along corridors. | Figure 4-7 (monthly profile) Figure 5-2 to Figure 5-5 show traffic composition on A303 and The Packway during the summer and the autumn | |
| Graphical presentation of yearly flow variation by vehicle type, either for a specific hour, period or daily or month (split by weekday, weekend or average day) for specific survey locations or across cordons / screenlines. | Figure 4-6 | |
| Diagrams showing turn count data by time period and vehicle type. | Appendix C | |
| Tabulations for multiple surveys showing traffic flows for key hours/periods, suitably grouped into cordons, screenlines or corridors. | Table B-1, Table B-2 and Table B-3 (new counts) Table B-4 (Wiltshire counts) Table B-5 (list of Highways England sites) | |
| Plan showing traffic flows at survey locations by key hours/periods. | Appendix C | |

| Content | Section | Comments |
|---|--|--|
| Details of any factoring to expand data from say 12 hours to 16 hours. | N/A | |
| Roadside interview data | | |
| Stonehenge visitor centre surveys. | §8 (Process) Appendix D (questionnaire) | |
| Journey time data | | |
| Trafficmaster data. | §6 | |
| Queue length data | | |
| Not collected as part of this study | - | Footage from video cameras has been used to inform the development of operational models |
| Registration plate survey | | |
| Overview of process including information on associated traffic counts. | §3.1.1 | |
| Plan/Map showing location of survey locations on a cordon, highlighting the locations where traffic may enter/leave the cordon un-surveyed or locations where vehicles may park/stop. | Figure 3-1 | |
| Household surveys | | |
| Not collected as part of this study | - | |

1.4.3 The Transport Data Package is one of a number of Appendices of the Combined Modelling and Appraisal Report (Application Document 7.5) as follows:

- a. Transport Data Package, Appendix A to the Combined Modelling and Appraisal Report;
- b. Transport Model Package, Appendix B to the Combined Modelling and Appraisal Report;
- c. Transport Forecasting Package, Appendix C to the Combined Modelling and Appraisal Report; and
- d. Economic Appraisal Package, Appendix D to the Combined Modelling and Appraisal Report.

2 Data requirements

2.1 The need for data

- 2.1.1 The models that will be used to support the DCO application will have new data included from what was collected and reported on in the PCF Stage 1/2 '*Traffic Data Collection Report*' (TDCR), July 2016 (document reference HE551506-AA-VTR-SWI-RP-CX-000001). This will take the form of new data to enhance local trip movements; new traffic count data for calibration and validation of the model in the vicinity of key junctions; and new demand and count data to allow for the development of a summer time period and detailed operational models.

2.2 Origin-destination data

- 2.2.1 Origin-destination (OD) data are a key building-block in the development of transport models. Traditionally this information has been collected using Roadside Interview surveys (RSIs) and Automatic Number Plate Recognition (ANPR) surveys. However, modern technology and data collection methods (often termed as 'big data') now provide alternative sources of information.
- 2.2.2 In particular, Highways England's Regional Traffic Models (RTMs), including the SWRTM, developed trip matrices using mobile phone data.
- 2.2.3 Sources of OD data that will be used in the model refinement will include:
- Mobile phone-based OD matrix data for private vehicles from the SWRTM
 - Trafficmaster-based (collected via Geographical Information Systems (GIS)) matrix data for Light Goods Vehicle (LGV) movements
 - DfT Base Year Freight Model (BYFM)-based matrix data for Heavy Goods Vehicle (HGV) movements, from the SWRTM
 - RSI data collected in October 2015
 - ANPR data collected in 2017 (more limited ANPR data were also collected in 2014)
 - New surveys at the Stonehenge visitor centre
 - Additional freight surveys
 - New mobile phone based OD data obtained from Highways England's Trip Information System (TIS)

2.3 Traffic count data

- 2.3.1 In addition to the Manual Classified Turning Count (MCTC) and Automatic Traffic Count (ATC) data collected to accompany the RSIs, additional counts were collected in October 2015. Details of the ATCs, MCCs and MCTCs are included in the PCF Stage 1/2 TDCR together with the ATC data collected as part of the ANPR survey described above.
- 2.3.2 Traffic count data were obtained from Local Authorities as part of the SWRTM development in 2016. In addition, during the development of the Stage 2 model, further count data were obtained from Local Authorities on the roads not covered by the SWRTM; these are recorded in the TDCR and LMVR for the PCF Stage 2 model. The count data from the different sources were assembled and processed for the PCF Stage 2 model and will continue to be used for matrix development, calibration or validation of the 'A303 Stonehenge SWRTM (DCO)' as appropriate.

2.3.3 A programme of additional traffic surveys has been undertaken as part of the PCF Stage 3 work, and will be used for the following:

- to enable increased validation around the area to the east of Solstice Park due to the closure of junctions in this vicinity that forms part of the Scheme;
- to enable the development of VISSIM-based corridor microsimulation operational models;
- to refine the neutral month strategic model; and
- to facilitate the development of the summer strategic model.

2.4 Journey time data

2.4.1 Journey time data used in SWRTM drew on data from the DfT Trafficmaster dataset (September 2014 to August 2015), as outlined in the SWRTM TDCR. The same routes will be used for the PCF Stage 3 model, as was the case at PCF Stage 2. Additional routes, not covered by the SWRTM, were identified during the development of the PCF Stage 2 model, again based on Trafficmaster data. These routes are recorded in the Stage 2 TDCR and LMVR. These routes have been used in PCF Stage 3 although the observed data have been updated. The base year model has been updated to 2017 and uses Trafficmaster data for the latest available period of July 2016 to June 2017.

2.5 Survey programme

2.5.1 Figure 2-1 and Figure 2-2 show the dates over which the various surveys were undertaken for both the summer and autumn periods respectively.

| Survey | 17/08/2017 | 18/08/2017 | 19/08/2017 | 20/08/2017 | 21/08/2017 | 22/08/2017 | 23/08/2017 | 24/08/2017 | 25/08/2017 | 26/08/2017 | 27/08/2017 | 28/08/2017 | 29/08/2017 | 30/08/2017 |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ANPR | | | | | | | | | | | | | | |
| ATC | | | | | | | | | | | | | | |
| MCTC | | | | | | | | | | | | | | |
| Visitor centre | | | | | | | | | | | | | | |

Figure 2-1: Summer programme of surveys

| Survey | 22/09/2017 | 23/09/2017 | 24/09/2017 | 25/09/2017 | 26/09/2017 | 27/09/2017 | 28/09/2017 | 29/09/2017 | 30/09/2017 | 01/10/2017 | 02/10/2017 | 03/10/2017 | 04/10/2017 | 05/10/2017 | 06/10/2017 | 07/10/2017 | 08/10/2017 |
|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ANPR | | | | | | | | | | | | | | | | | |
| ATC | | | | | | | | | | | | | | | | | |
| MCTC | | | | | | | | | | | | | | | | | |
| Visitor centre | | | | | | | | | | | | | | | | | |
| Freight surveys | | | | | | | | | | | | | | | | | |

Figure 2-2: Autumn programme of surveys

- 2.5.2 Throughout this report, data relevant to the summer surveys have been colour coded using blue, data associated with the autumn surveys have been colour coded orange.
- 2.5.3 The 2017 data collection period (both summer and neutral month) coincided with planned temporary roadworks on The Packway, Larkhill. The temporary roadworks closed the whole of The Packway between the A345 Countess Road and Tombs Road that spanned both survey periods. This closure affected local access movements and restricted opportunities for people who would normally avoid queuing on the A303 by re-routeing on The Packway.
- 2.5.4 Prior to the survey specification being developed, it was observed that Fargo Road offered an alternative parallel route to The Packway, although road signs advise that the road is restricted to military personnel. Traffic counts were therefore undertaken at the Fargo Road/A345 Countess Road to capture this movement. The modelling approach also considered how the roadworks may affect local traffic and how this should be considered in making forecasts.

2.6 Procurement and oversight of traffic surveys

- 2.6.1 A survey specification was developed that captured the requirements as set out above. The survey specification was issued in July 2017 to three tenderers. After an evaluation period, the preferred tenderer (Tracsis) was commissioned in August 2017.
- 2.6.2 During both the summer and autumn surveys, staff from AmW were on-site to verify the location of monitoring equipment and to undertake independent observations in order to affirm data quality.
- 2.6.3 The following sections consider each survey type listed in the programmes above, together with other data sources.

3 ANPR surveys

3.1.1 ANPR surveys were carried out for three days during the summer period (Friday 18 August 2017 to Sunday 20 August 2017) and three days during the autumn period (Tuesday 3 October to Thursday 5 October). ANPR cameras were positioned at the locations shown in Figure 3-1 and listed in Table 3-1. At each camera site, 'control counts' were undertaken using ATCs, with the exception of the survey locations on the A303, where video cameras were used in the interest of safety.

Table 3-1: List of ANPR sites

| Site ref | Junction description | Site ref | Junction description |
|----------|---|----------|--|
| E1 | A360: West of Eltson Lane turning | E15 | Chitterne Rd: West of A360 |
| E2 | High St: South of London Rd | E16 | Longbarrow Rdbt E/B exit |
| E3 | B3086: South of the Packway | E17 | Longbarrow Rdbt W/B exit |
| E4 | The Packway w of Brackenbury Rd | E18 | Countess Rdbt W/B exit |
| E5 | Netheravon Rd: North of Hackthorne Rd | E19 | Countess Rdbt E/B exit |
| E6 | A3028: West of Church Lane | E20 | A303 at Solstice Park Overbridge |
| E7 | A303: East of Double Hedges | E21 | A360: West of Eltson Lane turning |
| E8 | Solstice Park Ave: East of Meridian Way | E22 | A36, west of A303 junction |
| E9 | A345: South of River Avon | E23 | A303, south of A36 junction |
| E10 | A345: South of Fargo Rd | E24 | A36, east of A303 junction |
| E11 | A360: South of A303 | E25 | A338, north of A303 junction (existing ATC site) |
| E12 | A303: West of B3083 | E26 | A303, east of A338 junction (existing ATC site) |
| E13 | Stonehenge Visitors Rd | E27 | A338, south of A303 junction (existing ATC site) |
| E14 | Chitterne Rd: West of A360 | | |

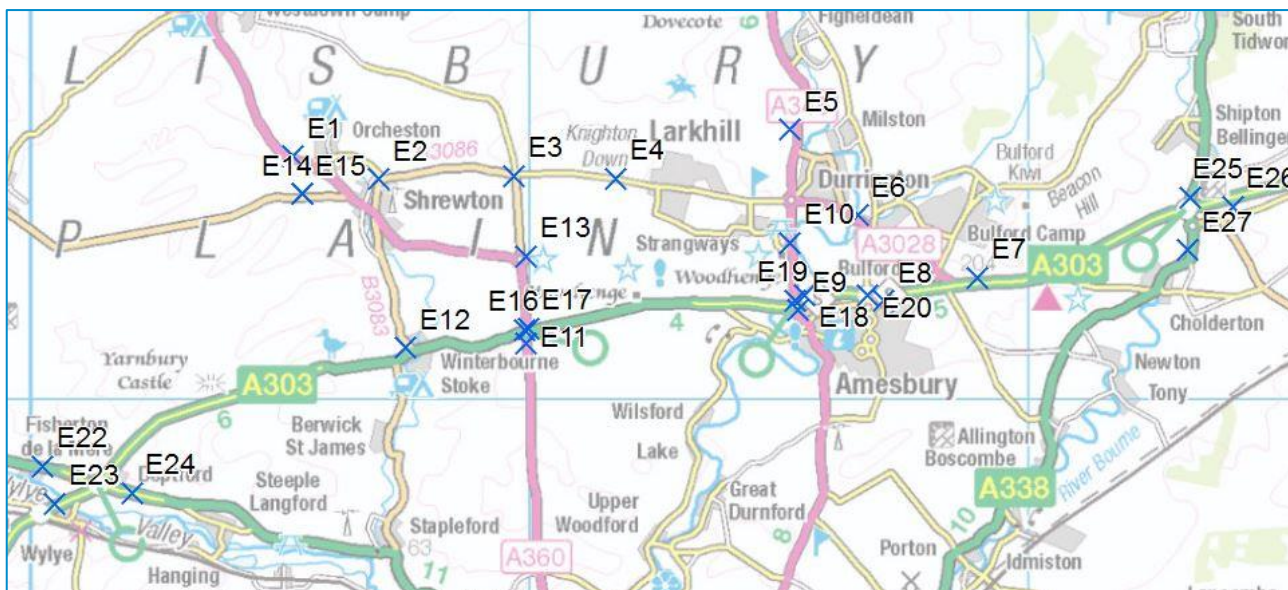


Figure 3-1: Location of ANPR sites

- 3.1.2 Table 3-2 presents statistics on the number plate captures and registration matches achieved during both summer and autumn surveys across all ANPR sites on each survey day. Overall between 92% and 94% of the observed plates were successfully read and verified. Of these, between 87% and 90% of plates were matched elsewhere in the ANPR cordon; about 3-4% of traffic was only observed to pass a single camera site.

Table 3-2: ANPR capture statistics, across all sites

| Survey Period | Vehicle count | Plates read | % read | Plates matched | % matched |
|----------------------|------------------|----------------|---------------|----------------|---------------|
| Friday 18/08/2017 | 375,723 | 363,140 | 97% | 325,703 | 89.69% |
| Saturday 19/08/2017 | 338,610 | 308,150 | 91% | 274,869 | 89.20% |
| Sunday 20/08/2017 | 317,609 | 295,758 | 93% | 268,701 | 90.85% |
| Summer total | 1,013,942 | 967,048 | 94% | 869,273 | 89.89% |
| Tuesday 03/10/2017 | 286,003 | 279,722 | 98% | 240,938 | 86.13% |
| Wednesday 04/10/2017 | 299,694 | 284,757 | 95% | 249,073 | 87.47% |
| Thursday 05/10/2017 | 328,798 | 280,047 | 85% | 242,063 | 86.44% |
| Autumn total | 914,496 | 844,526 | 92.35% | 732,074 | 86.68% |

- 3.1.3 On Thursday 5 October 2017 there was an accident on the A303 at Chicklade (approximately 23 km west of Stonehenge). The accident which happened in the early afternoon resulted in the A303 being closed eastbound between the A350 and the A36. The A303 was open in both directions by mid-afternoon.
- 3.1.4 As a result of this incident, none of the ANPR analyses from this day have been used to inform either the strategic or operational traffic models.
- 3.1.5 Analysis has been undertaken to assess whether the partial closure of The Packway (as described in paragraph 2.5.3) affected rat-running through the Larkhill area. A comparison of ANPR data from 2014 (collected at PCF stage 1/2)

and 2017 showed that the roadworks had little effect on re-routing, with traffic using Fargo Road to bypass the road closure.

- 3.1.6 Journey times derived from the ANPR analysis have been compared with on-site measurements of journey time and were shown to be robust. This was achieved by comparing the time at which the AmW car was logged at a particular ANPR site in the database, and cross-referencing with on-site measurements. These checks were undertaken across multiple camera sites.
- 3.1.7 During the surveys there were very few periods when data were not collected due to reasons such as technical issues, adverse weather (one camera was struck by lightning). These instances have been noted at the foot of Table 3-3 and Table 3-4, which provide site by site capture rate and match rate statistics for the summer and autumn periods respectively. The extensive cordon of ANPR cameras mitigated the impact of one camera being inactive, as journeys were matched at other ANPR sites.
- 3.1.8 The quality of the data is considered to be of sufficiently high quality such that travel patterns and journey times through the cordon can be determined with adequate robustness.

Table 3-3: ANPR capture statistics – summer surveys

| Site | Friday 18 August 2017 | | | | | Saturday 19 August 2017 | | | | | Sunday 20 August 2017 | | | | |
|-------|---|-------------|------|----------------|------|---|-------------|------|----------------|------|---|-------------|------|----------------|------|
| | Vehicle count | Plates read | % | Plates matched | % | Vehicle count | Plates read | % | Plates matched | % | Vehicle count | Plates read | % | Plates matched | % |
| 1 | 6362 | 5829 | 92% | 4966 | 85% | 4707 | 4391 | 93% | 3812 | 87% | 4157 | 3853 | 93% | 3308 | 86% |
| 2 | 4120 | 3834 | 93% | 3197 | 83% | 2857 | 2660 | 93% | 2105 | 79% | 2838 | 2611 | 92% | 2075 | 79% |
| 3 | 4247 | 3795 | 89% | 3589 | 95% | 3291 | 2958 | 90% | 2815 | 95% | 2641 | 2437 | 92% | 2326 | 95% |
| 4 | 7589 | 6959 | 92% | 6048 | 87% | 5410 | 5092 | 94% | 4663 | 92% | 4763 | 4480 | 94% | 4071 | 91% |
| 5 | 3171 | 8416 | 265% | 7349 | 87% | 7175 | 6655 | 93% | 5819 | 87% | 5307 | 4802 | 90% | 4068 | 85% |
| 6 | 9353 | 8812 | 94% | 4599 | 52% | 6814 | 6427 | 94% | 3153 | 49% | 5219 | 4924 | 94% | 2168 | 44% |
| 7 | 20162 | 20103 | 100% | 19420 | 97% | 16980 | 16920 | 100% | 14349 | 85% | 17565 | 17805 | 101% | 16964 | 95% |
| 8 | 12774 | 11686 | 91% | 9856 | 84% | 9745 | 9124 | 94% | 7429 | 81% | 7674 | 7150 | 93% | 5845 | 82% |
| 9 | 12585 | 9041 | 72% | 5040 | 56% | 10262 | 9570 | 93% | 5046 | 53% | 8467 | 7886 | 93% | 4239 | 54% |
| 10 | 15734 | 14610 | 93% | 10808 | 74% | 13056 | 12285 | 94% | 9206 | 75% | 10688 | 10118 | 95% | 7178 | 71% |
| 11 | 10772 | 10086 | 94% | 8994 | 89% | 7601 | 7131 | 94% | 6259 | 88% | 7164 | 6691 | 93% | 6053 | 90% |
| 12 | 25833 | 26312 | 102% | 25861 | 98% | 25500 | 23579 | 92% | 23176 | 98% | 23252 | 22008 | 95% | 21708 | 99% |
| 13 | 3623 | 3074 | 85% | 2975 | 97% | 4167 | 3585 | 86% | 2975 | 83% | 3972 | 3544 | 89% | 3447 | 97% |
| 14 | 6326 | 5954 | 94% | 3826 | 64% | 3331 | 3173 | 95% | 1822 | 57% | 3419 | 3255 | 95% | 1978 | 61% |
| 16 | 27653 | 24718 | 89% | 24607 | 100% | 25015 | 22701 | 91% | 22619 | 100% | 22427 | 20749 | 93% | 20661 | 100% |
| 17 | 32797 | 29391 | 90% | 29201 | 99% | 28383 | 25669 | 90% | 25525 | 99% | 27495 | 25367 | 92% | 25245 | 100% |
| 18 | 21417 | 18459 | 86% | 14444 | 78% | 18231 | 15973 | 88% | 12915 | 81% | 19022 | 16896 | 89% | 13214 | 78% |
| 19 | 12449 | 12957 | 104% | 12810 | 99% | 11997 | 12192 | 102% | 12058 | 99% | 11466 | 12378 | 108% | 12253 | 99% |
| 20 | 20528 | 32549 | 159% | 29189 | 90% | 32411 | 27432 | 85% | 25068 | 91% | 31748 | 27363 | 86% | 25562 | 93% |
| 22 | 10003 | 9373 | 94% | 9409 | 100% | 11269 | 10768 | 96% | 10370 | 96% | 11219 | 10778 | 96% | 10275 | 95% |
| 23 | 32052 | 29098 | 91% | 28304 | 97% | 26995 | 24425 | 90% | 24009 | 98% | 25734 | 23752 | 92% | 23127 | 97% |
| 24 | 13869 | 12773 | 92% | 11173 | 87% | 12053 | 11248 | 93% | 10530 | 94% | 12736 | 11901 | 93% | 11303 | 95% |
| 25 | 12075 | 11231 | 93% | 8907 | 79% | 9313 | 8725 | 94% | 7043 | 81% | 8795 | 8255 | 94% | 6895 | 84% |
| 26 | 43925 | 38148 | 87% | 36024 | 94% | 36579 | 30773 | 84% | 28025 | 91% | 35168 | 32376 | 92% | 30852 | 95% |
| 27 | 6304 | 5932 | 94% | 5107 | 86% | 5468 | 4694 | 86% | 4078 | 87% | 4673 | 4379 | 94% | 3886 | 89% |
| Notes | Site 5 –data loss 00:00-16:00, site 7 & 19 missing data 00:00 - 05:45 & 20:15 - 00:00, site 9 data loss 11:30 - 14:00, site 12 Slow moving traffic affecting counts, site 20 Camera affected by lightning 13:45 - 21:00 | | | | | Site 7 and 19 missing overview data 00:00 - 05:45 & 20:15 - 00:00 | | | | | Site 7 and 19 missing overview data 00:00 - 05:45 & 20:15 - 00:00 | | | | |

Table 3-4: ANPR capture statistics – autumn surveys

| Site | Tuesday 03 October 2017 | | | | | Wednesday 04 October 2017 | | | | | Thursday 05 October 2017 | | | | |
|-------|--|-------------|-----------|----------------|-----|---|-------------|-----------|----------------|------|--|-------------|-----------|----------------|-----|
| | Vehicle count | Plates read | % | Plates matched | % | Vehicle count | Plates read | % | Plates matched | % | Vehicle count | Plates read | % | Plates matched | % |
| 1 | 6158 | 5324 | 86% | 4324 | 81% | 6437 | 5795 | 90% | 4713 | 81% | 4872.5 | 5560 | 114% | 4434 | 80% |
| 2 | 2562 | 2398 | 94% | 1776 | 74% | 2511 | 2344 | 93% | 1789 | 76% | 2734 | 2575 | 94% | 1936 | 75% |
| 3 | 2238 | 1941 | 87% | 1507 | 78% | 2078 | 1826 | 88% | 1498 | 82% | 2189 | 1915 | 87% | 1574 | 82% |
| 4 | 6378 | 3315 | 52% | 3145 | 95% | 6226 | 3375 | 54% | 3221 | 95% | 6359 | 3502 | 55% | 3259 | 93% |
| 5 | 0 | 7688 | see notes | 6091 | 79% | 7479 | 7653 | 102% | 6018 | 79% | 7803 | 7805 | 100% | 6166 | 79% |
| 6 | 9003 | 8247 | 92% | 3607 | 44% | 9251 | 8527 | 92% | 3601 | 42% | 9336 | 8595 | 92% | 3737 | 43% |
| 7 | 18762 | 15452 | 82% | 14546 | 94% | 17881 | 15742 | 88% | 14958 | 95% | 18893 | 15515 | 82% | 14307 | 92% |
| 8 | 10050 | 8808 | 88% | 7206 | 82% | 8797 | 8812 | 100% | 7339 | 83% | 10295 | 8899 | 86% | 8487 | 95% |
| 9 | 12737 | 11938 | 94% | 5696 | 48% | 12265 | 11498 | 94% | 5386 | 47% | 12678 | 11422 | 90% | 5211 | 46% |
| 10 | 6228 | 12168 | 195% | 6871 | 56% | 13274 | 11954 | 90% | 6689 | 56% | 13734 | 12391 | 90% | 7121 | 57% |
| 11 | 8815 | 7963 | 90% | 5865 | 74% | 9255 | 8540 | 92% | 6587 | 77% | 9045 | 7969 | 88% | 5872 | 74% |
| 12 | 0 | 19143 | see notes | 18858 | 99% | 0 | 19061 | see notes | 18805 | 99% | 24627 | 17613 | 72% | 17371 | 99% |
| 13 | 1684 | 1552 | 92% | 1446 | 93% | 1655 | 1495 | 90% | 1409 | 94% | 1661 | 1532 | 92% | 1424 | 93% |
| 14 | 3017 | 2697 | 89% | 1655 | 61% | 3332 | 2633 | 79% | 1601 | 61% | 0 | 2896 | see notes | 1749 | 60% |
| 16 | 21509 | 18914 | 88% | 18806 | 99% | 21254 | 18621 | 88% | 18537 | 100% | 22244 | 19102 | 86% | 18516 | 97% |
| 17 | 27989 | 23932 | 86% | 23573 | 98% | 28016 | 24111 | 86% | 23794 | 99% | 28384 | 19299 | 68% | 19050 | 99% |
| 18 | 16137 | 10914 | 68% | 8628 | 79% | 16344 | 13635 | 83% | 11150 | 82% | 16086 | 12977 | 81% | 10351 | 80% |
| 19 | 12194 | 12541 | 103% | 11573 | 92% | 11738 | 12315 | 105% | 11369 | 92% | 11738 | 13479 | 115% | 12263 | 91% |
| 20 | 29233 | 22307 | 76% | 19193 | 86% | 29196 | 22568 | 77% | 21410 | 95% | 29879 | 22988 | 77% | 21081 | 92% |
| 22 | 13811 | 12938 | 94% | 12024 | 93% | 13392 | 12587 | 94% | 12111 | 96% | 14302 | 13366 | 93% | 12889 | 96% |
| 23 | 18350 | 16887 | 92% | 16453 | 97% | 18764 | 17208 | 92% | 16909 | 98% | 18848 | 17367 | 92% | 17007 | 98% |
| 24 | 9819 | 8998 | 92% | 8430 | 94% | 10137 | 9966 | 98% | 9790 | 98% | 10304 | 10058 | 98% | 9773 | 97% |
| 25 | 11684 | 10625 | 91% | 8588 | 81% | 12134 | 11159 | 92% | 9081 | 81% | 12020 | 11074 | 92% | 8846 | 80% |
| 26 | 32084 | 27839 | 87% | 26620 | 96% | 32563 | 27982 | 86% | 26654 | 95% | 34857 | 26670 | 77% | 24908 | 93% |
| 27 | 5561 | 5193 | 93% | 4457 | 86% | 5715 | 5350 | 94% | 4654 | 87% | 5910 | 5478 | 93% | 4731 | 86% |
| Notes | Sites 5 & 12 - Overview Data Loss 00:00 - 24:00, sites 7 & 19 - Overview footage missing 00:00 - 05:30 & 20:00 - 24:00 | | | | | sites 7 & 19 - Overview footage missing 00:00 - 05:30 & 20:00 - 24:00, site 12 Overview Data Loss 00:00 - 24:00, site 14 camera issues - low counts 19:15 - 21:00, site 24 Overview Data Loss 00:00 - 06:00 & 21:30 - 24:00 | | | | | sites 7 & 19 - Overview footage missing 00:00 - 05:30 & 20:00 - 24:00, sites 12 & 14 Overview Data Loss 00:00 - 24:00, site 24 Overview footage missing 00:00 - 06:00 & 21:15 - 24:00 | | | | |

- 3.1.9 The ANPR data have been used to measure journey times for different routes through the local road network between the A303/A36 junction and the A303 at the Wiltshire/Hampshire border.
- 3.1.10 This analysis has established journey times along the A303 and a number of alternative routes using local roads for each day of the ANPR surveys and in each direction. Figure 3-2 shows westbound journey times observed during the summer period, when the difference in journey time between remaining on the A303 and alternative routes is greatest, which was Friday 18 August. Similarly, Figure 3-3 shows eastbound journey times observed on Sunday 20 August. Westbound and eastbound journey times for the other survey days are shown in appendix A.1 and A.2 respectively. The three most popular alternative routes have been shown in terms of number of vehicles observed on that route.
- 3.1.11 Figure 3-2 shows that westbound journey times increase on the A303 (between the Hampshire border and the A36) to over an hour between 11:00 and 13:30 compared to approximately 28 minutes at 09:00. Three alternative routes have been identified that have been shown to provide a range of journey time savings from remaining on the A303. The route that offers the most significant journey time saving goes via Solstice Park and Stonehenge Road, providing a journey time saving of approximately 27 minutes.
- 3.1.12 Figure 3-3 shows that eastbound journey times increase on the A303 (between the A36 and the Hampshire border) from approximately 16 minutes at 09:00 to 90 minutes between 16:00 and 17:00. Use of an alternative route north of the A303 resulted in similar journey times to staying on the A303. Journeys that turned south off the A303 at the A36 junction and headed via Stapleford and Stoford were approximately 54 minutes quicker than staying on the A303 (between 16:00 and 17:00).
- 3.1.13 Journey time analysis during the neutral month showed that journey times along the A303 corridor in each direction did not vary much at all – journey times did not exceed 20 minutes at any point during the day. The data evidenced almost no traffic diverting from the A303 to use local roads as an alternative (and that time for travel along these routes could not be derived due to the small sample).

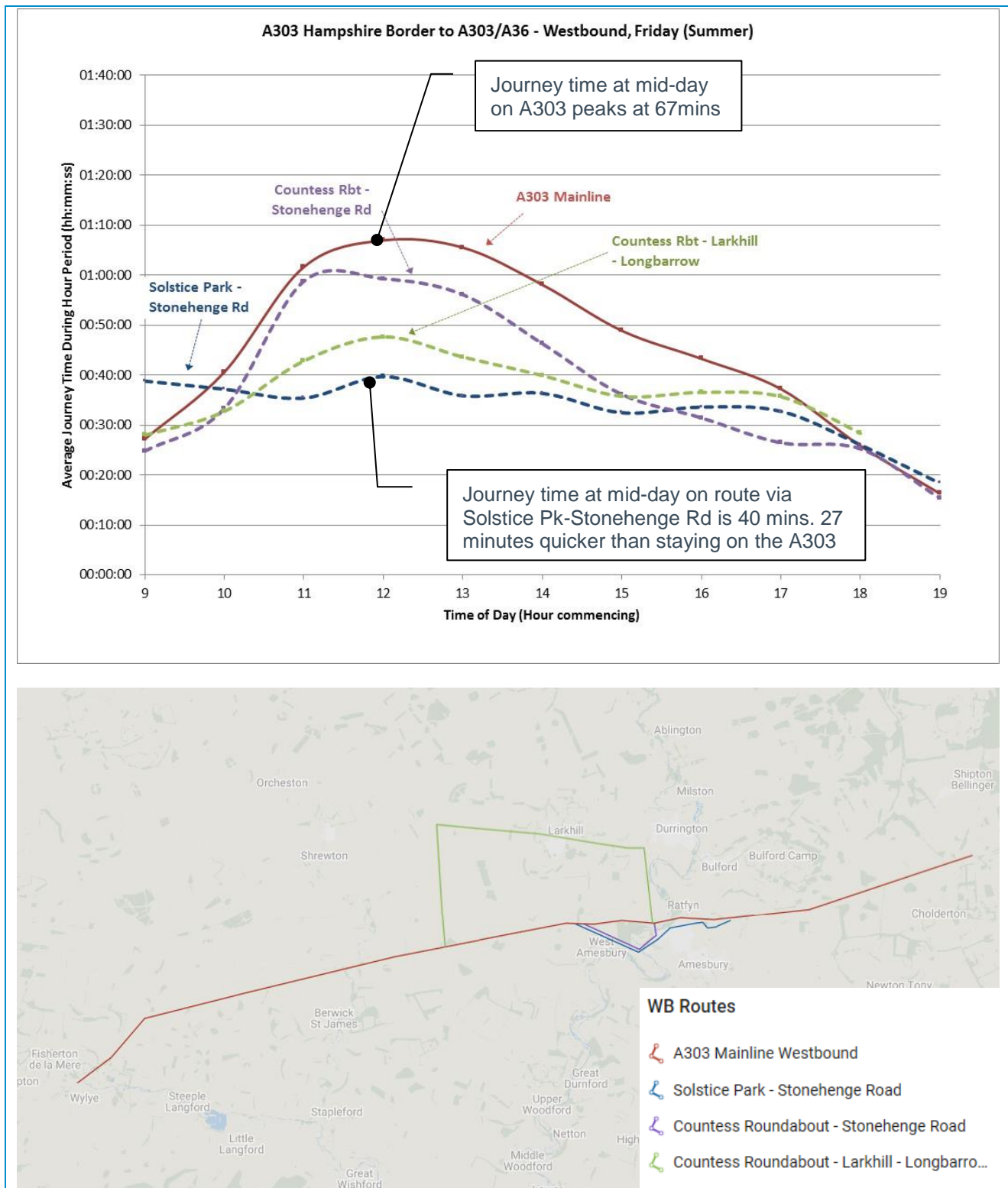


Figure 3-2: Westbound journey times at different times during the day on different routes (Summer, Friday)

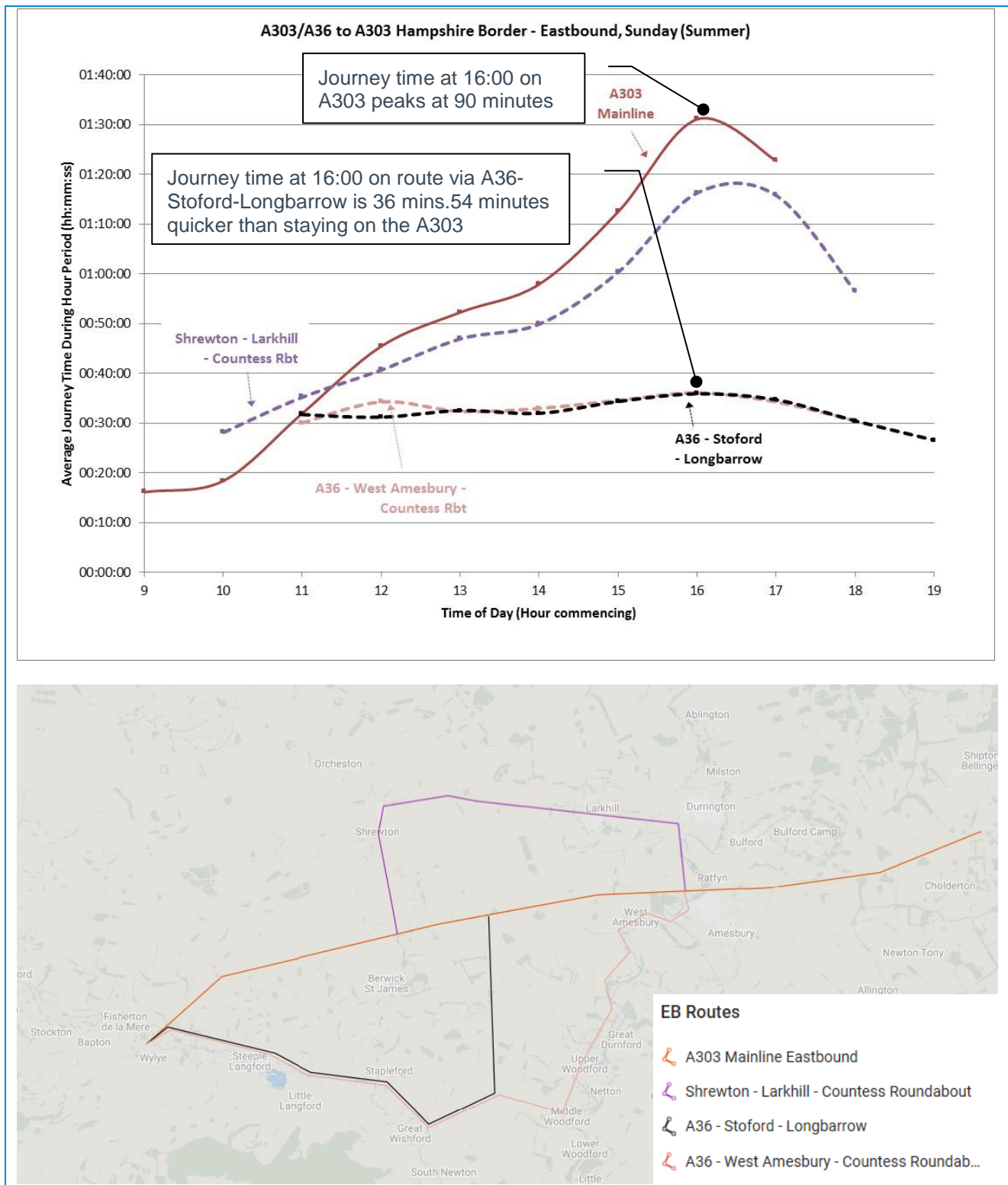


Figure 3-3: Eastbound journey times at different times during the day on different routes (Summer, Sunday)

- 3.1.14 Table 3-5 shows the number of ANPR matches on the most popular routes observed during the surveys. On average, 79% of matches were on the A303 corridor (in each direction).
- 3.1.15 In the eastbound direction approximately 15% of matches occur on routes south of the A303 and 7% on routes north of the A303, i.e. through Larkhill.
- 3.1.16 In the westbound direction, approximately 13% of matches occur on the south of the A303 and 8% on routes north of the A303.

Table 3-5: Sample size for ANPR journey times

| Route | Friday 18 August | Saturday 19 August | Sunday 20 August |
|---|---------------------|-----------------------|---------------------|
| Eastbound | | | |
| A303 eastbound | 3,308 | 3,652 | 3,609 |
| Shrewton - Larkhill - Countess roundabout | 111 | 110 | 214 |
| A36 - West Amesbury - Countess roundabout | 103 | 58 | 219 |
| A36 - Stoford – Longbarrow | 565 | 362 | 587 |
| Westbound | | | |
| A303 westbound | 3,500 | 3,127 | 4,347 |
| Solstice Park - Stonehenge Road | 361 | - | - |
| Countess roundabout - Stonehenge Road | 285 | 154 | 79 |
| Countess roundabout - Larkhill - Longbarrow | 306 | 363 | 123 |

4 Automatic traffic counts and link counts

4.1 New count data

- 4.1.1 Automatic traffic counters (ATCs) attached to pneumatic tubes were deployed at the locations listed in Table 4-1, other link counts in Table 4-2, and shown in Figure 4-1 for at least a two-week period commencing 17 August 2017 (for the summer surveys) and 22 September 2017 (for the autumn surveys). The ATCs collected traffic flow by vehicle classification (car, taxi, LGV, OGV1, OGV2 PSV (private), PSV (public), motorcycle, pedal cycle) in 15 minute time intervals. At each ANPR site ATCs were deployed in order to provide control counts to verify capture rates.

Table 4-1: List of ATC sites

| Site ref | Site description | Site ref | Site description |
|----------|-----------------------------------|----------|---|
| C2 | B3083, south of A303 junction | C19 | B3084, Winscott |
| C3 | B3083 near High Down | C20 | A338, north of A303 |
| C6 | A360 near Oatlands Hill | C21 | A338, north of Home Farm |
| C7 | A360, north of A303 | C23 | Countess Road, south of A303 |
| C8 | A360, west of B3086 | C24 | Porton Road, south of Solstice Park Avenue |
| C9 | Stonehenge visitor centre | C25 | A303, east of B3083 |
| C10 | The Packway, Rollestone Clump | C26 | A3028, west of Church Lane |
| C11 | Rollestone Camp access road | C29 | A360, west of Eltson Lane turning |
| C12 | The Packway east of Bingham Road | C30 | High Street, south of London Road |
| C13 | A345, south of Clover Lane | C31 | Chitterne Road, west of A360 |
| C14 | A345, Totterdown Clump | C32 | B3086, south of The Packway |
| C15 | A3028, west of Amesbury Rd | C33 | Solstice Park Avenue, east of Meridian Way |
| C16 | Amesbury Road, north of A3028 | C34 | Salisbury Road |
| C17 | A303, west of Amesbury Road | C35 | London Road |
| C18 | A303, west of Countess roundabout | C36 | Unnamed Road, Normanton, between West Amesbury and Upper Woodford |

- 4.1.2 Any instances where data have not been captured have been described at the foot of Table B-1 – there were very few such occasions. The quality of the data was verified by:

- comparing ATC volumes with volumes from the nearby MCTC surveys, e.g. at the Stonehenge Visitor Centre
- comparing ATC volumes with adjacent sites
- comparing ATC volumes to other sites such as those on WebTRIS (see section 4.3) to confirm approximate magnitude and pattern, e.g. tidality (peak in one direction in the morning and a peak in the opposite direction in the evening); and
- comparing ATC volumes from week 1 against week 2.

- 4.1.3 Where necessary, erroneous data have been omitted and not used to inform the development of either the strategic or operational traffic models. For example, the effect of the road accident described in paragraph 3.1.3 reinforced the need to exclude data that was collected on 5 October 2017.
- 4.1.4 Summary totals for each site in each direction are shown in Table B-1, in appendix B.1, comprising:
- Total weekly traffic flow
 - 5 day (Monday to Friday) average daily traffic flow – average weekday traffic (AWT)
 - 7 day average daily traffic flow – average daily traffic (ADT)
- 4.1.5 Peak period traffic flow data for the AM peak (07:00-10:00), inter peak (IP) period 10:00-16:00) and PM peak (16:00-19:00) for summer and neutral months are shown in Table B-2.
- 4.1.6 A higher level summary of daily traffic flows (two-way ADT) is shown in Figure 4-2.
- 4.1.7 The top three sites where the proportional increase in traffic flow is greatest between the summer and neutral surveys have been highlighted. The largest proportional increase (73%) is at the Stonehenge Visitor Centre, followed by two sites that are both located on routes used to avoid congestion on the A303; B3083 (53% increase) (site C3) and B3086 (43%) (site C32).
- 4.1.8 It was not possible to install pneumatic tubes at all the locations listed in Table 4-1 due to perceived safety issues associated with their deployment. At the locations shown in Table 4-2 link counts were undertaken, where video cameras were used to record movements and later transcribed by video analysts into a spreadsheet format.
- 4.1.9 The link count data for the summer data were processed by analysts for 18 to 20 August 2017. Autumn data were processed for 3 to 5 October 2017. A summary of daily traffic flows is shown in Table B-3 (Appendix B.1).

Table 4-2: List of link count sites

| Site ref | Link description | Site ref | Link description |
|----------|-------------------------------------|----------|------------------------------|
| C1 | A303, Great Bathampton Cottage | C28 | Countess roundabout W/B exit |
| C4 | A303, west of Longbarrow roundabout | C37 | A303, west of A36 junction |
| C5 | A303, east of Longbarrow roundabout | C38 | A36, east of A303 junction |
| C22 | A303, east of A338 | C39 | A36, west of A303 junction |
| C27 | A303 at Solstice Park overbridge | | |

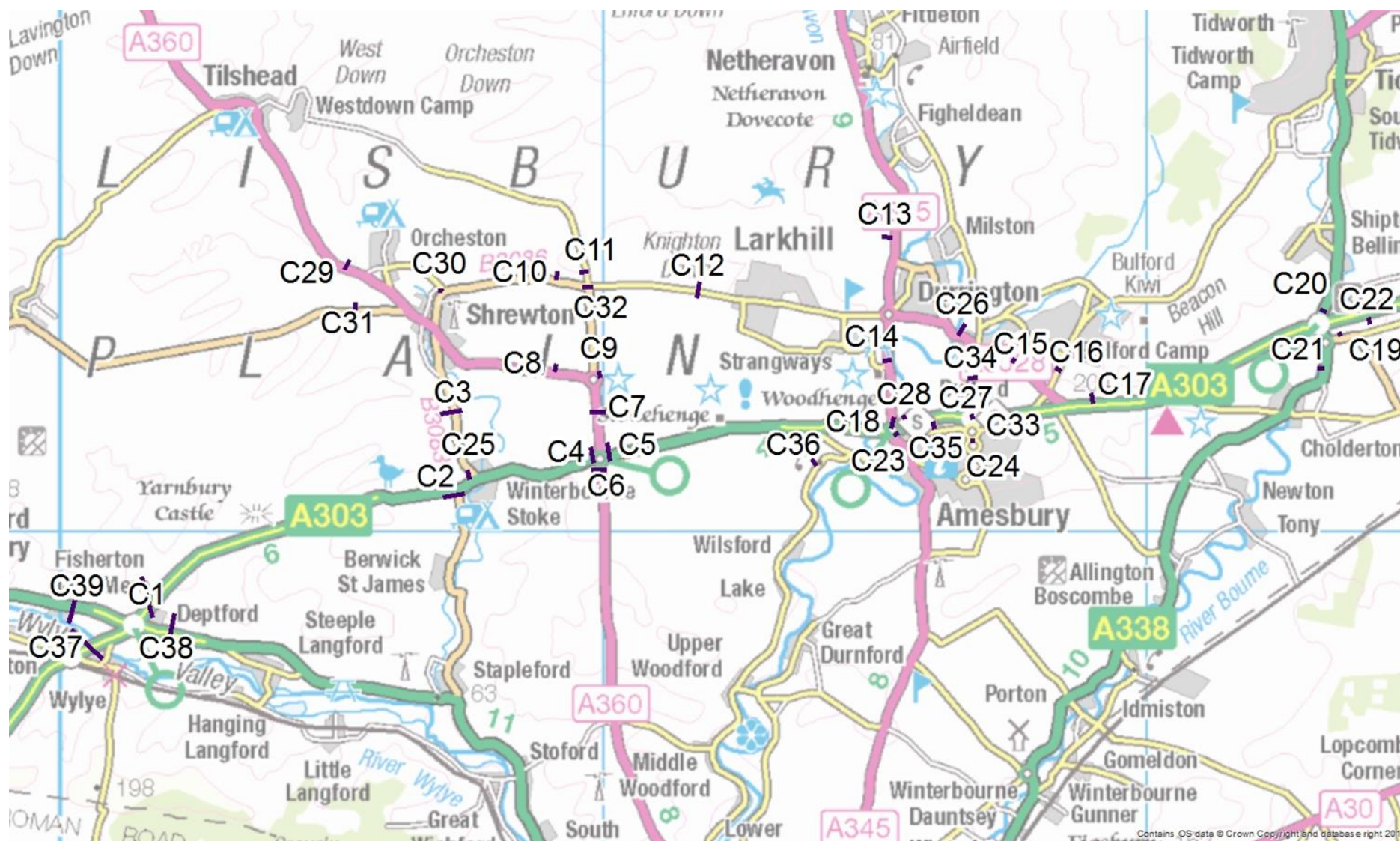


Figure 4-1: Location of ATC sites

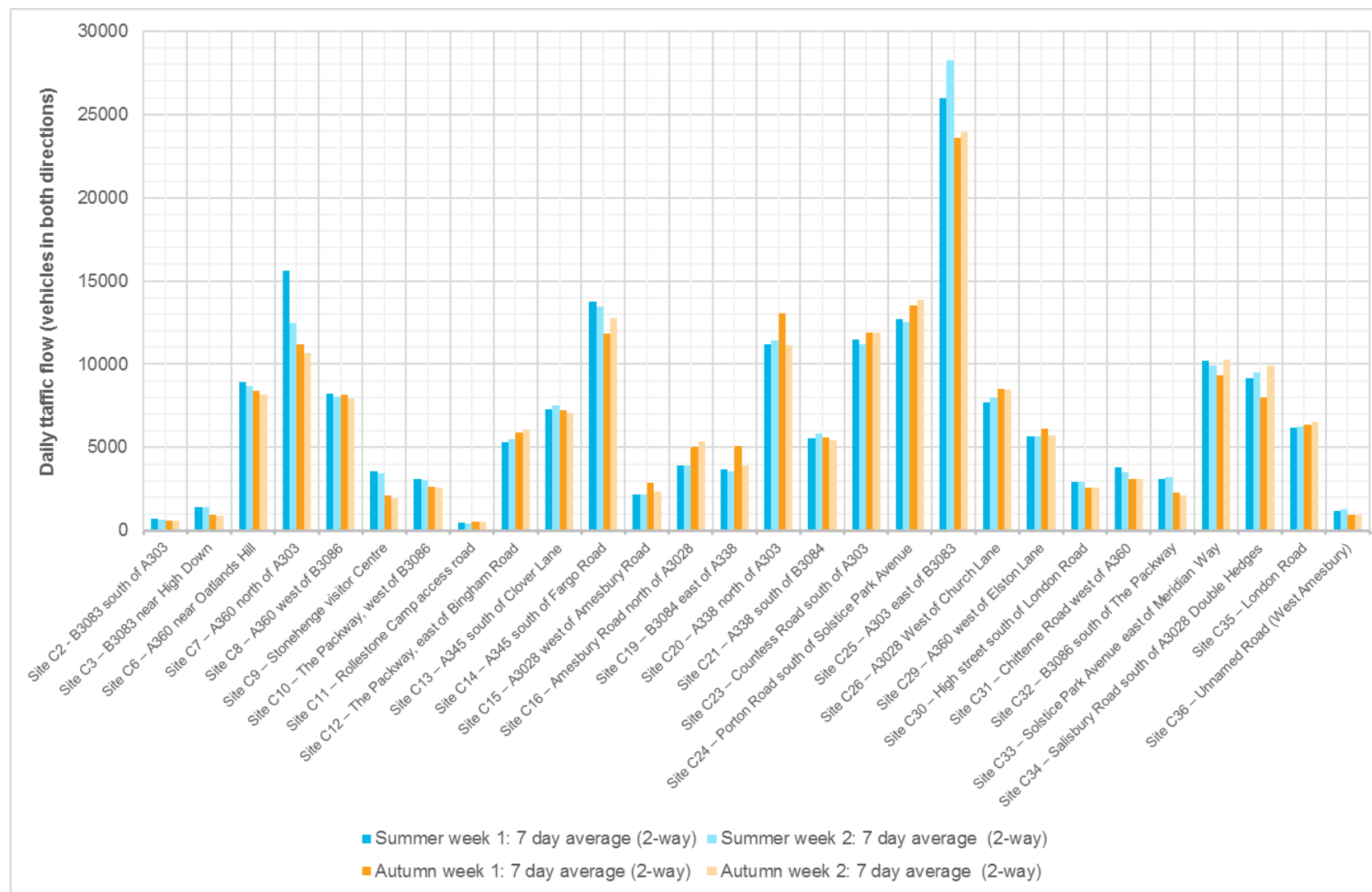


Figure 4-2: Summary of ATC traffic flows

4.2 Existing data – Local Authority sites

- 4.2.1 Automatic traffic count data at 15 sites in the local area have been acquired from Wiltshire Council. These sites are shown in Figure 4-3 and listed in Table 4-3. Traffic flow has been recorded at hourly intervals with no disaggregation by vehicle classification. None of the data provided by Wiltshire Council covers the summer 2017 period. The data comprises of a selection of sites with one to two weeks' worth of data, between January 2015 and July 2017.
- 4.2.2 Table B-4 in Appendix B.2 provides a summary of the ATC data.

Table 4-3: ATC sites commissioned by Wiltshire council

| Site ref | Site description | Site ref | Site description |
|----------|-----------------------------------|----------|---|
| a601 | A30 East of Barford St Martin | c320 | A338 North of Collingbourne Kingston |
| a110 | A338 North of Winterbourne gunner | f503 | B3098 West Lavington |
| b201 | A338 North of Winterbourne gunner | f603 | A360 Gore Cross (south of West Lavington) |
| b301 | A345 South of Highpost | f703 | B3098 West of Erlestoke |
| b401 | A360 South of Druids Lodge | l501 | A362 Corsley Heath |
| b803 | A30 north east of Salisbury | m501 | B3089 Fonthill Bishop |
| c102 | A342 Upavon Down (East of Upavon) | m701 | B390 West of Shrewton |
| c202 | A338 Tidworth Military Cemetery | | |

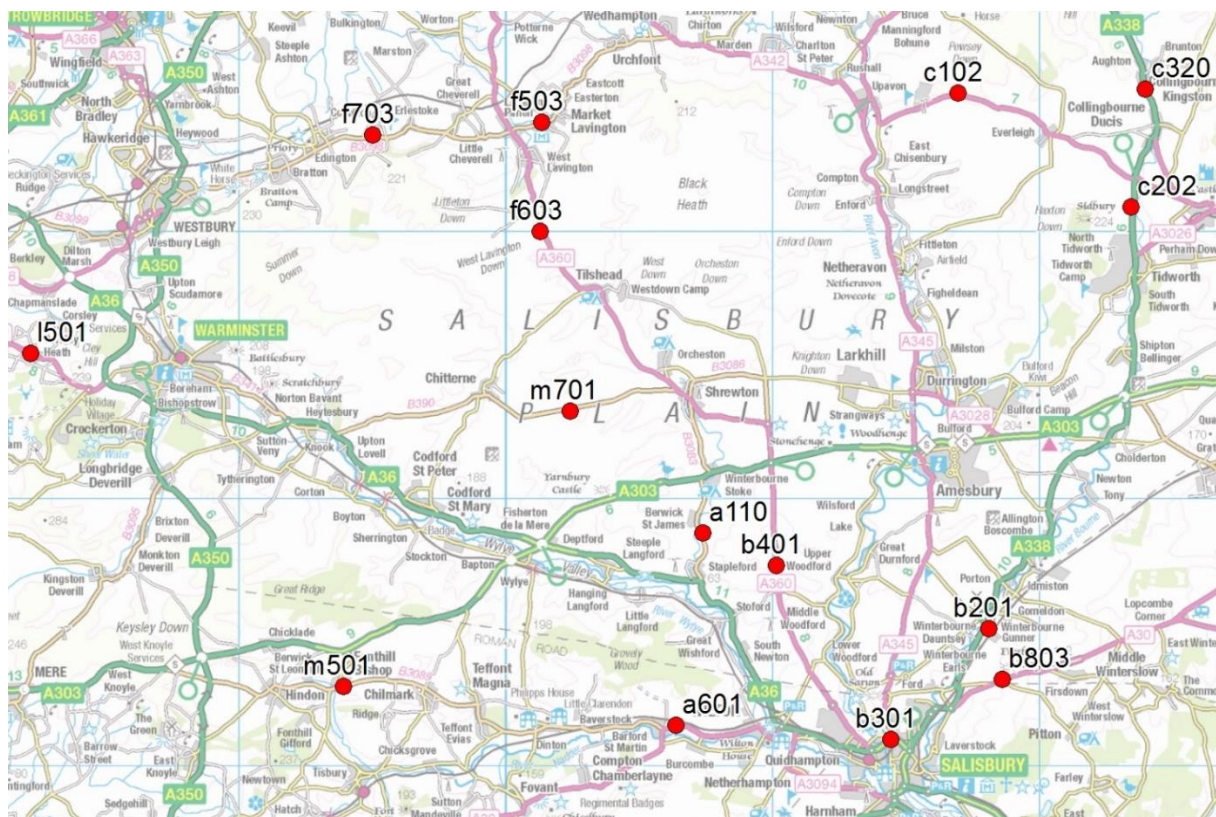


Figure 4-3: Location of ATC sites commissioned by Wiltshire council

4.3 Existing data – Highways England sites

- 4.3.1 Highways England maintain and operate a number of ATC sites across their road network. Data are publically available via the WebTRIS website¹. The sites shown in Figure 4-4 and listed in Table B-5 (Appendix B.3) have been used for calibration and validation of the base year strategic model. Traffic flow data is also made publically available by the DfT via the government's Open Data programme².

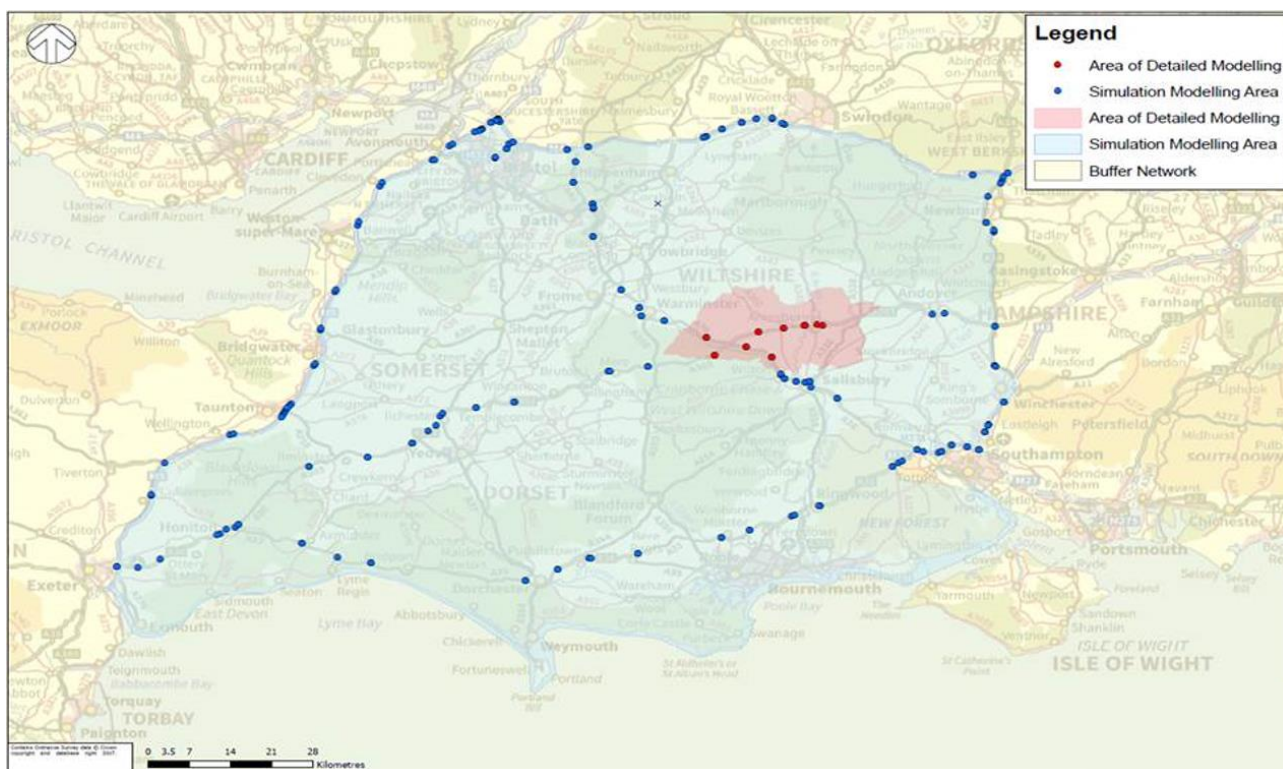


Figure 4-4: Location of Highways England ATC sites (WebTRIS)

- 4.3.2 Figure 4-5 shows the Highways England ATC sites that are closest to Stonehenge. It has not been possible to download data from the West Amesbury site (on the A303 by Stonehenge Road) due to partially complete data (most likely due to damaged/faulty monitoring equipment). The adjacent site that is immediately east of the A360 is operational and data have been analysed and summarised below.

¹ WebTRIS: <http://webtris.highwaysengland.co.uk/>

² DfT Open Data: <https://www.dft.gov.uk/traffic-counts/>

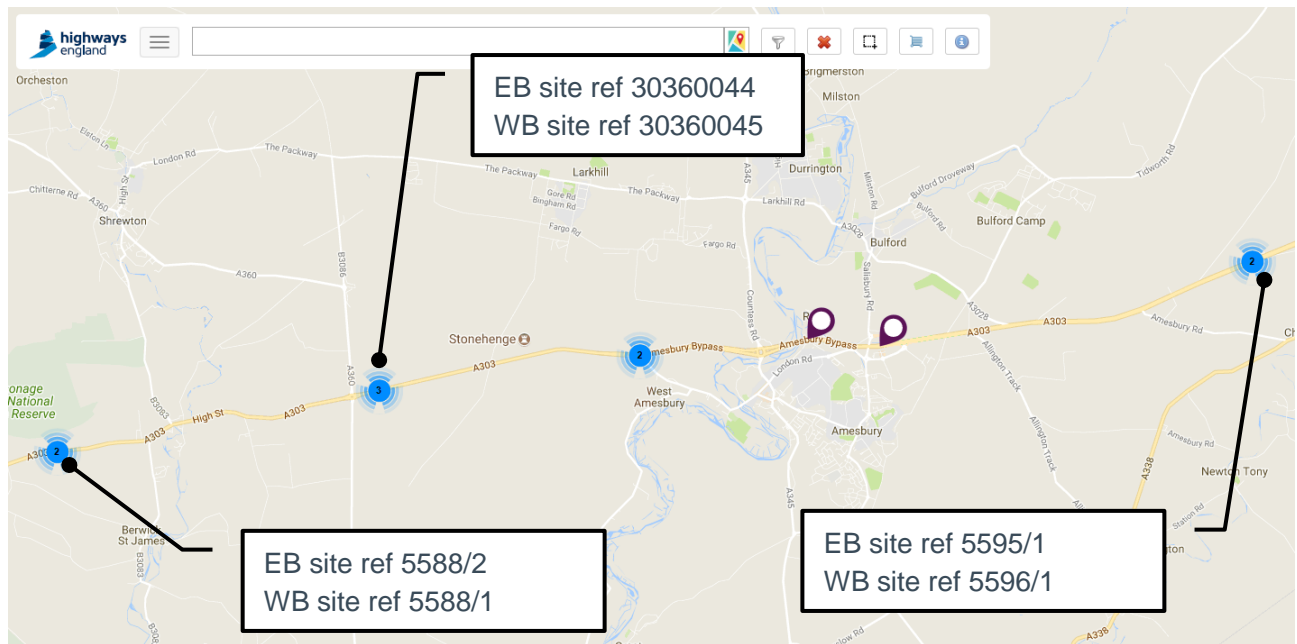


Figure 4-5: Location of Highways England ATC sites near Stonehenge

4.3.3 Figure 4-6 shows annual average daily traffic (AADT) flow for the three sites referenced above from the year 2000 up to 2016. Data points that are based on observed data have been specifically labelled (squares). During years when traffic flow data is unavailable (most likely due to damaged or faulty equipment), the DfT have estimated AADT based on the previous year's annual daily traffic flow.

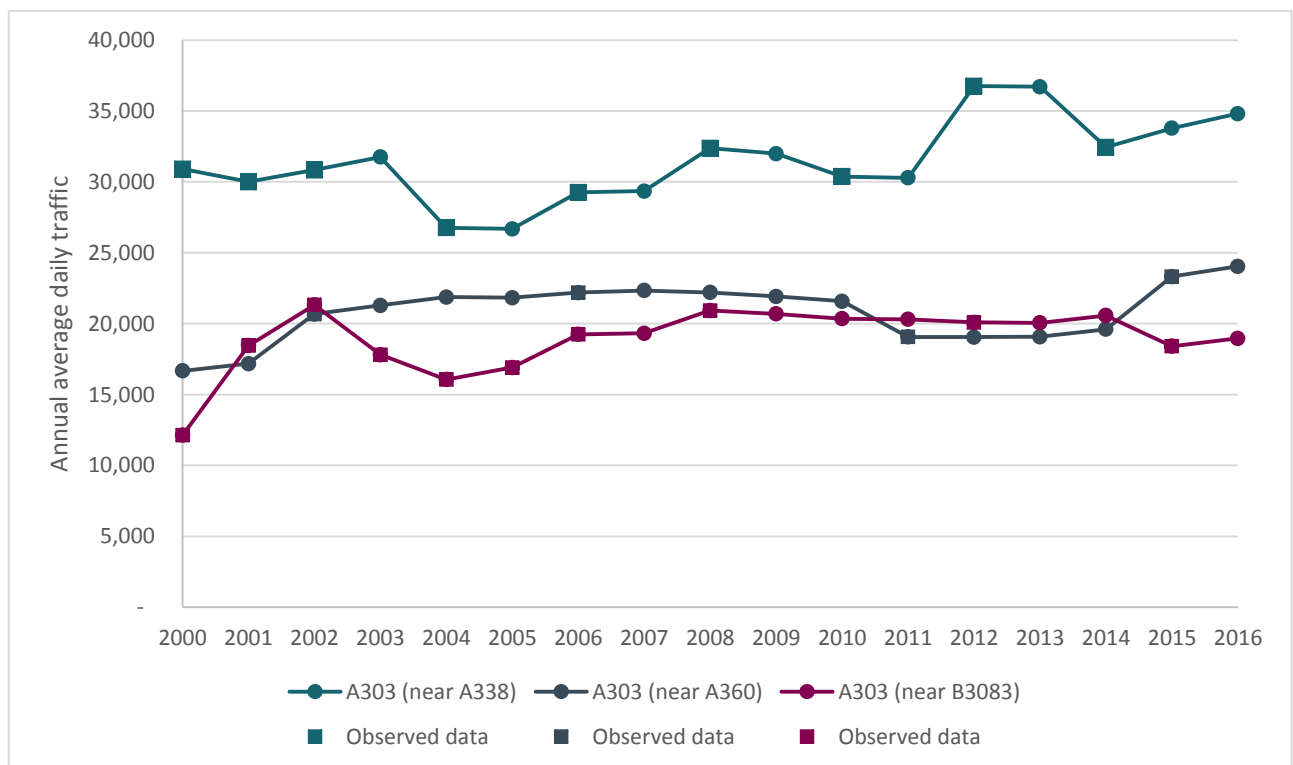


Figure 4-6: Historic trends of AADT at three sites on the A303

- 4.3.4 Figure 4-7 shows the monthly profile of daily traffic on the A303 at site reference 30360044 (for eastbound traffic), site 30360045 (for westbound traffic) from December 2016 to November 2017 (the site located east of the A360). Figure 4-7 also shows average daily traffic flows for a site located approximately 10 km to the east (near Cholderton and the A338). Data for December 2017 were not available at the time of preparing this report.
- 4.3.5 At the A303 site near the A360 (shown in green) (this is a single carriageway site), the month with the highest daily traffic flows at this location is August with a 2-way daily traffic flow of 30,290 vehicles. The average daily traffic flow during neutral traffic months (late March, late April, May, June, September, October and November) is 27,975. Traffic flows at this location are on average approximately 8% higher during the summer month of August than an average neutral month.
- 4.3.6 At the more easterly site near the A338 (shown in magenta), the month with the highest daily traffic flows is August with a 2-way traffic flow of 40,089 vehicles (approximately 32% higher than the site at Stonehenge – this site is dual carriageway). Daily traffic flows in August are approximately 10% higher than the average neutral month.

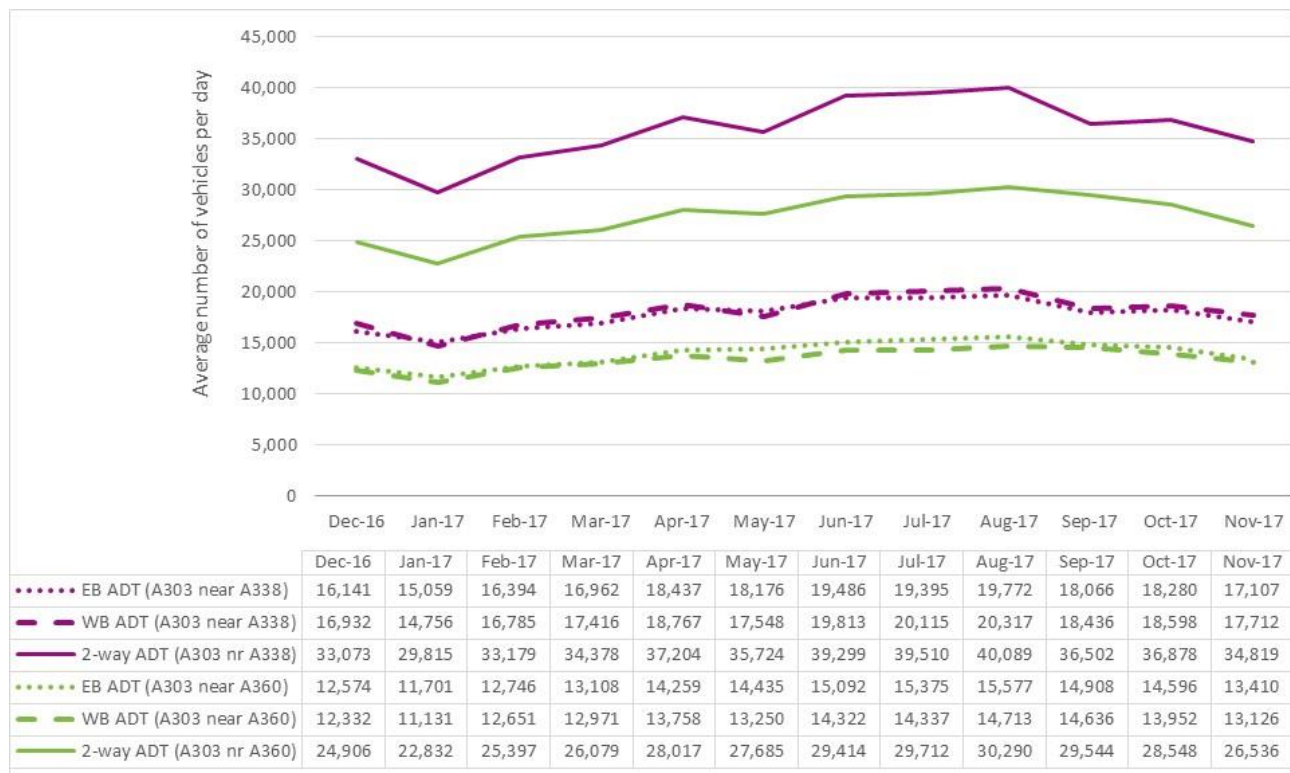


Figure 4-7: Monthly profile of daily traffic on A303

- 4.3.7 Figure 4-8 shows the daily profile of traffic on the A303 (east of the A360) for east and westbound directions. Daily demand has been averaged between December 2016 and November 2017. December 2017 data were not available when the assessment was undertaken.
- 4.3.8 Peak demand (1,312 vehicles) occurs in the eastbound direction mid-week between 07:00 and 08:00. There is a clear distinction between Monday-Friday commuter peaks and the weekend profile, with the weekend morning peak

occurring around 11:00 to 12:00. The peak in the westbound direction occurs mid-week (1,145 vehicles) between 17:00 and 18:00.

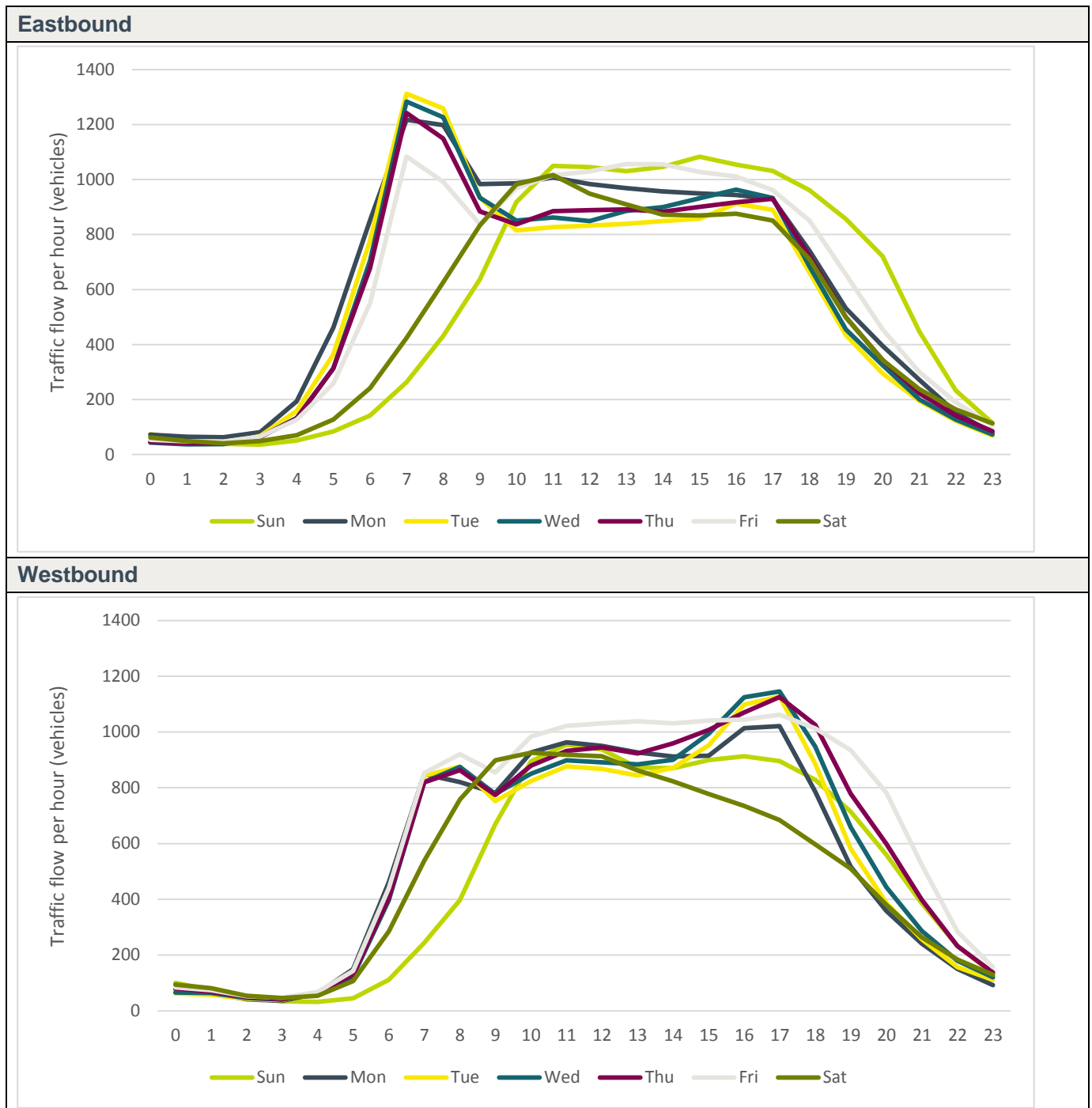


Figure 4-8: Daily profile of traffic on the A303

5 Manual classified turning counts

5.1 Survey descriptions

- 5.1.1 Manual classified turning counts (MCTC) have been undertaken at 51 sites (see Figure 5-1 and Table 5-1) during both the summer and autumn periods. Video observations to enable MCTCs were carried out between 18 August 2017 - 20 August 2017 and 3 October 2017 – 5 October 2017.

Table 5-1: Location and descriptions of MCTC surveys

| Site ref | Junction description | Site ref | Junction description |
|----------|-----------------------|----------|-------------------------------------|
| M1 | Packway/Bingham Rd | M27 | A303/B3083 |
| M2 | Packway/Willoughby Rd | M28 | A303/Berwick Rd |
| M3 | Packway/Whinyates Rd | M29 | A303/Church St |
| M4 | Packway/Wilson Rd | M30 | A303/A360 |
| M5 | Packway/Congreve Rd | M31 | A303 Countess Rdbt |
| M6 | Packway/Unnamed Rd | M32 | A303/Stonehenge Rd |
| M7 | Packway/Unnamed Rd | M33 | A303 Solstice Park Rdbt |
| M8 | Packway/Alanbrooke Rd | M34 | London Rd/Solstice Park Avenue Rdbt |
| M9 | Packway/Lightfoot Rd | M35 | A303/Salisbury Rd Rdbt |
| M10 | Packway/Unnamed Rd | M36 | Solstice Park Av/Meridian Way Rdbt |
| M11 | Packway/Glover Rd | M37 | A303/Amesbury Rd |
| M12 | Packway/Biddulph Rd | M38 | A303/Allington Track |
| M13 | Packway/McNeill Rd | M39 | A303/Amesbury Way |
| M14 | Packway/Wood Rd | M40 | A303/Salisbury Rd |
| M15 | Packway/Tombs Rd | M41 | A338/B3084 |
| M16 | Packway/Countess Rd | M42 | A303 Hill Farm |
| M17 | A3028/Stonehenge Rd | M43 | Countess Rd/Services Access |
| M18 | A3028/Meads Rd | M44 | A303/Services Exit |
| M19 | A3028/Philip Rd | M45 | Double Hedges/Amesbury Rd |
| M20 | A3028/B3085 | M46 | Double Hedges/Car Park access |
| M21 | A3028/Old Coach Rd | M47 | Amesbury Road/A338 |
| M22 | A3028/Camilla Cl | M48 | Bulford Drove/Bulford Rd |
| M23 | A3028/Orchard End | M49 | Bulford Rd/Amesbury Rd |
| M24 | A3028/Salisbury Rd | M50 | Sheepbridge Rd/Tidworth Rd |
| M25 | B3086/The Packway | M51 | Countess Rd/Fargo Rd |
| M26 | A360/B3086 | | |

- 5.1.2 Video footage of vehicle movements has been recorded between the hours of 06:00 and 20:00 for the following vehicle classifications:

- Car
- Taxi
- LGV
- OGV1

- e. OGV2
- f. PSV (private)
- g. PSV (public)
- h. Motorcycle
- i. Pedal cycle

5.2 Survey analysis

- 5.2.1 For the summer surveys, data were processed for the period 10:00-19:00 on all three survey days. For the autumn surveys, data were processed for the period 07:00-19:00 on Wednesday 4 October, deliberately excluding data from the 5 October when there was an incident on the A303 (described in paragraph 3.1.3). All count data have been processed into 15-minute intervals, tabulated with both hourly and period totals.
- 5.2.2 A range of checks to confirm the quality of the MCTC data were undertaken, outlined below:
- a. Traffic volumes were compared to nearby ATC data
 - b. Traffic volumes were compared to adjacent MCTC sites (where appropriate)
 - c. Any spurious looking traffic movements were identified and explanations sought – such as the high volume of ‘u-turning’ movements at the A345 Countess Road/The Packway roundabout which were due to The Packway being closed
 - d. Consistency of traffic flow across different surveys days (where available)
 - e. The profile of demand was reviewed for anomalies
- 5.2.3 The peak hour turning movement figures that were prepared for the PCF Stage 1/2 *Traffic Data Collection Report* have been updated with 2017 data and are shown in Figure C-1 to Figure C-10 in Appendix C. The figures show total traffic flows and percentage HGVs. The peak hour has been identified at each junction, where the sum of traffic flows on all approaches, in four consecutive 15 minute periods is greatest.

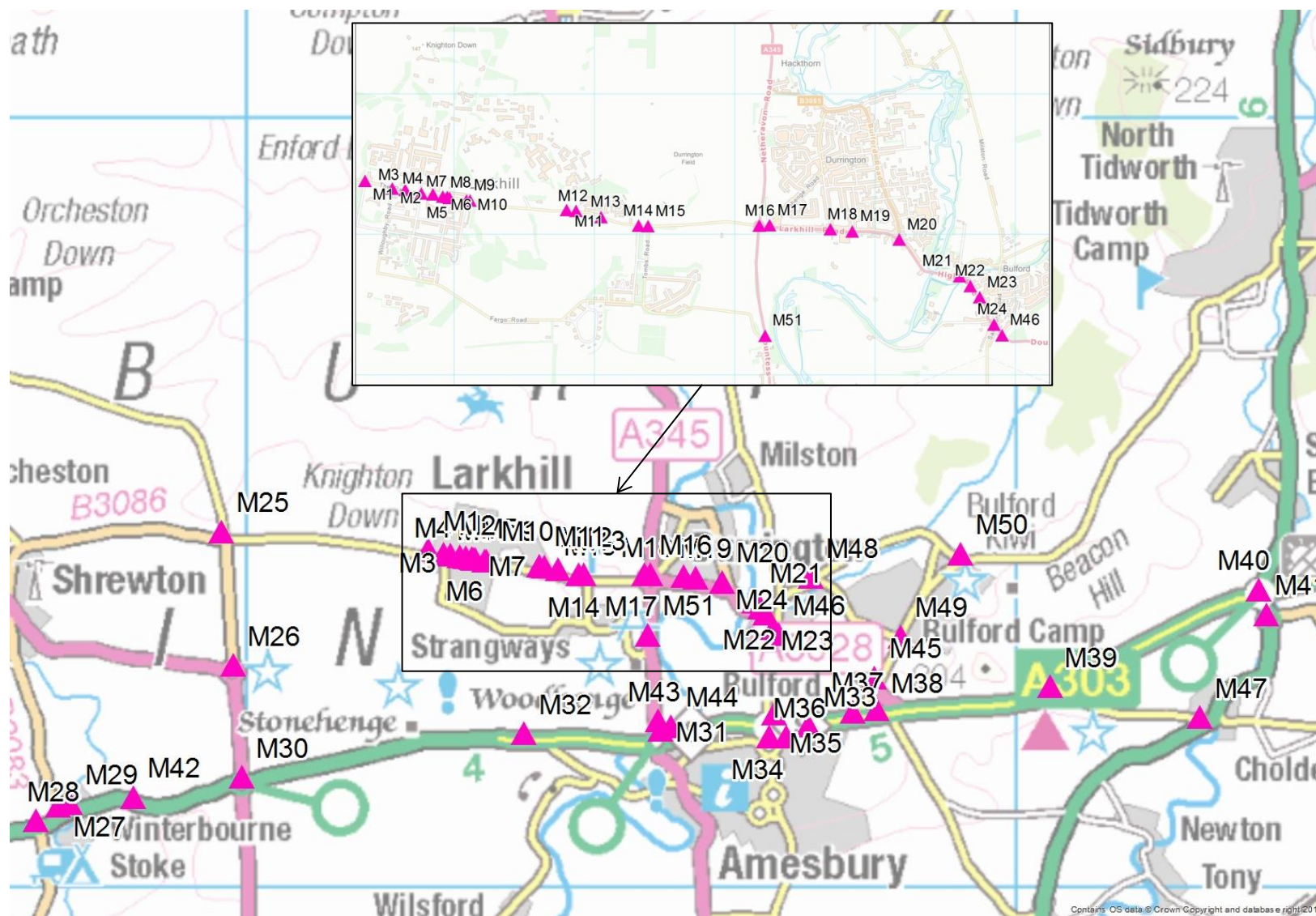


Figure 5-1: Location of MCTC survey sites

5.2.4 Traffic composition on the A303 (on the west side of the B3083) during the summer is shown in Figure 5-2 and summarised below:

- The proportion of cars ranges from 84% (10:00-11:00) to 91% (18:00-19:00);
- LGVs ranges between 6% and 8% (across the survey period); and
- OGV1 and OGV2 combined ranges from 3% (18:00-19:00) to 8% (10:00-11:00).

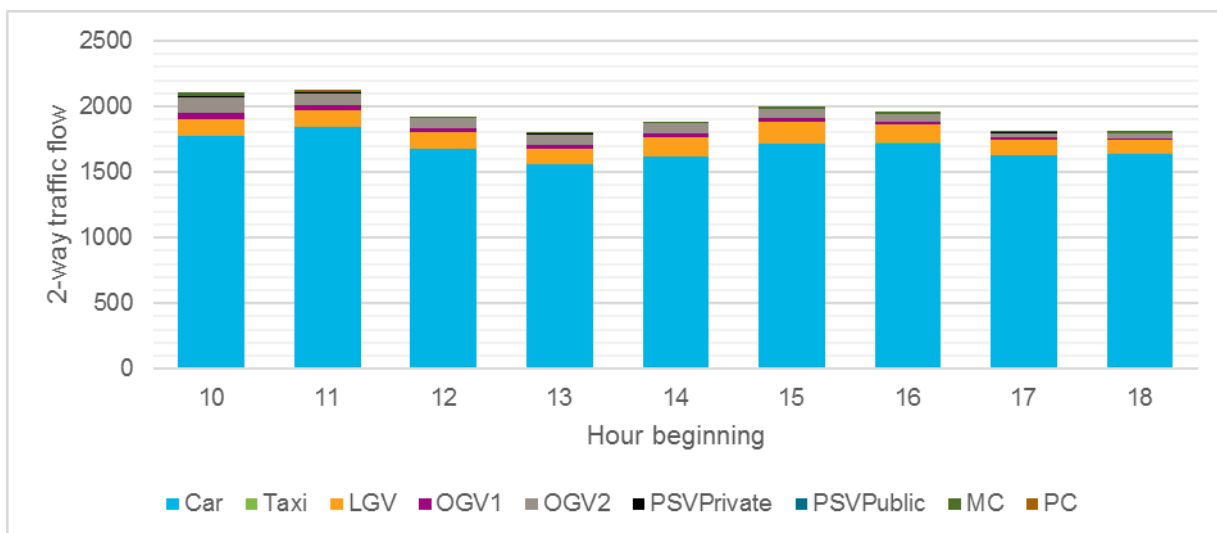


Figure 5-2: Traffic composition on A303 (west of B3083), Summer (18 August 2017)

5.2.5 Traffic composition at the same site during the autumn is shown in Figure 5-3 and summarised below:

- The proportion of cars ranges from 71% (09:00-10:00) to 84% (17:00-18:00);
- LGVs ranges from 9% (18:00-19:00) to 17% (07:00-08:00); and
- OGV1 and OGV2 combined ranges from 6% (17:00-18:00) to 15% (11:00-12:00).

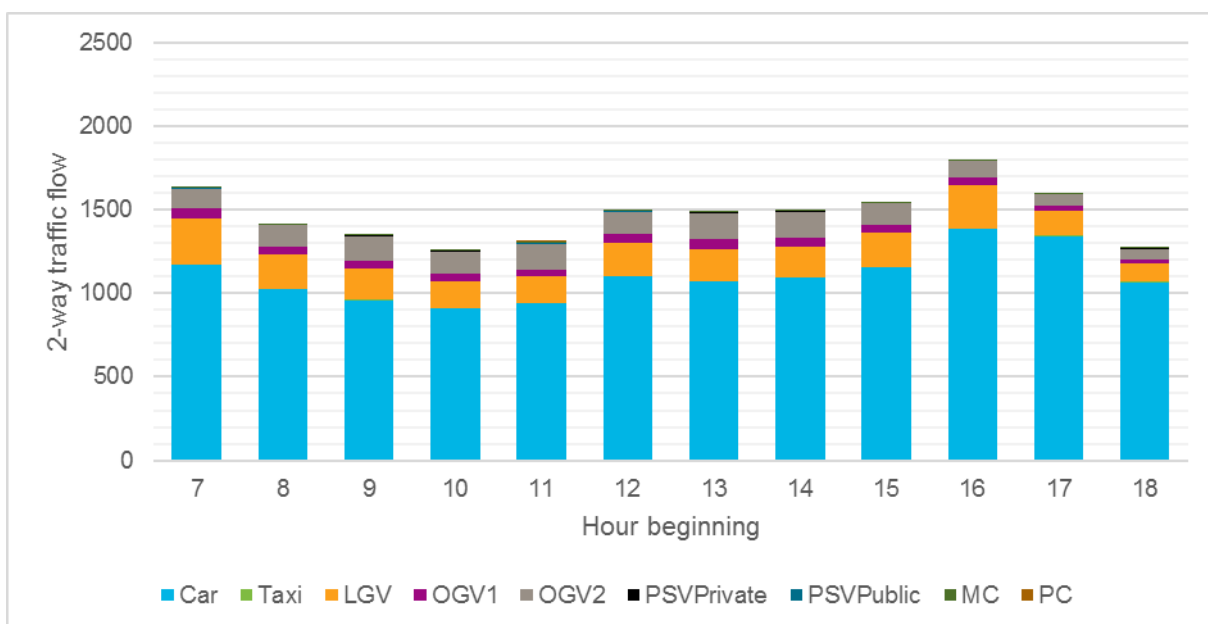


Figure 5-3: Traffic composition on A303 (west of B3083), Autumn (04 October 2017)

5.2.6 Traffic composition on The Packway (on the east side of the B3086) during the summer is shown in Figure 5-4 and summarised below:

- The proportion of cars ranges from 81% (10:00-12:00) to 90% (18:00-19:00);
- LGVs ranges between 9% and 15% (across the survey period); and
- OGV1 + OGV2 ranges from 1% (15:00-19:00) to 5% (10:00-11:00).

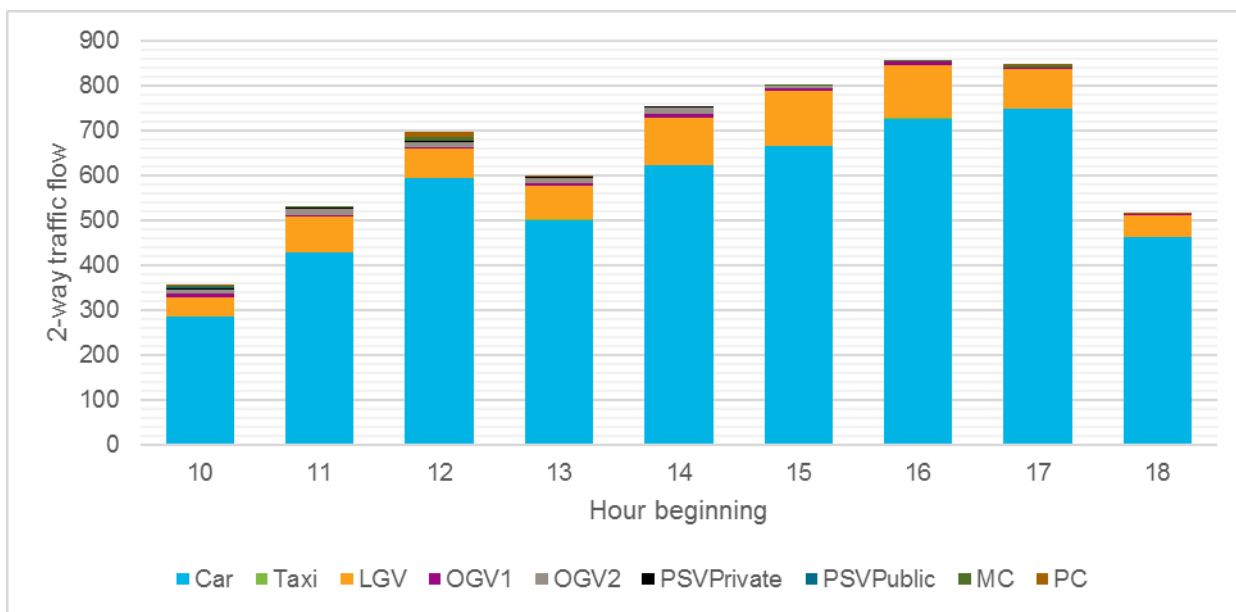


Figure 5-4: Traffic composition on The Packway (east of B3086), Summer (18 August 2017)

5.2.7 Traffic composition at the same site during the autumn is shown in Figure 5-5 and summarised below:

- The proportion of cars ranges from 69% (10:00-11:00) to 89% (18:00-19:00);
- LGVs ranges from 15% to 21% between 07:00-17:00; and
- OGV1 + OGV2 ranges from 1% (17:00-19:00) to 10% (10:00-12:00).

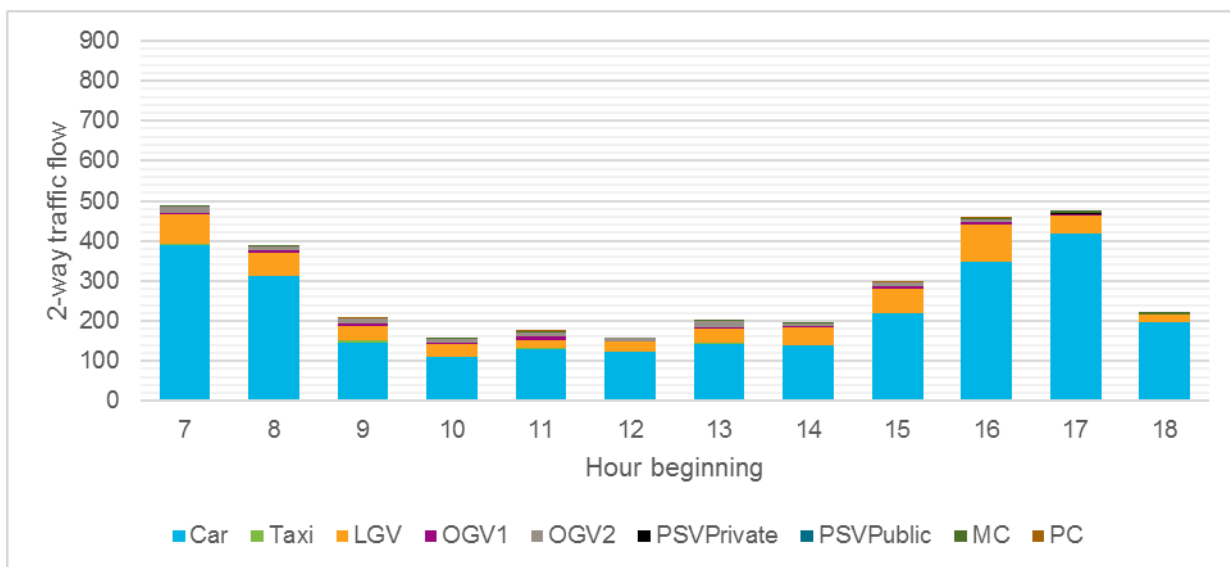


Figure 5-5: Traffic composition on The Packway (east of B3086), Autumn (04 October 2017)

6 Trafficmaster data

6.1 Data description

- 6.1.1 The DfT has provided a Trafficmaster journey time database and integrated transport network (ITN) layer. The database is generated by collecting data from a sample of vehicles that are equipped with in-vehicle Global Positioning Satellite (GPS) technology. The routes selected for which journey time data were derived are identified in Figure 6-1.



Figure 6-1: Coverage of the A303 Trafficmaster database (ITN links)

- 6.1.2 The database covers the period of July 2016 to June 2017 and provides average journey times for each ITN link where data exists, at 15 minute intervals on each day, categorised by vehicle type. The Trafficmaster data specification is shown in Table 6-1.

Table 6-1: Trafficmaster GPS data definition

| Variable name | Description |
|---------------|---|
| Link_id | ITN link identifier |
| Link_ref | Trafficmaster link reference |
| Date_1 | Date (YYYY-MM-DD) |
| Time_per | 24 hours by 15 minute intervals |
| Veh_cls | 1 – cars; 2 – LGVs (up to 3500kg); 3 – HGVs (up to 3500kg); 4 – HGVs over 7500kg); 5- buses (including minibuses); 6 – Taxis; 7 – Motorised caravans; 8 – Other vehicles; 9 - Unknown |
| N | Number of observations |
| Av_jt | Average journey time in 1/1000th of a second |
| sum_squ_jt | Sum of squares of journey times (1/1000th of a second*second) |
| Len_m | Length in metres |

- 6.1.3 The Traffic Model Package provides analysis of these data.

7 Highways England's Trip Information System

7.1 Data description

7.1.1 Highways England has developed a database of trip information and a web based interface that allows users to extract origin and destination matrices for motorised road trips. The database uses data extracted from Telefónica's O₂ UK mobile phone network, containing anonymised trip records for the whole of the UK mainland for the whole of 2016.

7.1.2 The OD trip matrices are available for download from the Trip Information System (TIS) website³ at a user defined zoning system, providing zones formed by 2011 Census Middle-layer Super Output Areas (MSOAs)¹ or aggregations thereof. The matrices supplied contain person trips, cover the whole of Great Britain and are available for the whole of 2016.

7.1.3 The person trip matrices supplied are provided as the average number of trips between each pair of zones for the dates, times and trip types specified by the user. The supplied data must cover a minimum of at least 20 days, though the dates do not have to be consecutive.

7.1.4 The zoning system (see Figure 7-1) comprises of the following zones:

- a. Local authorities within the SWRTM region of focus and intermediate model areas;
- b. Counties in the external model area within the vicinity of the intermediate model area; and
- c. Aggregations of counties (or regions) further afield.

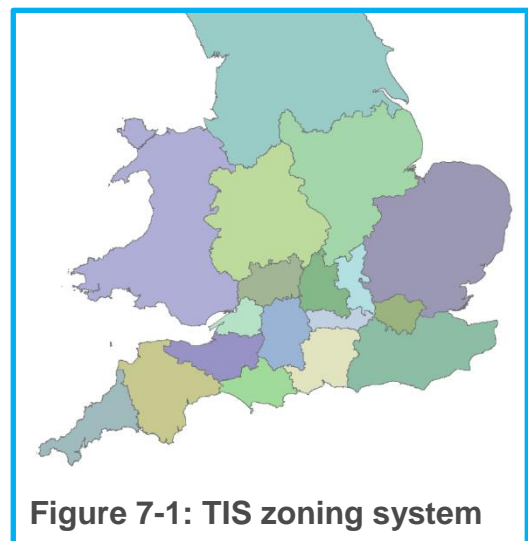


Figure 7-1: TIS zoning system

7.1.5 Trip type information was also specified and included:

- a. Main mode of trips
 - i. Motorised road trips (included all trips by private motor vehicle, bus, tram and freight)
- b. Trip purpose
 - i. HBW/HBO/NHB (home based work/home based other/non-home based other) – provides purpose segmentation by work (commuting) and other for home based trips.

7.1.6 The matrices represent person trips for the period 10:00 – 16:00 for the summer and neutral modelling periods which are outlined below:

- a. **Neutral** – March 2016: 20 weekdays between 26 February 2016 and 24 March 2016; and

³ TIS website: <https://tis.smartsteps.telefonica.com/#/>

- b. **Summer** – 21 days between Friday 15 July 2016 and Sunday 28 August 2016, i.e. every Friday, Saturday and Sunday for the seven week period.

7.1.7 The TIS data have been sourced collaboratively with the A303 Sparkford to Ilchester project team, which is also developing a strategic traffic model derived from SWRTM.

7.1.8 The Traffic Modelling Package provides an explanation of how TIS data have been used to enhance the 'A303 Stonehenge SWRTM (DCO)'.

8 Stonehenge visitor centre interviews

8.1 Survey description

- 8.1.1 Visitors to the Stonehenge visitor centre were interviewed during both the summer and autumn survey period. Surveyors were positioned at the location shown in Figure 8-1 to interview visitors as they walked from the main car park to the visitor centre. Visitors that arrived by coach at the designated coach car park were not interviewed.
- 8.1.2 The primary purpose of the interviews was to ascertain the origin and destination of visitors to the centre in order to enhance the representation of these trips in the 'A303 Stonehenge SWRTM (DCO)'. A copy of the survey form is shown in Figure D-1 (Appendix D). To ensure overseas visitors were represented the form was translated into the following languages:
- Welsh;
 - French;
 - Spanish;
 - Italian;
 - Greek;
 - Arabic;
 - Russian;
 - Chinese; and
 - German

8.2 Survey analysis

- 8.2.1 Table 8-1 shows the number of interviews attempted and the number of interviews that were completed on each day of the surveys. The first question visitors were asked was whether or not they wanted to partake in the survey. A greater proportion of visitors (approximately 98%) during the summer were happy to complete the survey, whereas during the autumn surveys approximately 50% of surveys were completed.

Table 8-1: Number of visitors interviewed during survey period

| Season | Date | No. of interviews attempted | No. of interviews completed |
|--------|--------------------------------------|-----------------------------|-----------------------------|
| Summer | Saturday 26 August 2017 | 266 | 261 |
| | Sunday 27 August 2017 | 281 | 278 |
| | Monday 28 August 2017 (Bank holiday) | 294 | 290 |
| Autumn | Tuesday 3 October 2017 | 167 | 95 |
| | Wednesday 4 October 2017 | 162 | 80 |
| | Thursday 5 October 2017 | 169 | 83 |



Figure 8-1: Location of Stonehenge visitor centre interviews

8.2.2 Table 8-2 shows the number of interview responses over the survey period with information on the type of vehicle used and vehicle occupancy.

Table 8-2: Interview responses showing vehicle type proportions and average vehicle occupancy

| Mode | Summer | | | Autumn | | |
|--------------|------------|-------------|---------------------------|------------|-------------|---------------------------|
| | Number | % | Average vehicle occupancy | Number | % | Average vehicle occupancy |
| Car | 756 | 91% | 2.9 | 228 | 88% | 3.1 |
| LGV | 5 | 1% | 3.6 | 1 | 0% | 2.0 |
| Motorcycle | 12 | 1% | 1.4 | 0 | 0% | - |
| PSV | 24 | 3% | 6.6 | 15 | 6% | 6.0 |
| Taxi | 32 | 4% | 3.6 | 14 | 5% | 3.4 |
| TOTAL | 829 | 100% | - | 258 | 100% | - |

8.2.3 During the summer surveys, information on onward destination was not correctly collected by the survey team. A way of approximating this information has been described below such that OD matrices could be developed.

8.2.4 Postcodes of origins and destinations were plotted using GIS software. The crow-fly distances between each point and Stonehenge visitor centre were calculated, banded into 5km groups, and used to produce the trip length distribution graphs.

8.2.5 To deal with the issue of there being no recorded destination data in the summer months, the destination trip distributions from the neutral month were used. As the

trip length distributions were similar, this approach was considered the most appropriate to infill the missing data. The trip distribution data from the neutral month destinations were used and expanded up to the summer MCTC and ATC counts.

- 8.2.6 Due to the layout of the visitor centre parking, outbound buses and coaches were not picked up in the ATC or MCC surveys. Instead of exiting west with cars and LGVs, back through the entrance, HGVs, buses and coaches leave the site to the north at a separate junction onto the B3086 north of the roundabout.
- 8.2.7 To adjust for this, the turning count at the junction north of the visitor centre roundabout was used to adjust the outbound visitor centre MCC to include these 'missed' heavy vehicle types. It was not possible to make these adjustments for the ATC surveys (as turning counts were required rather than link counts). To mitigate for this, the assumption was made that all trips entering the visitor centre would also leave within the same day, by 19:00, due to the opening hours of the centre. Thus, the outbound ATC total was fixed to match the inbound ATC total. Trips were then distributed across the vehicle classes and time periods using proportions derived from the in-filled MCC data.
- 8.2.8 For both the neutral and summer models, the visitor centre interview records were first expanded to the MCC link counts, to obtain the correct vehicle class splits. Expansions were carried out at an hourly level, to ensure that variances in vehicle class splits across the hours were captured.
- 8.2.9 Following this, totals were expanded to the ATC period totals. This was done to ensure that the total trip count was representative of an average day. Plots of origins and destinations of journeys to Stonehenge visitor centre are shown in Figure D-2 (Appendix D).

9 Freight surveys

9.1 Introduction

- 9.1.1 Data have been collected covering freight modes using the A303. These include data from specialised freight surveys and the DfT's Continuing Survey of Road Goods Transport (CSRGT) surveys, which are described below.

9.2 Specialised goods vehicle counts

Introduction

- 9.2.1 The Specialised Goods Vehicle Count (SGVC) is a survey technique that has been developed by AECOM's specialist freight team to obtain a detailed understanding of freight movements in a given study area.
- 9.2.2 The SGVC survey sought to develop a particular understanding on a number of issues on the A303, including:
- a. The impact of the Solstice Park industrial estate on traffic flows in the area, in particular the number and nature of vehicles using the site; and
 - b. The direction of vehicles travelling on the A303 (through Countess roundabout) and in particular if there was a large amount of traffic coming off at this junction to utilise the service station or travel to local destinations.
- 9.2.3 In addition to the quantitative data capture process, the hauliers which were most frequently observed were approached for more information (e.g. on fleet size and typical origins and destinations), either in a face-to-face interview or via a telephone consultation. Key information on the surveys is provided below.

Solstice Park surveys

- 9.2.4 In order to assess the vehicles arriving and departing from Solstice Park, surveyors were located at both the Equinox Drive roundabout and the Porton Road Roundabout (as shown in Figure 9-1).



Figure 9-1: Location of Solstice Park surveys

- 9.2.5 Movements were recorded on 3 October 2017 between 07:00-19:00. There were no known reported disruptions or incidents which would have affected the traffic flow during the count period.

Countess roundabout surveys

- 9.2.6 Countess roundabout is located to the west of Solstice Park and is the first available junction west of the industrial estate where it is possible to leave the A303. Data were recorded at both the north-east and south-east of the roundabout (as shown in Figure 9-2). The count took place between 07:00 and 19:00 on Wednesday 4 October. There were no recorded delays or incidents.



Figure 9-2: Location of Countess roundabout surveys

Haulier consultation

- 9.2.7 Table 9-1 shows the hauliers with vehicles most frequently observed at Countess roundabout. Information from telephone interviews show their operation type, size of fleet, origin of vehicles and destination of vehicles. Interviews were conducted with transport operators and transport managers at the companies and were carried out in the week following the counts.

Summary of key findings from SGVC surveys

- 9.2.8 The headline findings from the SGVC surveys are:
- a. By far the most commonly observed operators seen at the Solstice Park count locations were either based on the site (Home Bargains, Müller Wiseman or S Morris) or servicing the site (Maritime Containers providing goods to Home Bargains). However, the other firms were using the site either for an identified purpose (Wiltshire Council, for example, may have been servicing the bins on the site) or as a service station (such as the Army and Ford) wherein they stopped off on their journeys elsewhere.
 - b. Solstice Park and the nearby services are largely served by traffic arriving from and returning to the A303. 574 unique vehicles were observed at Solstice Park. Assuming similar flows at Countess roundabout that were observed the previous day, approximately one in four freight vehicles on the A303 interacted with Solstice Park or the associated services.
 - c. A significant proportion of vehicles at the count sites are likely to be associated with local depots, particularly those associated with the construction sector. Vehicles from the agriculture, army and driver training sectors are higher than on many equivalent routes.
 - d. 45% of vehicles observed on Countess roundabout were 6-axled articulated HGVs, usually associated with long-haul and regional (e.g. regional distribution centre to large retail store) movements.
 - e. 37% of vehicles observed were rigid vehicles (4-8 wheels), which are usually associated with more localised movements.
 - f. Over the 12 hour 07:00-19:00 period there is an imbalance in the East-West/West-East flows on the A303. However, it is anticipated that these flows balance over a 24 hour period as vehicles are travelling to destinations in Greater London before 07:00, particularly dairy products and perishables
 - g. Operators based at Solstice Park served differing distribution areas, with the construction sector operating in an approximately 30 mile radius from the park, dairy products associated with Muller being delivered to the South Coast, hinterland and across to West London whilst retailer Home Bargains served its stores located across the South of England including East Anglia.
 - h. The A303 is the major freight artery from Greater London to the South West. There are more hauliers on the route that are from Wiltshire and the South West than from London and the East – this may be due to land price differentials and where operators are based.

Table 9-1: Summary of haulier consultations

| Company | Operation type | Size of fleet | Amount of times recorded | Origin of vehicles | Destination of vehicles |
|--------------------|---------------------------------------|--|--------------------------|--|--|
| Co-op | Food distribution centre | 200 Box Fridges | 32 | The majority of vehicles are from the Midlands but deliveries can come from across the UK. | The distribution centre serves the majority of the South East, including East London. |
| Hanson | Aggregates & Construction | 70 Tippers 30 Mixers | 29 | Tippers come from Whatley quarry in Frome. | Aggregate and cement is delivered anywhere within 1 hour or 50 miles. Currently Hinkley Point is a key destination. |
| Wiltshire concrete | Construction | 40 Tippers 40 Mixers | 25 | Aggregate comes from two quarries in the Mendip Hills and one at Wick Quarry. | Vehicles deliver anywhere in Wiltshire depending on demand. |
| Wiltshire Council | Local council | N/A | 6 | Vehicles are based at Churchfields Industrial Estate in Salisbury. | The council and its contractors move vehicles from the Salisbury area across to the western side of South Wiltshire to provide services to Mee, Hindon and Tisbury. |
| S. Morris | Aggregates & Construction | 9 Mixers | 17 | Aggregate comes from quarries in the Mendips (from various companies, including JC Deans and Hooks). | Vehicles deliver anywhere within 30 minutes of the depot, usually using the A303. Delivery destination depends on demand but often Andover, Larkhill and Longhenge Roundabout. |
| Muller | Food distribution centre (Cross-dock) | 42 Rigids 7 Articulated 53 vehicles in total | 30 | 20 trailers of milk arrive daily from Bridgewater. 5 trailers of milk arrive daily from other areas. | Vehicles deliver to much of the South East including Poole, Salisbury, Maidenhead, Epsom, Eastbourne, Burgess Hill, Brighton and the Isle of Wight. 50% of all deliveries go to Southampton, Newbury and Basingstoke. |
| Home Bargains | Regional distribution centre | 50 either 5-Axle or 6-Axle Articulated | 20 | Imports to the depot are from all major ports including Dover, Tilbury, Southampton, Liverpool and Hull. | The depot covers anywhere from the Midlands down. Drivers have difficulty in getting to Norfolk in one go since the driver has to take a break. |

9.3 Continuing Survey of Roads Goods Transport (CSRGT)

Introduction

- 9.3.1 The DfT obtains details of domestic activity of Great Britain registered HGVs through the Continuing Survey of Road Goods Transport (CSRGT) surveys.
- 9.3.2 The survey team at DfT uses details held by the Driver and Vehicle Licensing Agency (DVLA) to draw a random sample of HGVs. The vehicles are chosen from groups which depend on vehicle type, vehicle weight, and the traffic area in which the vehicle is registered.

Data specification

- 9.3.3 The Road Freight statistics team at the DfT has provided domestic road freight activity in 2015 and 2016 by GB-registered HGVs operating in the UK, for all journeys with an origin or destination in the following NUTS3⁴ regions:
- a. UKJ37 North Hampshire
 - b. UKJ36 Central Hampshire
 - c. UKK15 Wiltshire
 - d. UKK22 Dorset
 - e. UKK23 Somerset
 - f. UKK43 Devon



Figure 9-3: NUTS3 zone boundaries in the South West

⁴ NUTS: Nomenclature of Territorial Units for Statistics (*Nomenclature des unités territoriales statistiques*) is a geocode standard for referencing the subdivisions of countries for statistical purposes. The standard is developed and regulated by the European Union.

- 9.3.4 NUTS3 represents the most disaggregated zone. Freight origin and destination movements to/from remaining UK zones have also been provided at the following levels of disaggregation:
- NUTS2 origin for regions East (H) and London (I);
 - NUTS2 destinations for regions East (H) and London (I);
 - NUTS1 origin for remaining regions (C, D, E, F, G, L, M, N); and
 - NUTS1 destination for remaining regions (C, D, E, F, G, L, M, N).
- 9.3.5 As noted above, CSRGT data are not a complete record of HGV movements across the UK. Furthermore, due to restrictions on use of the dataset, DfT has only provided those data for trips that pass along the broad A303 corridor.
- 9.3.6 It is not therefore possible to construct a complete HGV trip matrix from the data. Instead, the data have been used to enhance the existing representation of HGVs within SWRTM, which were originally developed from the DfT's Base Year Freight Matrices (BYFM) dataset. The process of developing the original trip matrices is set out in the SWRTM model validation report.
- 9.3.7 The CSRGT data will be used to factor the existing SWRTM prior HGV trip matrices. The 'A303 Stonehenge SWRTM (DCO)' model zoning system will be aggregated to the same NUTS level definitions at which the CSRGT data were provided and a sectorised HGV prior matrix produced. The expanded CSRGT HGV totals will be compared to the sectorised SWRTM HGV matrix and a set of factors produced. These factors will subsequently be applied to the SWRTM HGV matrix to provide a CSRGT adjusted prior matrix for each of the three modelled neutral time periods.
- 9.3.8 The process to expand the CSRGT data to a full sample and to subsequently disaggregate to the modelled time periods is set out in the Transport Model Package, Appendix B to the Combined Modelling and Appraisal Report (Application Document 7.5). The Transport Model Package details the process used to factor the matrices and provide some analysis on the amount of change applied to the original SWRTM HGV prior matrices.

Abbreviations List

| | |
|-------|--|
| AADT | Annual Average Daily Traffic |
| ADT | Average Daily Traffic |
| ANPR | Automatic Number Plate Recognition |
| AoDM | Area of Detailed Modelling |
| ATC | Automatic Traffic Count |
| AWT | Average Weekday Traffic |
| BYFM | Base Year Freight Matrices |
| ComMA | Combined Modelling and Appraisal report |
| CSRG | Continuing Survey of Roads Goods Transport |
| CSRs | Client Scheme Requirements |
| DCO | Development Consent Order |
| DfT | Department for Transport |
| DVLA | Driver and Vehicle Licensing Agency |
| GIS | Geographic Information Systems |
| GPS | Global Positioning Systems |
| HGV | Heavy Goods Vehicle |
| IAN | Interim Advice Note |
| IP | Interpeak |
| ITN | Integrated Transport Network |
| Km | Kilometre |
| LGV | Light Goods Vehicle |
| MCTC | Manual Classified Turning Count |
| MSOAs | Middle-layer Super Output Area |
| NUTS | Nomenclature of territorial units for statistics |
| OD | Origin-Destination |
| OGV1 | Ordinary Goods Vehicle 1 (2 and 3 axle rigid vehicles) |

| | |
|---------|--|
| OGV2 | Ordinary Goods Vehicle 2 (4 axle rigid and 3+ axle articulated vehicles) |
| PCF | Project Control Framework |
| RIS | Roads Investment Strategy |
| RSIs | Roadside Interview surveys |
| RTMs | Regional Traffic Models |
| SGVC | Specialised Goods Vehicle Counts |
| SWRTM | South West Regional Traffic Model |
| TDCR | Traffic Data Collection Report |
| TEN-T | Trans-European Network - Transport |
| TIS | Traffic Information System |
| WebTRIS | Web-based Traffic Information System |
| WHS | World Heritage Site |

Appendices

Appendix A ANPR journey time analysis

A.1 Westbound traffic

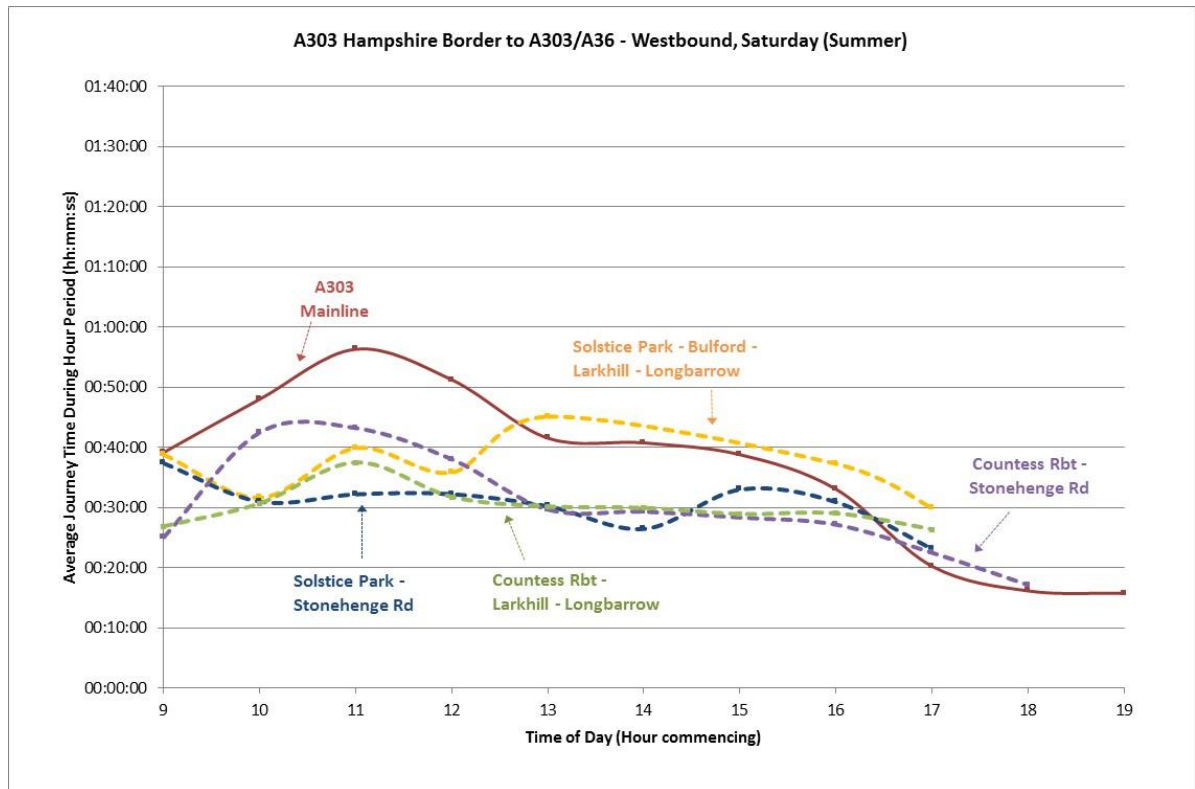


Figure A-1: ANPR journey time analysis – westbound, Saturday (Summer)

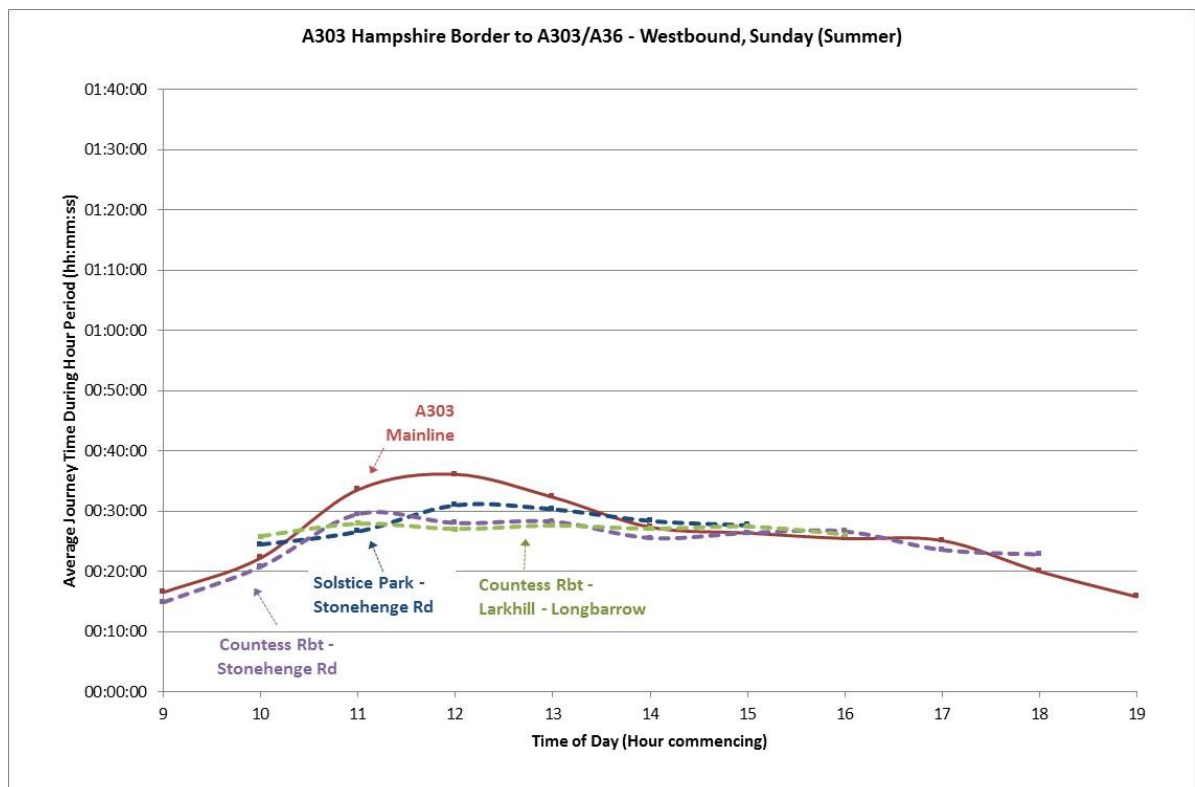


Figure A-2: ANPR journey time analysis – westbound, Sunday (Summer)

A.2 Eastbound traffic

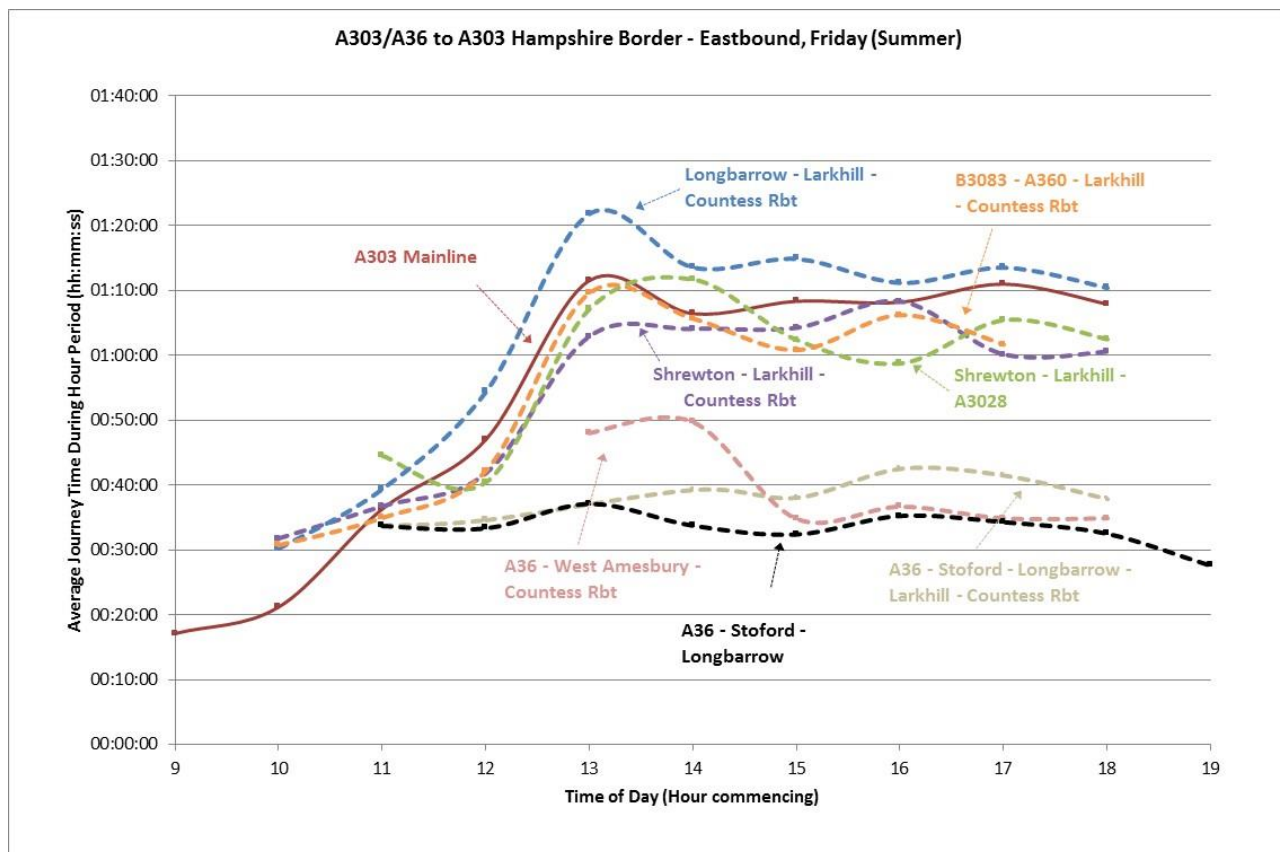


Figure A-3: ANPR journey time analysis – eastbound, Friday (Summer)

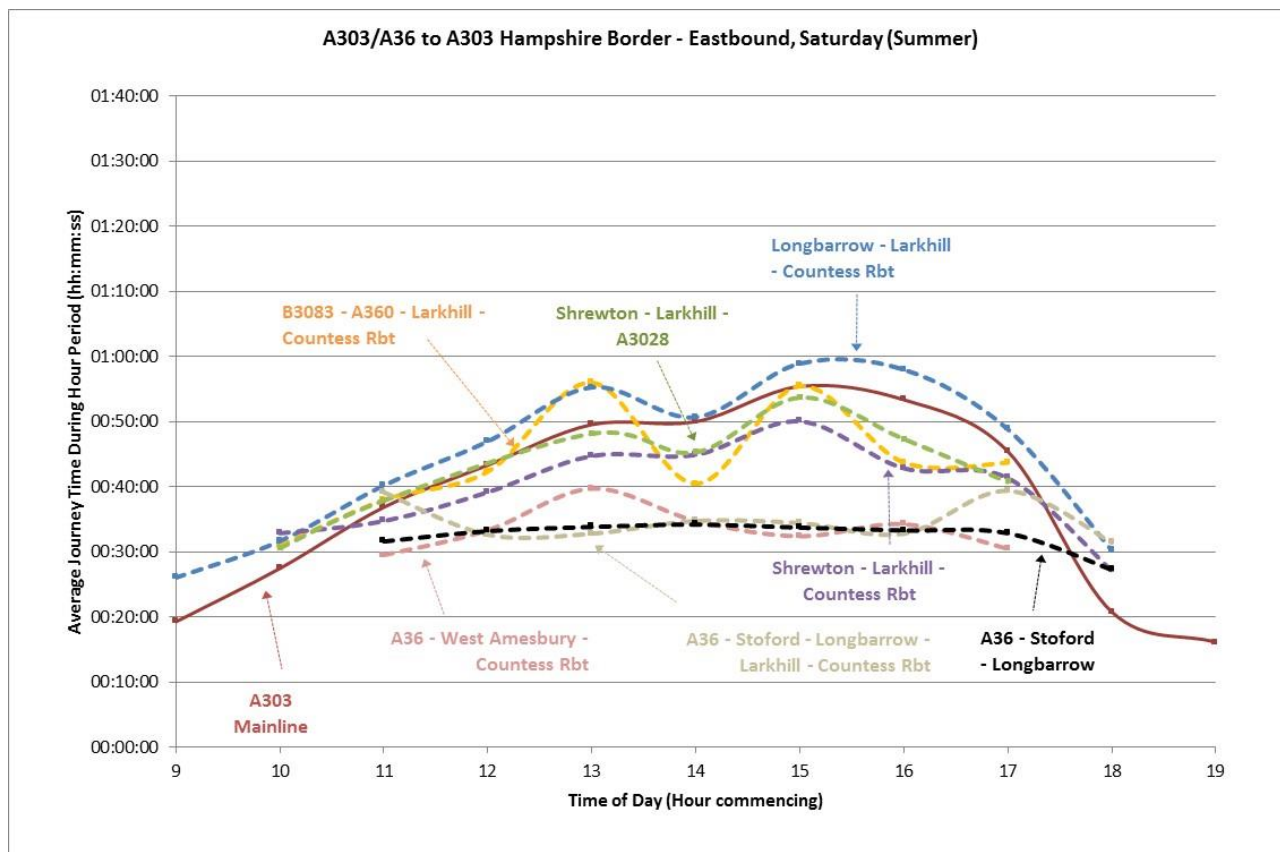


Figure A-4: ANPR journey time analysis – eastbound, Saturday (Summer)

Appendix B ATC summary data

B.1 Tracsis ATC and link count data

Table B-1: Summary of ATC data from Tracsis surveys

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|-----------------------------------|-------------------|------------|----------------|-------------------------------|-----------------------------|
| Site C2 - B3083 south of A303 | | | | | |
| 17 August 2017 | 50 | Northbound | 2570 | 366 | 350 |
| | | Southbound | 2865 | 389 | 393 |
| | | Combined | 5435 | 755 | 743 |
| 24 August 2017 | 50 | Northbound | 2303 | 335 | 317 |
| | | Southbound | 2603 | 373 | 347 |
| | | Combined | 4906 | 708 | 664 |
| 23 September 2017 | 50 | Northbound | 2046 | 304 | 292 |
| | | Southbound | 2105 | 313 | 301 |
| | | Combined | 4151 | 617 | 593 |
| 30 September 2017 | 50 | Northbound | 1781 | 277 | 254 |
| | | Southbound | 2206 | 338 | 315 |
| | | Combined | 3987 | 615 | 570 |
| Site C3 – B3083 near High Down | | | | | |
| 17 August 2017 | 50 | Northbound | 6841 | 795 | 952 |
| | | Southbound | 3263 | 484 | 450 |
| | | Combined | 10104 | 1279 | 1402 |
| 24 August 2017 | 50 | Northbound | 6774 | 1068 | 944 |
| | | Southbound | 3206 | 458 | 448 |
| | | Combined | 9980 | 1526 | 1392 |
| 23 September 2017 | 50 | Northbound | 3703 | 544 | 529 |
| | | Southbound | 2959 | 480 | 423 |
| | | Combined | 6662 | 1024 | 952 |
| 30 September 2017 | 50 | Northbound | 3406 | 478 | 487 |
| | | Southbound | 2746 | 434 | 392 |
| | | Combined | 6152 | 912 | 879 |
| Site C6 – A360 near Oatlands Hill | | | | | |
| 17 August 2017 | 60 | Northbound | 32782 | 4865 | 4638 |
| | | Southbound | 30341 | 4675 | 4288 |
| | | Combined | 63123 | 9540 | 8926 |
| 24 August 2017 | 60 | Northbound | 31078 | 4835 | 4403 |
| | | Southbound | 30276 | 4355 | 4291 |
| | | Combined | 61354 | 9190 | 8694 |
| 23 September 2017 | 60 | Northbound | 29680 | 4542 | 4240 |
| | | Southbound | 29288 | 4543 | 4184 |
| | | Combined | 58968 | 9085 | 8424 |
| 30 September 2017 | 60 | Northbound | 28755 | 4491 | 4108 |
| | | Southbound | 28590 | 4525 | 4084 |
| | | Combined | 57345 | 9016 | 8192 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|---------------------------------------|-------------------|------------|----------------|-------------------------------|-----------------------------|
| Site C7 – A360 north of A303 | | | | | |
| 17 August 2017 | 60 | Northbound | 38678 | 5713 | 5482 |
| | | Southbound | 49890 | 7419 | 7111 |
| | | Combined | 88568 | 13132 | 15593 |
| 24 August 2017 | 60 | Northbound | 38776 | 5611 | 5488 |
| | | Southbound | 49119 | 7248 | 7005 |
| | | Combined | 87895 | 12859 | 12493 |
| 23 September 2017 | 60 | Northbound | 36314 | 5496 | 5188 |
| | | Southbound | 42143 | 6406 | 6020 |
| | | Combined | 78457 | 11902 | 11208 |
| 30 September 2017 | 60 | Northbound | 34376 | 5262 | 4911 |
| | | Southbound | 40417 | 6202 | 5774 |
| | | Combined | 74793 | 11464 | 10685 |
| Site C8 – A360 west of B3086 | | | | | |
| 17 August 2017 | 60 | Eastbound | 32918 | 4915 | 4658 |
| | | Westbound | 25338 | 3820 | 3568 |
| | | Combined | 58256 | 8735 | 8226 |
| 24 August 2017 | 60 | Eastbound | 31868 | 4882 | 4516 |
| | | Westbound | 24867 | 3690 | 3509 |
| | | Combined | 56735 | 8572 | 8025 |
| 23 September 2017 | 60 | Eastbound | 30967 | 4728 | 4424 |
| | | Westbound | 26120 | 4073 | 3731 |
| | | Combined | 57087 | 8801 | 8155 |
| 30 September 2017 | 60 | Eastbound | 29849 | 4613 | 4264 |
| | | Westbound | 25507 | 3957 | 3644 |
| | | Combined | 55356 | 8570 | 7908 |
| Site C9 – Stonehenge visitor Centre | | | | | |
| 17 August 2017 | 30 | Eastbound | 13079 | 1736 | 1839 |
| | | Westbound | 12172 | 1615 | 1711 |
| | | Combined | 25251 | 3351 | 3550 |
| 24 August 2017 | 30 | Eastbound | 12625 | 1661 | 1785 |
| | | Westbound | 11891 | 1544 | 1677 |
| | | Combined | 24516 | 3205 | 3462 |
| 23 September 2017 | 30 | Eastbound | 7731 | 977 | 1104 |
| | | Westbound | 7119 | 876 | 1017 |
| | | Combined | 14850 | 1853 | 2121 |
| 30 September 2017 | 30 | Eastbound | 7099 | 943 | 1014 |
| | | Westbound | 6467 | 845 | 924 |
| | | Combined | 13566 | 1788 | 1938 |
| Site C10 – The Packway, west of B3086 | | | | | |
| 17 August 2017 | 50 | Eastbound | 10271 | 1351 | 1437 |
| | | Westbound | 11622 | 1821 | 1638 |
| | | Combined | 21893 | 3172 | 3075 |
| 24 August 2017 | 50 | Eastbound | 10408 | 1619 | 1458 |
| | | Westbound | 11128 | 1694 | 1570 |
| | | Combined | 21536 | 3313 | 3028 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|--|-------------------|------------|----------------|-------------------------------|-----------------------------|
| 23 September 2017 | 50 | Eastbound | 8451 | 1311 | 1207 |
| | | Westbound | 9949 | 1648 | 1421 |
| | | Combined | 18400 | 2958 | 2629 |
| 30 September 2017 | 50 | Eastbound | 7730 | 1274 | 1121 |
| | | Westbound | 9918 | 1628 | 1448 |
| | | Combined | 17648 | 2902 | 2569 |
| Site C11 – Rolleston Camp access road | | | | | |
| 17 August 2017 | 50 | Northbound | 1849 | 272 | 243 |
| | | Southbound | 1812 | 258 | 241 |
| | | Combined | 3661 | 530 | 484 |
| 24 August 2017 | 50 | Northbound | 1697 | 238 | 214 |
| | | Southbound | 1658 | 254 | 220 |
| | | Combined | 3355 | 492 | 434 |
| 23 September 2017 | 50 | Northbound | 1874 | 295 | 268 |
| | | Southbound | 1902 | 310 | 272 |
| | | Combined | 3776 | 606 | 539 |
| 30 September 2017 | 50 | Northbound | 1825 | 317 | 261 |
| | | Southbound | 1853 | 319 | 265 |
| | | Combined | 3678 | 637 | 525 |
| Site C12 – The Packway, east of Bingham Road | | | | | |
| 17 August 2017 | 30 | Eastbound | 16435 | 2189 | 2309 |
| | | Westbound | 21164 | 3209 | 2996 |
| | | Combined | 37599 | 5398 | 5305 |
| 24 August 2017 | 30 | Eastbound | 17369 | 2592 | 2451 |
| | | Westbound | 21360 | 3105 | 3024 |
| | | Combined | 38729 | 5697 | 5475 |
| 23 September 2017 | 30 | Eastbound | 19757 | 3116 | 2822 |
| | | Westbound | 21427 | 3549 | 3061 |
| | | Combined | 41184 | 6665 | 5883 |
| 30 September 2017 | 30 | Eastbound | 19742 | 3126 | 2820 |
| | | Westbound | 22688 | 3628 | 3241 |
| | | Combined | 42430 | 6754 | 6061 |
| Site C13 – A345 south of Clover Lane | | | | | |
| 17 August 2017 | 30 | Northbound | 23299 | 3906 | 3676 |
| | | Southbound | 22688 | 3871 | 3632 |
| | | Combined | 45987 | 7777 | 7308 |
| 24 August 2017 | 30 | Northbound | 27213 | 3938 | 3834 |
| | | Southbound | 25923 | 3800 | 3667 |
| | | Combined | 53136 | 7738 | 7501 |
| 27 September 2017 | 30 | Northbound | 25493 | 3956 | 3642 |
| | | Southbound | 25001 | 3889 | 3572 |
| | | Combined | 50494 | 7845 | 7213 |
| 30 September 2017 | 30 | Northbound | 24630 | 3858 | 3519 |
| | | Southbound | 24845 | 3869 | 3549 |
| | | Combined | 49475 | 7727 | 7068 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|---|-------------------|------------|----------------|-------------------------------|-----------------------------|
| Site C14 – A345 south of Fargo Road | | | | | |
| 17 August 2017 | 50 | Northbound | 49850 | 7578 | 7075 |
| | | Southbound | 47245 | 6966 | 6708 |
| | | Combined | 97095 | 14544 | 13783 |
| 24 August 2017 | 50 | Northbound | 49064 | 7121 | 6967 |
| | | Southbound | 45908 | 6804 | 6511 |
| | | Combined | 94972 | 13925 | 13478 |
| 23 September 2017 | 50 | Northbound | 37602 | 6700 | 5951 |
| | | Southbound | 36396 | 6213 | 5895 |
| | | Combined | 73998 | 12913 | 11847 |
| 30 September 2017 | 50 | Northbound | 42216 | 7142 | 6499 |
| | | Southbound | 40270 | 6889 | 6293 |
| | | Combined | 82486 | 14031 | 12792 |
| 17 August 2017 | 60 | Eastbound | 9452 | 1491 | 1322 |
| | | Westbound | 6102 | 913 | 850 |
| | | Combined | 15554 | 2404 | 2172 |
| 24 August 2017 | 60 | Eastbound | 9467 | 1493 | 1320 |
| | | Westbound | 5978 | 877 | 833 |
| | | Combined | 15445 | 2370 | 2153 |
| 23 September 2017 | 60 | Eastbound | 6575 | 1043 | 939 |
| | | Westbound | 13581 | 2065 | 1940 |
| | | Combined | 20156 | 3108 | 2879 |
| 30 September 2017 | 60 | Eastbound | 3466 | 459 | 495 |
| | | Westbound | 12938 | 2118 | 1848 |
| | | Combined | 16404 | 2577 | 2343 |
| Site C16 – Amesbury Road north of A3028 | | | | | |
| 17 August 2017 | 60 | Northbound | 15457 | 2426 | 2155 |
| | | Southbound | 12547 | 1992 | 1752 |
| | | Combined | 28004 | 4418 | 3907 |
| 24 August 2017 | 60 | Northbound | 15382 | 2412 | 2141 |
| | | Southbound | 12570 | 1979 | 1772 |
| | | Combined | 27952 | 4391 | 3913 |
| 23 September 2017 | 60 | Northbound | 15580 | 2984 | 2585 |
| | | Southbound | 14714 | 2647 | 2438 |
| | | Combined | 30294 | 5630 | 5023 |
| 3 October 2017 | 60 | Northbound | 18442 | 3297 | 2876 |
| | | Southbound | 15988 | 2877 | 2476 |
| | | Combined | 34430 | 6174 | 5352 |
| Site C19 – B3084 east of A338 | | | | | |
| 17 August 2017 | 60 | Eastbound | 13250 | 2042 | 1849 |
| | | Westbound | 13134 | 2049 | 1830 |
| | | Combined | 26384 | 4091 | 3679 |
| 24 August 2017 | 60 | Eastbound | 12785 | 1957 | 1791 |
| | | Westbound | 12804 | 1961 | 1794 |
| | | Combined | 25589 | 3918 | 3585 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|--|-------------------|------------|----------------|-------------------------------|-----------------------------|
| 23 September 2017 | 60 | Eastbound | 14330 | 2236 | 2047 |
| | | Westbound | 21130 | 2283 | 3019 |
| | | Combined | 35460 | 4519 | 5066 |
| 30 September 2017 | 60 | Eastbound | 13919 | 2233 | 1988 |
| | | Westbound | 13375 | 2142 | 1911 |
| | | Combined | 27294 | 4375 | 3899 |
| Site C20 – A338 north of A303 | | | | | |
| 17 August 2017 | 60 | Northbound | 37631 | 5688 | 5331 |
| | | Southbound | 41297 | 6291 | 5844 |
| | | Combined | 78928 | 11979 | 11175 |
| 24 August 2017 | 60 | Northbound | 38595 | 5809 | 5465 |
| | | Southbound | 41964 | 6343 | 5950 |
| | | Combined | 80559 | 12152 | 11415 |
| 23 September 2017 | 60 | Northbound | 36489 | 5673 | 5213 |
| | | Southbound | 54817 | 6870 | 7831 |
| | | Combined | 91306 | 12543 | 13044 |
| 30 September 2017 | 60 | Northbound | 36592 | 5667 | 5227 |
| | | Southbound | 41222 | 6366 | 5889 |
| | | Combined | 77814 | 12033 | 11116 |
| Site C21 – A338 south of B3084 | | | | | |
| 17 August 2017 | 60 | Northbound | 18553 | 2697 | 2612 |
| | | Southbound | 20782 | 3097 | 2916 |
| | | Combined | 39335 | 5794 | 5528 |
| 24 August 2017 | 60 | Northbound | 19930 | 2921 | 2800 |
| | | Southbound | 21501 | 3133 | 3034 |
| | | Combined | 41431 | 6054 | 5834 |
| 23 September 2017 | 60 | Northbound | 20113 | 3017 | 2873 |
| | | Southbound | 18966 | 2790 | 2709 |
| | | Combined | 39079 | 5807 | 5583 |
| 30 September 2017 | 60 | Northbound | 20003 | 3075 | 2858 |
| | | Southbound | 18170 | 2770 | 2596 |
| | | Combined | 38173 | 5845 | 5453 |
| Site C23 – Countess Road south of A303 | | | | | |
| 17 August 2017 | 30 | Northbound | 41060 | 6184 | 5829 |
| | | Southbound | 39795 | 6118 | 5664 |
| | | Combined | 80855 | 12302 | 11493 |
| 24 August 2017 | 30 | Northbound | 41050 | 6030 | 5801 |
| | | Southbound | 37892 | 5571 | 5376 |
| | | Combined | 78942 | 11601 | 11177 |
| 23 September 2017 | 30 | Northbound | 44986 | 6843 | 6427 |
| | | Southbound | 38195 | 5922 | 5456 |
| | | Combined | 83181 | 12764 | 11883 |
| 30 September 2017 | 30 | Northbound | 44779 | 6929 | 6397 |
| | | Southbound | 38332 | 5903 | 5476 |
| | | Combined | 83111 | 12832 | 11873 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|--|-------------------|------------|----------------|-------------------------------|-----------------------------|
| Site C24 – Porton Road south of Solstice Park Avenue | | | | | |
| 17 August 2017 | 40 | Northbound | 43186 | 6649 | 6115 |
| | | Southbound | 46559 | 7227 | 6601 |
| | | Combined | 89745 | 13876 | 12716 |
| 24 August 2017 | 40 | Northbound | 43068 | 6588 | 6096 |
| | | Southbound | 45335 | 7009 | 6420 |
| | | Combined | 88403 | 133597 | 12516 |
| 23 September 2017 | 40 | Northbound | 46081 | 7097 | 6583 |
| | | Southbound | 48751 | 7667 | 6964 |
| | | Combined | 94832 | 14764 | 13547 |
| 30 September 2017 | 40 | Northbound | 46822 | 7281 | 6689 |
| | | Southbound | 50089 | 7815 | 7156 |
| | | Combined | 96911 | 15096 | 13844 |
| Site C25 – A303 east of B3083 | | | | | |
| 17 August 2017 | 40 | Eastbound | 90703 | 13212 | 12913 |
| | | Westbound | 91713 | 13395 | 13077 |
| | | Combined | 182416 | 26607 | 25990 |
| 24 August 2017* | 40 | Eastbound | 44145 | 14311 | 13367 |
| | | Westbound | 49137 | 16090 | 14887 |
| | | Combined | 93282 | 30401 | 28254 |
| 4 October 2017^ | 40 | Eastbound | 79107 | 12022 | 11778 |
| | | Westbound | 79745 | 12401 | 11840 |
| | | Combined | 158852 | 24423 | 23618 |
| 11 October 2017 | | Eastbound | 82812 | 11969 | 11830 |
| | | Westbound | 84830 | 12610 | 12119 |
| | | Combined | 167642 | 24579 | 23949 |
| Site C26 – A3028 West of Church Lane | | | | | |
| 17 August 2017 | 30 | Eastbound | 25277 | 3856 | 3589 |
| | | Westbound | 29015 | 4476 | 4102 |
| | | Combined | 54292 | 8332 | 7691 |
| 24 August 2017* | 30 | Eastbound | 26701 | 4053 | 3789 |
| | | Westbound | 29730 | 4557 | 4215 |
| | | Combined | 56431 | 8610 | 8004 |
| 23 September 2017 | 30 | Eastbound | 28451 | 4500 | 4064 |
| | | Westbound | 31346 | 4902 | 4478 |
| | | Combined | 59797 | 9402 | 8542 |
| 30 September 2017 | 30 | Eastbound | 28260 | 4476 | 4037 |
| | | Westbound | 30918 | 4885 | 4417 |
| | | Combined | 59178 | 9361 | 8454 |
| Site C29 – A360 west of Elston Lane | | | | | |
| 17 August 2017 | 50 | Eastbound | 20263 | 3114 | 2847 |
| | | Westbound | 20051 | 3041 | 2810 |
| | | Combined | 40314 | 6155 | 5657 |
| 24 August 2017* | 50 | Eastbound | 20138 | 3014 | 2838 |
| | | Westbound | 19884 | 2962 | 2806 |
| | | Combined | 40022 | 5976 | 5644 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|---|-------------------|------------|----------------|-------------------------------|-----------------------------|
| 23 September 2017 | 50 | Eastbound | 21742 | 3331 | 3106 |
| | | Westbound | 20961 | 3238 | 2994 |
| | | Combined | 42703 | 6569 | 6100 |
| 30 September 2017 | 50 | Eastbound | 20278 | 3188 | 2897 |
| | | Westbound | 19887 | 3121 | 2841 |
| | | Combined | 40165 | 6309 | 5738 |
| Site C30 – High street south of London Road | | | | | |
| 17 August 2017 | 30 | Northbound | 10136 | 1309 | 1414 |
| | | Southbound | 10949 | 1687 | 1534 |
| | | Combined | 21085 | 2996 | 2948 |
| 24 August 2017 | 30 | Northbound | 10209 | 1568 | 1436 |
| | | Southbound | 10520 | 1586 | 1478 |
| | | Combined | 20729 | 3154 | 2914 |
| 23 September 2017 | 30 | Northbound | 8398 | 1295 | 1200 |
| | | Southbound | 9515 | 1565 | 1359 |
| | | Combined | 17913 | 2860 | 2559 |
| 30 September 2017 | 30 | Northbound | 8177 | 1264 | 1168 |
| | | Southbound | 9769 | 1548 | 1395 |
| | | Combined | 17944 | 2812 | 2563 |
| Site C31 – Chitterne Road west of A360 | | | | | |
| 17 August 2017 | 60 | Eastbound | 14674 | 2085 | 2074 |
| | | Westbound | 12225 | 1875 | 1723 |
| | | Combined | 26899 | 3960 | 3797 |
| 24 August 2017* | 60 | Eastbound | 13736 | 2071 | 1923 |
| | | Westbound | 11299 | 1659 | 1577 |
| | | Combined | 25035 | 3730 | 3500 |
| 23 September 2017 | 60 | Eastbound | 11633 | 1749 | 1662 |
| | | Westbound | 9982 | 1621 | 1426 |
| | | Combined | 21615 | 3370 | 3088 |
| 30 September 2017 | 60 | Eastbound | 11528 | 1740 | 1647 |
| | | Westbound | 10242 | 1551 | 1463 |
| | | Combined | 21770 | 3291 | 3110 |
| Site C32 – B3086 south of The Packway | | | | | |
| 18 August 2017 | 60 | Northbound | 9640 | 1320 | 1304 |
| | | Southbound | 12922 | 1913 | 1809 |
| | | Combined | 22382 | 3233 | 3113 |
| 25 August 2017 | 60 | Northbound | 10145 | 1469 | 1409 |
| | | Southbound | 13082 | 1833 | 1831 |
| | | Combined | 23227 | 3302 | 3240 |
| 23 September 2017 | 60 | Northbound | 7429 | 1182 | 1061 |
| | | Southbound | 8632 | 1476 | 1233 |
| | | Combined | 16061 | 2658 | 2294 |
| 30 September 2017 | 60 | Northbound | 6566 | 1026 | 938 |
| | | Southbound | 8395 | 1332 | 1199 |
| | | Combined | 14961 | 2358 | 2137 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|--|-------------------|------------|----------------|-------------------------------|-----------------------------|
| Site C33 – Solstice Park Avenue east of Meridian Way | | | | | |
| 18 August 2017 | 40 | Eastbound | 19659 | 2844 | 2751 |
| | | Westbound | 52463 | 8001 | 7464 |
| | | Combined | 72122 | 10845 | 10215 |
| 25 August 2017 | 40 | Eastbound | 19616 | 2854 | 2740 |
| | | Westbound | 50471 | 7659 | 7176 |
| | | Combined | 70087 | 10513 | 9916 |
| 23 September 2017 | 40 | Eastbound | 19181 | 29008 | 2740 |
| | | Westbound | 45990 | 7628 | 6570 |
| | | Combined | 65171 | 10536 | 9310 |
| 30 September 2017 | 40 | Eastbound | 20234 | 2969 | 2891 |
| | | Westbound | 51397 | 7655 | 7342 |
| | | Combined | 71631 | 10624 | 10233 |
| Site C34 – Salisbury Road south of A3028 Double Hedges | | | | | |
| 18 August 2017 | 40 | Northbound | 31651 | 4740 | 4491 |
| | | Southbound | 33027 | 5000 | 4682 |
| | | Combined | 64678 | 9740 | 9173 |
| 25 August 2017 | 40 | Northbound | 32244 | 4814 | 4576 |
| | | Southbound | 34913 | 5310 | 4957 |
| | | Combined | 67157 | 10124 | 9533 |
| 23 September 2017 | 40 | Northbound | 29703 | 4406 | 4243 |
| | | Southbound | 26191 | 3951 | 3742 |
| | | Combined | 55894 | 8356 | 7985 |
| 30 September 2017 | 40 | Northbound | 31585 | 4787 | 4512 |
| | | Southbound | 37845 | 5815 | 5406 |
| | | Combined | 69430 | 10602 | 9919 |
| Site C35 – London Road | | | | | |
| 18 August 2017 | 30 | Eastbound | 19603 | 2934 | 2776 |
| | | Westbound | 24109 | 3662 | 3416 |
| | | Combined | 43712 | 6596 | 6192 |
| 25 August 2017 | 30 | Eastbound | 19850 | 2955 | 2822 |
| | | Westbound | 24021 | 3588 | 3397 |
| | | Combined | 43871 | 6543 | 6219 |
| 23 September 2017 | 30 | Eastbound | 19864 | 3000 | 2838 |
| | | Westbound | 24499 | 3787 | 3500 |
| | | Combined | 44363 | 6787 | 6338 |
| 30 September 2017 | 30 | Eastbound | 20363 | 3081 | 2909 |
| | | Westbound | 25229 | 3805 | 3604 |
| | | Combined | 45592 | 6886 | 6513 |
| Site C36 – Unnamed Road (West Amesbury) | | | | | |
| 17 August 2017 | 60 | Northbound | 4862 | 649 | 678 |
| | | Southbound | 3688 | 526 | 509 |
| | | Combined | 8550 | 1175 | 1187 |
| 24 August 2017 | 60 | Northbound | 5428 | 751 | 760 |
| | | Southbound | 3843 | 544 | 537 |
| | | Combined | 9271 | 1295 | 1297 |

| Week beginning | Speed limit (mph) | Direction | Total vehicles | Average weekday traffic (AWT) | Average daily traffic (ADT) |
|-------------------|---|------------|----------------|-------------------------------|-----------------------------|
| 23 September 2017 | 60 | Northbound | 3595 | 527 | 514 |
| | | Southbound | 3177 | 499 | 454 |
| | | Combined | 6722 | 1027 | 967 |
| 30 September 2017 | 60 | Northbound | 3464 | 506 | 495 |
| | | Southbound | 3093 | 459 | 442 |
| | | Combined | 6557 | 964 | 937 |
| Notes | | | | | |
| *C25 | No data collected Monday-Wednesday | | | | |
| ^C25 | Data loss Monday 9 October 2017 between 08:15-12:15 | | | | |

Table B-2: Summary of peak period traffic flows from ATC data

| Period | Direction | AM (07:00-10:00) | IP (10:00-16:00) | PM (16:00-19:00) | Direction | AM (07:00-10:00) | IP (10:00-16:00) | PM (16:00-19:00) |
|---------------------------------------|------------|------------------|------------------|------------------|--|------------------|------------------|------------------|
| Site C2 - B3083 south of A303 | | | | | Site C3 - B3083 near High Down | | | |
| Summer 2 week average | Northbound | 67 | 158 | 74 | Northbound | 85 | 418 | 321 |
| | Southbound | 53 | 172 | 99 | Southbound | 77 | 215 | 107 |
| | Combined | 120 | 329 | 173 | Combined | 162 | 633 | 428 |
| Neutral 2 week average | Northbound | 66 | 122 | 63 | Northbound | 147 | 184 | 107 |
| | Southbound | 75 | 130 | 66 | Southbound | 108 | 163 | 107 |
| | Combined | 141 | 252 | 129 | Combined | 255 | 347 | 214 |
| Site C6 - A360 near Oatlands Hill | | | | | Site C7 - A360 north of A303 | | | |
| Summer 2 week average | Northbound | 768 | 1853 | 1168 | Northbound | 838 | 2457 | 1342 |
| | Southbound | 932 | 1793 | 970 | Southbound | 1243 | 3257 | 1688 |
| | Combined | 1700 | 3646 | 2138 | Combined | 2081 | 5714 | 3029 |
| Neutral 2 week average | Northbound | 1137 | 1516 | 1125 | Northbound | 1194 | 2135 | 1368 |
| | Southbound | 1383 | 1579 | 1001 | Southbound | 1764 | 2209 | 1400 |
| | Combined | 2520 | 3095 | 2126 | Combined | 2958 | 4344 | 2768 |
| Site C8 - A360 west of B3086 | | | | | Site C9 - Stonehenge visitor Centre | | | |
| Summer 2 week average | Eastbound | 1084 | 1942 | 956 | Eastbound | 227 | 1284 | 286 |
| | Westbound | 473 | 1393 | 1035 | Westbound | 47 | 959 | 558 |
| | Combined | 1557 | 3335 | 1991 | Combined | 273 | 2244 | 844 |
| Neutral 2 week average | Eastbound | 1642 | 1497 | 807 | Eastbound | 140 | 697 | 92 |
| | Westbound | 714 | 1473 | 1250 | Westbound | 541 | 223 | 41 |
| | Combined | 2356 | 2970 | 2057 | Combined | 681 | 920 | 133 |
| Site C10 - The Packway, west of B3086 | | | | | Site C11 - Rollestone Camp access road | | | |
| Summer 2 week average | Eastbound | 280 | 585 | 387 | Northbound | 54 | 104 | 51 |
| | Westbound | 133 | 759 | 557 | Southbound | 42 | 112 | 56 |
| | Combined | 413 | 1344 | 943 | Combined | 96 | 216 | 107 |
| Neutral 2 week average | Eastbound | 510 | 336 | 211 | Northbound | 93 | 134 | 49 |
| | Westbound | 188 | 451 | 648 | Southbound | 61 | 148 | 78 |
| | Combined | 698 | 787 | 859 | Combined | 154 | 282 | 127 |

| Period | Direction | AM (07:00-10:00) | IP (10:00-16:00) | PM (16:00-19:00) | Direction | AM (07:00-10:00) | IP (10:00-16:00) | PM (16:00-19:00) |
|--|------------|---------------------|------------------|---------------------|--|---------------------|------------------|---------------------|
| Site C12 – The Packway, east of Bingham Road | | | | | Site C13 – A345 south of Clover Lane | | | |
| Summer 2 week average | Eastbound | 413 | 955 | 663 | Northbound | 503 | 1564 | 993 |
| | Westbound | 272 | 1614 | 906 | Southbound | 747 | 1459 | 735 |
| | Combined | 685 | 2569 | 1570 | Combined | 1250 | 3023 | 1728 |
| Neutral 2 week average | Eastbound | 875 | 1100 | 691 | Northbound | 815 | 1320 | 1077 |
| | Westbound | 708 | 1166 | 1040 | Southbound | 1169 | 1263 | 815 |
| | Combined | 1583 | 2266 | 1731 | Combined | 1984 | 2583 | 1892 |
| Site C14 – A345 south of Fargo Road | | | | | Site C15 – A3028, West of Amesbury Road | | | |
| Summer 2 week average | Northbound | 959 | 3229 | 1766 | Eastbound | 174 | 612 | 365 |
| | Southbound | 1300 | 2851 | 1405 | Westbound | 222 | 335 | 154 |
| | Combined | 2259 | 6080 | 3170 | Combined | 396 | 947 | 519 |
| Neutral 2 week average | Northbound | 1379 | 2806 | 2706 | Eastbound | 286 | 251 | 127 |
| | Southbound | 1787 | 2860 | 2091 | Westbound | 313 | 733 | 699 |
| | Combined | 3166 | 5666 | 4797 | Combined | 599 | 984 | 826 |
| Site C16 – Amesbury Road north of A3028 | | | | | Site C19 – B3084 east of A338 | | | |
| Summer 2 week average | Northbound | 493 | 797 | 460 | Eastbound | 421 | 732 | 402 |
| | Southbound | 265 | 799 | 451 | Westbound | 320 | 729 | 510 |
| | Combined | 757 | 1597 | 911 | Combined | 741 | 1460 | 911 |
| Neutral 2 week average | Northbound | 945 | 850 | 699 | Eastbound | 640 | 670 | 485 |
| | Southbound | 466 | 864 | 904 | Westbound | 462 | 667 | 636 |
| | Combined | 1411 | 1714 | 1603 | Combined | 1102 | 1337 | 1121 |
| Site C20 – A338 north of A303 | | | | | Site C21 – A338 south of B3084 | | | |
| Summer 2 week average | Northbound | 942 | 2135 | 1303 | Northbound | 459 | 1134 | 683 |
| | Southbound | 1224 | 2528 | 1211 | Southbound | 598 | 1379 | 650 |
| | Combined | 2166 | 4664 | 2513 | Combined | 1058 | 2513 | 1332 |
| Neutral 2 week average | Northbound | 1088 | 1625 | 1100 | Northbound | 729 | 1041 | 761 |
| | Southbound | 1171 | 1643 | 1167 | Southbound | 681 | 973 | 684 |
| | Combined | 2259 | 3268 | 1267 | Combined | 1410 | 2014 | 1445 |
| Site C23 – Countess Road south of A303 | | | | | Site C24 – Porton Road south of Solstice Park Avenue | | | |
| Summer 2 week average | Northbound | 880 | 2440 | 1415 | Northbound | 1083 | 2570 | 1434 |
| | Southbound | 1072 | 2432 | 1123 | Southbound | 1117 | 2761 | 1533 |
| | Combined | 1952 | 4872 | 2537 | Combined | 2200 | 5330 | 2966 |
| Neutral 2 week average | Northbound | 1423 | 2413 | 1574 | Northbound | 1663 | 2351 | 1809 |
| | Southbound | 1353 | 2129 | 1342 | Southbound | 1716 | 2507 | 2014 |
| | Combined | 2776 | 4542 | 2916 | Combined | 3379 | 4858 | 3823 |
| Site C25 – A303 east of B3083 | | | | | Site C26 – A3028 West of Church Lane | | | |
| Summer 2 week average | Eastbound | 1811 | 4037 | 1668 | Eastbound | 817 | 1534 | 736 |
| | Westbound | 1878 | 4035 | 1928 | Westbound | 473 | 1893 | 1181 |
| | Combined | 3689 | 8071 | 3596 | Combined | 1291 | 3426 | 1918 |
| Neutral 2 week average | Eastbound | 2498 | 4348 | 1994 | Eastbound | 1403 | 1419 | 914 |
| | Westbound | 1780 | 4485 | 2670 | Westbound | 841 | 1699 | 1518 |
| | Combined | 4278 | 8833 | 4664 | Combined | 2244 | 3118 | 2432 |
| Site C29 – A360 west of Elston Lane | | | | | Site C30 – High street south of London Road | | | |
| Summer 2 week average | Eastbound | 698 | 1234 | 544 | Northbound | 242 | 596 | 392 |
| | Westbound | 433 | 1108 | 817 | Southbound | 152 | 718 | 492 |
| | Combined | 1131 | 2342 | 1361 | Combined | 394 | 1314 | 884 |

| Period | Direction | AM (07:00-10:00) | IP (10:00-16:00) | PM (16:00-19:00) | Direction | AM (07:00-10:00) | IP (10:00-16:00) | PM (16:00-19:00) |
|--|------------|---------------------|------------------|---------------------|--|---------------------|------------------|---------------------|
| Neutral 2 week average | Eastbound | 1059 | 1070 | 633 | Northbound | 455 | 378 | 226 |
| | Westbound | 693 | 1124 | 954 | Southbound | 201 | 475 | 555 |
| | Combined | 1752 | 2194 | 1587 | Combined | 656 | 853 | 781 |
| Site C31 – Chitterne Road west of A360 | | | | | Site C32 – B3086 south of The Packway | | | |
| Summer 2 week average | Eastbound | 398 | 826 | 521 | Northbound | 237 | 580 | 367 |
| | Westbound | 163 | 779 | 525 | Southbound | 229 | 1053 | 450 |
| | Combined | 561 | 1605 | 1047 | Combined | 466 | 1633 | 817 |
| Neutral 2 week average | Eastbound | 662 | 490 | 285 | Northbound | 443 | 334 | 182 |
| | Westbound | 188 | 523 | 567 | Southbound | 212 | 459 | 482 |
| | Combined | 850 | 1013 | 852 | Combined | 655 | 793 | 664 |
| Site C33 – Solstice Park Avenue east of Meridian Way | | | | | Site C34 – Salisbury Road south of A3028 Double Hedges | | | |
| Summer 2 week average | Eastbound | 448 | 1313 | 459 | Northbound | 457 | 2046 | 1271 |
| | Westbound | 1016 | 3258 | 1829 | Southbound | 899 | 2130 | 1019 |
| | Combined | 1464 | 4571 | 2288 | Combined | 1356 | 4176 | 2290 |
| Neutral 2 week average | Eastbound | 529 | 1236 | 548 | Northbound | 630 | 1582 | 1397 |
| | Westbound | 1292 | 2602 | 2141 | Southbound | 911 | 1519 | 1266 |
| | Combined | 1821 | 3838 | 2689 | Combined | 1541 | 3101 | 2663 |
| Site C35 – London Road | | | | | Site C36 – Unnamed Road (West Amesbury) | | | |
| Summer 2 week average | Eastbound | 364 | 1463 | 581 | Northbound | 67 | 332 | 238 |
| | Westbound | 395 | 1779 | 776 | Southbound | 80 | 273 | 124 |
| | Combined | 759 | 3242 | 1357 | Combined | 146 | 606 | 362 |
| Neutral 2 week average | Northbound | 514 | 1361 | 663 | Northbound | 95 | 207 | 130 |
| | Southbound | 630 | 1511 | 308 | Southbound | 86 | 170 | 107 |
| | Combined | 1144 | 2872 | 971 | Combined | 181 | 377 | 237 |

Table B-3: Summary of link count data – daily total vehicles

| Date | Dir | C1^ A303, Great Bathamp ton Cottage | C4 A303 west of Longbar row Rdbt | C5 A303 east of Longbar row Rdbt | C22 A303 east of A338 | C27* A303 at Solstice Park Overbrid ge | C28 Countes s Rdbt W/B exit | C37 A303, west of A36 | C38 A36, east of A303 | C39 A36, west of A303 |
|--|-------|--|--|--|--------------------------------|---|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Friday 18 th Aug 2017 | EB | 12085 | 11997 | 16470 | 19122 | 10462 | - | 14439 | 7330 | 5347 |
| | WB | 13958 | 15656 | 16327 | 21222 | 10066 | 21417 | 16783 | 6539 | 4656 |
| | 2-way | 26043 | 27653 | 32797 | 40344 | 20528 | 21417 | 31222 | 13869 | 10003 |
| Saturday 19 th Aug 2017 | EB | - | 11257 | 14207 | 16240 | 16122 | - | 6325 | 5728 | 5663 |
| | WB | - | 13758 | 17673 | 17673 | 18231 | 13948 | 12849 | 5606 | 4656 |
| | 2-way | - | 25015 | 31880 | 33913 | 34353 | 13948 | 19174 | 11334 | 10319 |
| Sunday 20 th Aug 2017 | EB | - | 10447 | 13812 | 17265 | 17213 | - | 13830 | 7394 | 5490 |
| | WB | - | 11980 | 13683 | 15354 | 14535 | 19022 | 11710 | 5342 | 5729 |
| | 2-way | - | 22427 | 27495 | 32619 | 31748 | 19022 | 25540 | 12736 | 11219 |
| Tuesday 3 rd October 2017 | EB | 9751 | 10248 | 13821 | 15177 | 13188 | - | 8099 | 4550 | 7526 |
| | WB | 10554 | 11261 | 14168 | 15198 | 13271 | 13535 | 9960 | 4977 | 6549 |
| | 2-way | 20305 | 21509 | 27989 | 30375 | 26459 | 13535 | 18059 | 9527 | 14075 |

| Date | Dir | C1^ A303, Great Bathamp ton Cottage | C4 A303 west of Longbar row Rdbt | C5 A303 east of Longbar row Rdbt | C22 A303 east of A338 | C27* A303 at Solstice Park Overbrid ge | C28 Countes s Rdbt W/B exit | C37 A303, west of A36 | C38 A36, east of A303 | C39 A36, west of A303 |
|---|-------|---|--|--|--------------------------------|---|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Wednesday 4 th October 2017 | EB | 10517 | 10606 | 14213 | 15537 | 14582 | - | 9175 | 5219 | 6734 |
| | WB | 10536 | 10648 | 13803 | 14634 | 13085 | 15870 | 9306 | 5308 | 6677 |
| | 2-way | 21053 | 21254 | 28016 | 30171 | 27667 | 15870 | 18481 | 10527 | 13411 |
| Thursday 5 th October 2017 | EB | 9894 | 10313 | 13598 | 13966 | 14062 | - | 8079 | 5148 | 7118 |
| | WB | 11797 | 11931 | 14786 | 14654 | 13821 | 15111 | 10426 | 5482 | 7091 |
| | 2-way | 21691 | 22244 | 28384 | 28620 | 27883 | 15111 | 18505 | 10630 | 14209 |
| Notes | | | | | | | | | | |
| ^C1 | | Data loss on 3 October 2017 from 00:00 - 00:49 & 20:00 - 22:38. Data not processed 00:00-06:00 and 20:00-00:00 on 18 August 2017. | | | | | | | | |
| *C27 | | Camera issues – data loss on 18 August 2017 between 13:45-21:00 | | | | | | | | |

B.2 Wiltshire council ATC data

Table B-4: ATC data supplied by Wiltshire council

| Data start and end date | No. of weeks surveyed | Speed limit (mph) | Direction | Total vehicles | Weekly Average | Weekday Average |
|--|-----------------------|-------------------|------------|----------------|----------------|-----------------|
| Site a601- A30 East of Barford St Martin | | | | | | |
| 6 January 2016 | 2 | 60 | Eastbound | 23531 | 3362 | 3713 |
| | | | Westbound | 23249 | 3321 | 3681 |
| | | | Combined | 46780 | 6683 | 7394 |
| Site a1101- B3083 South of Berwick St James | | | | | | |
| 7 January 2015 | 2 | 30 | Northbound | 2169 | 310 | 350 |
| | | | Southbound | 2017 | 288 | 323 |
| | | | Combined | 4185 | 598 | 674 |
| Site b201- A338 North of Winterbourne gunner | | | | | | |
| 18 January 2017 | 1 | 50 | Westbound | 21233 | 3033 | 3411 |
| | | | Northbound | 20557 | 2937 | 3318 |
| | | | Combined | 41790 | 5970 | 6729 |
| Site b301- A345 South of Highpost | | | | | | |
| 20 January 2016 | 1 | 40 | Westbound | 43513 | 6216 | 6575 |
| | | | Northbound | 44688 | 6384 | 6784 |
| | | | Combined | 88201 | 12600 | 13359 |
| Site b401- A360 South of Druids Lodge | | | | | | |
| 18 January 2017 | 1 | 60 | Westbound | 27614 | 3945 | 4456 |
| | | | Northbound | 26685 | 3812 | 4300 |
| | | | Combined | 54299 | 7757 | 8756 |

| Data start and end date | No. of weeks surveyed | Speed limit (mph) | Direction | Total vehicles | Weekly Average | Weekly Average |
|--|-----------------------|-------------------|------------|----------------|----------------|----------------|
| Site b803- A30 north east of Salisbury | | | | | | |
| 23 September 2015 | 1 | 60 | Northbound | 45738 | 6534 | 6534 |
| | | | Eastbound | 43439 | 6206 | 6743 |
| | | | Combined | 89177 | 12740 | 13277 |
| Site c102- A342 Upavon Down (East of Upavon) | | | | | | |
| 3 May 2017 | 1 | 60 | Eastbound | 11008 | 1573 | 1791 |
| | | | Northbound | 12273 | 1753 | 2011 |
| | | | Combined | 23281 | 3326 | 3803 |
| Site c202- A338 Tidworth Military Cemetery | | | | | | |
| 6 May 2015 | 2 | 60 | Northbound | 26144 | 3735 | 3959 |
| | | | Southbound | 26618 | 3803 | 3986 |
| | | | Combined | 52762 | 7537 | 7945 |
| Site c320- A338 North of Collingbourne Kingston | | | | | | |
| 4 May 2016 | 1 | 40 | Southbound | 30068 | 4295 | 4407 |
| | | | Northbound | 28223 | 4032 | 4173 |
| | | | Combined | 58291 | 8327 | 8579 |
| Site f503- B3098 West Lavington | | | | | | |
| 19 July 2017 | 1 | 40 | Eastbound | 9541 | 1363 | 1498 |
| | | | Westbound | 10026 | 1432 | 1582 |
| | | | Combined | 40834 | 2795 | 3080 |
| Site f603- A360 Gore Cross (south of West Lavington) | | | | | | |
| 19 July 2017 | 1 | 60 | Southbound | 19843 | 2835 | 3114 |
| | | | Northbound | 20991 | 2999 | 3296 |
| | | | Combined | 40834 | 5833 | 6410 |
| Site f703- B3098 West of Erlstoke | | | | | | |
| 19 July 2017 | 1 | 50 | Eastbound | 11197 | 1600 | 1868 |
| | | | Westbound | 11400 | 1629 | 1922 |
| | | | Combined | 22597 | 3228 | 3790 |
| Site I501- A362 Corsley Heath | | | | | | |
| 25 February 2015 | 1 | 40 | Eastbound | 0 | 0 | 0 |
| | | | Northbound | 25768 | 3681 | 3836 |
| | | | Combined | 25768 | 3681 | 3836 |
| Site m501- B3089 Fonthill Bishop | | | | | | |
| 8 March 2017 | 2 | 30 | Westbound | 7154 | 1022 | 1118 |
| | | | Eastbound | 6932 | 990 | 1087 |
| | | | Combined | 6932 | 990 | 1087 |
| Site m701- B390 West of Shrewton | | | | | | |
| 8 March 2017 | 1 | 60 | Eastbound | 11356 | 1622 | 1777 |
| | | | Westbound | 11117 | 1588 | 1718 |
| | | | Combined | 22473 | 3210 | 3496 |

B.3 Highways England ATC data

Table B-5: ATC sites deployed by Highways England

| ID | TRADS | Direction | Relevance to model | Location |
|----|----------|------------|--------------------|---|
| 1 | 30360044 | Eastbound | AoDM | A303 eastbound between A360 and A344 |
| 2 | 30360045 | Westbound | AoDM | A303 westbound between A345 and A360 |
| 3 | 5333/1 | Westbound | AoDM | A303 westbound between A36 and A350 |
| 4 | 5333/2 | Eastbound | AoDM | A303 eastbound between A350 and A36 |
| 5 | 5588/1 | Westbound | AoDM | A303 westbound between A360 and A36 |
| 6 | 5588/2 | Eastbound | AoDM | A303 eastbound between A36 and A360 |
| 7 | 5591/1 | Eastbound | AoDM | A303 eastbound between A344 and A345 |
| 8 | 5592/1 | Westbound | AoDM | A303 westbound between A345 and A344 |
| 9 | 5593/1 | Eastbound | AoDM | A303 eastbound between A345 and A338 |
| 10 | 5594/1 | Westbound | AoDM | A303 westbound between A338 and A345 |
| 11 | 5638/1 | Northbound | AoDM | A36 northbound between A30 (west) and A303 |
| 12 | 5638/2 | Southbound | AoDM | A36 southbound between A303 and A30 (west) |
| 13 | 5639/1 | Northbound | AoDM | A36 northbound between A30 (west) and A303 |
| 14 | 5639/2 | Southbound | AoDM | A36 southbound between A303 and A30 (west) |
| 15 | 5651/1 | Southbound | AoDM | A36 southbound between B3414 and A303 |
| 16 | 5651/2 | Northbound | AoDM | A36 northbound between A303 and B3414 |
| 17 | 30360046 | Eastbound | Simulation Area | A303 eastbound between B3092 and B3095 |
| 18 | 30360047 | Westbound | Simulation Area | A303 westbound between B3095 and B3092 |
| 19 | 30360064 | Northbound | Simulation Area | A36 northbound between A30 (west) and A303 |
| 20 | 30360065 | Southbound | Simulation Area | A36 southbound between A303 and A30 (west) |
| 21 | 5332/1 | Eastbound | Simulation Area | A303 eastbound between B3095 and A350 |
| 22 | 5332/2 | Westbound | Simulation Area | A303 westbound between A350 and B3095 |
| 23 | 5552/1 | Southbound | Simulation Area | A36 southbound between A338 and A27 |
| 24 | 5552/2 | Northbound | Simulation Area | A36 northbound between A27 and A338 |
| 25 | 5564/1 | Southbound | Simulation Area | A36 southbound between A345 and A30 (east) |
| 26 | 5565/1 | Southbound | Simulation Area | A36 southbound between A360 and A345 |
| 27 | 5565/2 | Northbound | Simulation Area | A36 northbound between A345 and A360 |
| 28 | 5589/1 | Southbound | Simulation Area | A36 southbound between A3094 and A360 |
| 29 | 5589/2 | Northbound | Simulation Area | A36 northbound between A360 and A3094 |
| 30 | 5590/1 | Southbound | Simulation Area | A36 southbound between A30 (west) and A3094 |
| 31 | 5590/2 | Northbound | Simulation Area | A36 northbound between A3094 and A30 (west); |
| 32 | 5652/1 | Northbound | Simulation Area | A36 northbound between B3414 and A350 (south) |
| 33 | 5652/2 | Southbound | Simulation Area | A36 southbound between A350 (south) and B3414 |
| 34 | 5653/1 | Northbound | Simulation Area | A36 northbound between A350 (south) and A362 |
| 35 | 5653/2 | Southbound | Simulation Area | A36 southbound between A362 and A350 (south) |
| 36 | 5654/1 | Southbound | Simulation Area | A36 southbound between A350 (north) and A362 |
| 37 | 5654/2 | Northbound | Simulation Area | A36 northbound between A362 and A350 (north) |
| 38 | 5663/1 | Northbound | Simulation Area | A36 northbound between A338 and A30 (east) |
| 39 | 5664/1 | Northbound | Simulation Area | A36 northbound between A30 (east) and A345 |

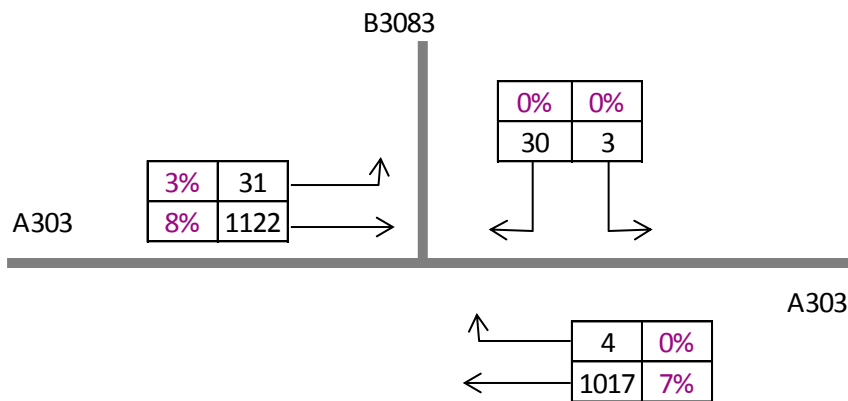
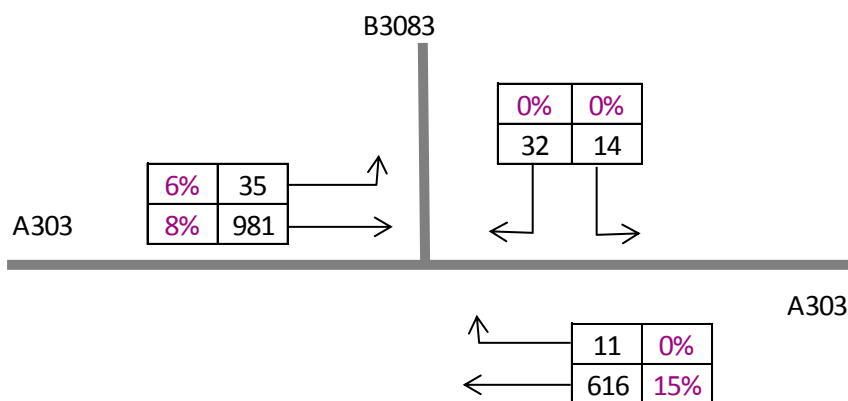
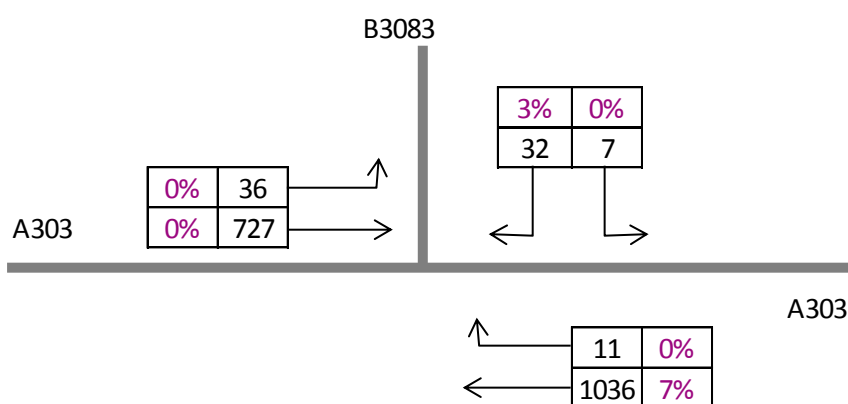
| ID | TRADS | Direction | Relevance to model | Location |
|----|-----------|------------|--------------------|---|
| 40 | 5330/1 | Eastbound | Simulation Area | A303 eastbound between A359 near Yeovil (east) and A371 |
| 41 | 5331/1 | Westbound | Simulation Area | A303 westbound between A371 and A359 near Yeovil (west) |
| 42 | 5517/1 | Southbound | Simulation Area | A36 southbound between A3090 and M27 |
| 43 | 5606/1 | Southbound | Simulation Area | A34 southbound exit for A272 |
| 44 | 5606/2 | Southbound | Simulation Area | A34 southbound within the A272 junction |
| 45 | 5607/1 | Northbound | Simulation Area | A34 northbound exit for A272 |
| 46 | 5656/1 | Northbound | Simulation Area | A36 northbound between A3098 and A361 (south) |
| 47 | 5656/2 | Southbound | Simulation Area | A36 southbound between A361 (south) and A3098 |
| 48 | 5660/1 | Northbound | Simulation Area | A36 northbound between A366 and A4 |
| 49 | 5660/2 | Southbound | Simulation Area | A36 southbound between A4 and A366 |
| 50 | 5662/1 | Northbound | Simulation Area | A36 northbound between M27 and A3090 |
| 51 | 5734/1 | Eastbound | Simulation Area | A303 eastbound between A3057 and A3093 |
| 52 | 5735/1 | Westbound | Simulation Area | A303 westbound between A3057 and A343 |
| 53 | 5066/2 | Northbound | Simulation Area | M5 northbound within J29 |
| 54 | 5067/2 | Southbound | Simulation Area | M5 southbound within J29 |
| 55 | 5068/2 | Northbound | Simulation Area | M5 northbound within J28 |
| 56 | 5069/2 | Southbound | Simulation Area | M5 southbound within J28 |
| 57 | 5251/2 | Northbound | Simulation Area | M5 northbound within J26 |
| 58 | 5252/2 | Southbound | Simulation Area | M5 southbound within J26 |
| 59 | 5545/1 | Eastbound | Simulation Area | M27 eastbound between J1 and J2 |
| 60 | 5546/1 | Westbound | Simulation Area | M27 westbound between J2 and J1 |
| 61 | 5548/2 | Eastbound | Simulation Area | M27 eastbound within J3 |
| 62 | M27/9132A | Eastbound | Simulation Area | M27/9132A priority 1 on link 123010001 |
| 63 | M27/9132B | Westbound | Simulation Area | M27/9132B priority 1 on link 123009801 |
| 64 | M4/3350A | Westbound | Simulation Area | M4/3350A priority 1 on link 102004601 |
| 65 | M4/3350B | Eastbound | Simulation Area | M4/3350B priority 1 on link 102004801 |
| 66 | M4/3406A | Westbound | Simulation Area | M4/3406A priority 1 on link 102004601 |
| 67 | M4/3407B | Eastbound | Simulation Area | M4/3407B priority 1 on link 102004801 |
| 68 | M4/3474A | Westbound | Simulation Area | M4/3474A priority 1 on link 102004601 |
| 69 | M4/3474B | Eastbound | Simulation Area | M4/3474B priority 1 on link 102004801 |
| 70 | M4/3682A | Westbound | Simulation Area | M4/3682A priority 1 on link 102004302 |
| 71 | M4/3682B | Eastbound | Simulation Area | M4/3682B priority 1 on link 123001701 |
| 72 | M4/3718A | Westbound | Simulation Area | M4/3718A priority 1 on link 102003201 |
| 73 | M4/3718B | Eastbound | Simulation Area | M4/3718B priority 1 on link 125007101 |
| 74 | M5/9065A | Southbound | Simulation Area | M5/9065A priority 1 on link 102034102 |
| 75 | M5/9069B | Northbound | Simulation Area | M5/9069B priority 1 on link 102034001 |
| 76 | M5/9307A | Southbound | Simulation Area | M5/9307A priority 1 on link 101002501 |
| 77 | M4/3479A | Westbound | Simulation Area | M4/3479A priority 1 on link 102004601 |
| 78 | M4/3479B | Eastbound | Simulation Area | M4/3479B priority 1 on link 102004801 |
| 79 | 5081/1 | Westbound | Simulation Area | A35 westbound between A37 and A3066 |
| 80 | 5081/2 | Eastbound | Simulation Area | A35 eastbound between A3066 and A37 |
| 81 | 5083/1 | Eastbound | Simulation Area | A35 eastbound between B3150 and A354 near Dorchester (east) |

| ID | TRADS | Direction | Relevance to model | Location |
|-----|-----------|-----------|--------------------|---|
| 82 | 5083/2 | Westbound | Simulation Area | A35 westbound between A354 near Dorchester (east) and B3150 |
| 83 | 5085/1 | Eastbound | Simulation Area | A35 eastbound between A354 near Dorchester (east) and B3390 |
| 84 | 5086/1 | Westbound | Simulation Area | A35 westbound between B3390 and A354 near Dorchester (east) |
| 85 | 5537/1 | Westbound | Simulation Area | A31 westbound between A350 and A35 |
| 86 | 5537/2 | Eastbound | Simulation Area | A31 eastbound between A35 and A350 |
| 87 | 5538/1 | Eastbound | Simulation Area | A31 eastbound between A350 and B3078 |
| 88 | 5538/2 | Westbound | Simulation Area | A31 westbound between B3078 and A350 |
| 89 | 5541/2 | Eastbound | Simulation Area | A31 eastbound at a minor junction between A338 near Ringwood (east) and M27 |
| 90 | 5542/1 | Westbound | Simulation Area | A31 westbound at a minor junction between M27 and A338 near Ringwood (east) |
| 91 | 5697/1 | Westbound | Simulation Area | A31 westbound between B3072 and B3073 near Wimborne Minster (east) |
| 92 | 5697/2 | Eastbound | Simulation Area | A31 eastbound between B3073 near Wimborne Minster (east) and B3072 |
| 93 | 5547/1 | Westbound | Simulation Area | M27 westbound between J3 and J2 |
| 94 | M27/9111A | Eastbound | Simulation Area | M27/9111A priority 1 on link 103005601 |
| 95 | M27/9111B | Westbound | Simulation Area | M27/9111B priority 1 on link 103005201 |
| 96 | M27/9160A | Eastbound | Simulation Area | M27/9160A priority 1 on link 103012601 |
| 97 | M27/9160B | Westbound | Simulation Area | M27/9160B priority 1 on link 103007302 |
| 98 | M27/9182B | Westbound | Simulation Area | M27/9182B priority 1 on link 103009001 |
| 99 | M27/9183A | Eastbound | Simulation Area | M27/9183A priority 1 on link 103008001 |
| 100 | M3/2072A | Westbound | Simulation Area | M3/2072A priority 1 on link 103044302 |
| 101 | M3/2073B | Eastbound | Simulation Area | M3/2073B priority 1 on link 103044401 |
| 102 | M3/2126A | Westbound | Simulation Area | M3/2126A priority 1 on link 103044902 |
| 103 | M3/2129B | Eastbound | Simulation Area | M3/2129B priority 1 on link 103045102 |
| 104 | M3/2142A | Westbound | Simulation Area | M3/2142A priority 1 on link 103008901 |
| 105 | M3/2144B | Eastbound | Simulation Area | M3/2144B priority 1 on link 103045001 |
| 106 | 5072/1 | Eastbound | Simulation Area | A30 eastbound between B3184 and B3174/B3180 |
| 107 | 5073/1 | Westbound | Simulation Area | A30 westbound between B3174/B3180 and B3184 |
| 108 | 5074/1 | Eastbound | Simulation Area | A30 eastbound between B3177 and A375 |
| 109 | 5075/1 | Westbound | Simulation Area | A30 westbound between A375 and B3177 |
| 110 | 5076/1 | Westbound | Simulation Area | A30 westbound between A35 and A375 |
| 111 | 5077/2 | Eastbound | Simulation Area | A30 eastbound within the A35 junction |
| 112 | 5078/1 | Westbound | Simulation Area | A35 westbound between A358 and A30 |
| 113 | 5078/2 | Eastbound | Simulation Area | A35 eastbound between A30 and A358 |
| 114 | 5079/1 | Eastbound | Simulation Area | A35 eastbound between A30 and A3052 |
| 115 | 5079/2 | Westbound | Simulation Area | A35 westbound between A3052 and A30 |
| 116 | 5080/1 | Westbound | Simulation Area | A35 westbound between B3157 and A3052 |
| 117 | 5080/2 | Eastbound | Simulation Area | A35 eastbound between A3052 and B3157 |
| 118 | 5320/1 | Eastbound | Simulation Area | A30 eastbound between A35 and A303 |
| 119 | 5320/2 | Westbound | Simulation Area | A30 westbound between A303 and A35 |
| 120 | 5321/1 | Eastbound | Simulation Area | A303 eastbound between A30/A35 and A358 |

| ID | TRADS | Direction | Relevance to model | Location |
|-----|----------|------------|--------------------|---|
| 121 | 5321/2 | Westbound | Simulation Area | A303 westbound between A358 and A30/A35 |
| 122 | 5322/1 | Westbound | Simulation Area | A303 westbound between A356 and A358 |
| 123 | 5322/2 | Eastbound | Simulation Area | A303 eastbound between A358 and A356 |
| 124 | 5325/1 | Eastbound | Simulation Area | A303 eastbound between A3088 and A37 |
| 125 | 5326/1 | Westbound | Simulation Area | A303 westbound between A37 and A3088 |
| 126 | 5327/1 | Eastbound | Simulation Area | A303 eastbound between A37 and A37/A372 |
| 127 | 5328/1 | Westbound | Simulation Area | A303 westbound between A37/A372 and A37 |
| 128 | 5329/1 | Westbound | Simulation Area | A303 westbound between A359 near Yeovil (west) and A37/A372 |
| 129 | 5329/2 | Eastbound | Simulation Area | A303 eastbound between A37/A372 and A359 near Yeovil (west) |
| 130 | 5323/1 | Eastbound | Simulation Area | A303 eastbound between A356 and A3088 |
| 131 | 5324/1 | Westbound | Simulation Area | A303 westbound between A3088 and A356 |
| 132 | 5539/1 | Eastbound | Simulation Area | A31 eastbound between A348 and A338 near Ringwood (west) |
| 133 | 5540/1 | Westbound | Simulation Area | A31 westbound between A338 near Ringwood (west) and A348 |
| 134 | 5543/2 | Eastbound | Simulation Area | M27 eastbound within J1 |
| 135 | 5544/2 | Westbound | Simulation Area | M27 westbound within J1 |
| 136 | 5259/2 | Northbound | Simulation Area | M5 northbound within J22 |
| 137 | 5260/2 | Southbound | Simulation Area | M5 southbound within J22 |
| 138 | 5261/2 | Northbound | Simulation Area | M5 northbound within J21 |
| 139 | 5262/2 | Southbound | Simulation Area | M5 southbound within J21 |
| 140 | 5263/2 | Northbound | Simulation Area | M5 northbound within J20 |
| 141 | 5264/2 | Southbound | Simulation Area | M5 southbound within J20 |
| 142 | 5269/2 | Northbound | Simulation Area | M5 northbound within J18 after M49 exit |
| 143 | 5270/2 | Southbound | Simulation Area | M5 southbound within J18 before A4 access |
| 144 | M4/3863B | Eastbound | Simulation Area | M4/3863B priority 1 on link 102019301 |
| 145 | M4/3864A | Westbound | Simulation Area | M4/3864A priority 1 on link 102020502 |
| 146 | M4/3869A | Westbound | Simulation Area | M4/3869A priority 1 on link 102020502 |
| 147 | M4/3869B | Eastbound | Simulation Area | M4/3869B priority 1 on link 102019301 |
| 148 | M5/8311A | Southbound | Simulation Area | M5/8311A priority 1 on link 102019601 |
| 149 | M5/8311B | Northbound | Simulation Area | M5/8311B priority 1 on link 102020302 |
| 150 | M5/8315A | Southbound | Simulation Area | M5/8315A priority 1 on link 102018701 |
| 151 | M5/8315B | Northbound | Simulation Area | M5/8315B priority 1 on link 102019802 |
| 152 | M5/8324A | Southbound | Simulation Area | M5/8324A priority 1 on link 102020901 |
| 153 | M5/8325B | Northbound | Simulation Area | M5/8325B priority 1 on link 102018901 |
| 154 | M5/8345A | Southbound | Simulation Area | M5/8345A priority 1 on link 102018501 |
| 155 | M5/8345B | Northbound | Simulation Area | M5/8345B priority 1 on link 102020801 |
| 156 | M5/8349A | Southbound | Simulation Area | M5/8349A priority 1 on link 102018501 |
| 157 | M5/8349B | Northbound | Simulation Area | M5/8349B priority 1 on link 102020801 |
| 158 | M5/8353A | Southbound | Simulation Area | M5/8353A priority 1 on link 102018501 |
| 159 | M5/8360B | Northbound | Simulation Area | M5/8360B priority 1 on link 102018401 |
| 160 | M5/9051A | Southbound | Simulation Area | M5/9051A priority 1 on link 102033901 |
| 161 | M5/9056A | Southbound | Simulation Area | M5/9056A priority 1 on link 102033901 |

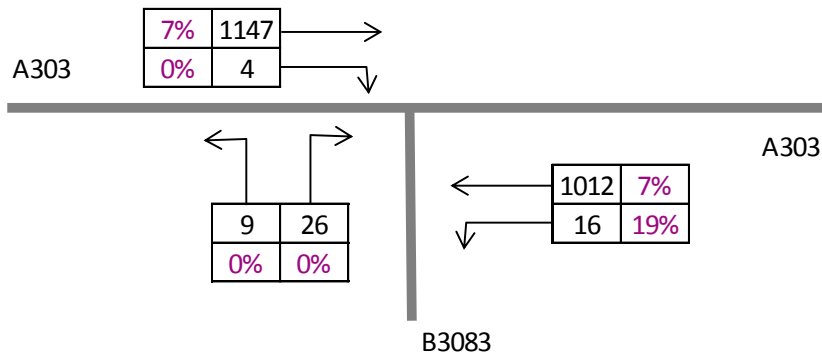
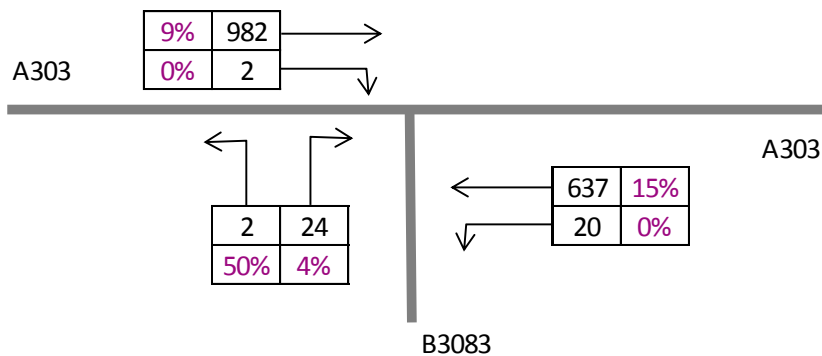
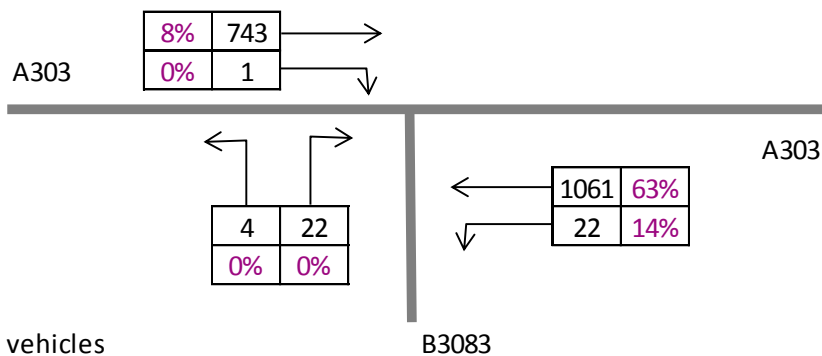
| ID | TRADS | Direction | Relevance to model | Location |
|-----|-----------|------------|--------------------|--|
| 162 | M5/9061A | Southbound | Simulation Area | M5/9061A priority 1 on link 102033901 |
| 163 | M5/9073B | Northbound | Simulation Area | M5/9073B priority 1 on link 102034202 |
| 164 | M5/9078B | Northbound | Simulation Area | M5/9078B priority 1 on link 102034202 |
| 165 | M5/9082B | Northbound | Simulation Area | M5/9082B priority 1 on link 102034202 |
| 166 | 5255/2 | Northbound | Simulation Area | M5 northbound within J24 |
| 167 | 5256/2 | Southbound | Simulation Area | M5 southbound within J24 |
| 168 | 5257/2 | Northbound | Simulation Area | M5 northbound within J23 |
| 169 | 5258/2 | Southbound | Simulation Area | M5 southbound within J23 |
| 170 | 5265/2 | Northbound | Simulation Area | M5 northbound within J19 |
| 171 | 5266/2 | Southbound | Simulation Area | M5 southbound within J19 |
| 172 | M4/2914A | Westbound | Simulation Area | M4/2914A priority 1 on link 200011765 |
| 173 | M4/2914B | Eastbound | Simulation Area | M4/2914B priority 1 on link 200011881 |
| 174 | M4/2974A | Westbound | Simulation Area | M4/2974A priority 1 on link 105003302 |
| 175 | M4/2974B | Eastbound | Simulation Area | M4/2974B priority 1 on link 200110982 |
| 176 | M4/3326A | Westbound | Simulation Area | M4/3326A priority 1 on link 102004701 |
| 177 | M4/3331B | Eastbound | Simulation Area | M4/3331B priority 1 on link 102005401 |
| 178 | M4/3380A | Westbound | Simulation Area | M4/3380A priority 1 on link 102004601 |
| 179 | M4/3380B | Eastbound | Simulation Area | M4/3380B priority 1 on link 102004801 |
| 180 | M4/3443A | Westbound | Simulation Area | M4/3443A priority 1 on link 102004601 |
| 181 | M4/3443B | Eastbound | Simulation Area | M4/3443B priority 1 on link 102004801 |
| 182 | 5335/1 | Northbound | Simulation Area | A46 northbound between A420 and M4 |
| 183 | 5335/2 | Southbound | Simulation Area | A46 southbound between M4 and A420 |
| 184 | 5336/1 | Southbound | Simulation Area | A46 southbound between A420 and A4 |
| 185 | 5336/2 | Northbound | Simulation Area | A46 northbound between A4 and A420 |
| 186 | 5337/1 | Westbound | Simulation Area | A4 westbound between A363 and A46 |
| 187 | 5337/2 | Eastbound | Simulation Area | A4 eastbound between A46 and A363 |
| 188 | 5661/1 | Northbound | Simulation Area | A36 northbound between A366 and A4 |
| 189 | 5661/2 | Southbound | Simulation Area | A36 southbound between A4 and A366 |
| 190 | M32/5035A | Northbound | Simulation Area | M32/5035A priority 1 on link 200044281 |
| 191 | M32/5037B | Southbound | Simulation Area | M32/5037B priority 1 on link 200044286 |
| 192 | M32/5063A | Northbound | Simulation Area | M32/5063A priority 1 on link 200044281 |
| 193 | M32/5064B | Southbound | Simulation Area | M32/5064B priority 1 on link 200044286 |
| 194 | M32/5073A | Northbound | Simulation Area | M32/5073A priority 1 on link 200044266 |
| 195 | M32/5073B | Southbound | Simulation Area | M32/5073B priority 1 on link 200044272 |
| 196 | M4/3815A | Westbound | Simulation Area | M4/3815A priority 1 on link 102003702 |
| 197 | M4/3815B | Eastbound | Simulation Area | M4/3815B priority 1 on link 102003301 |

Appendix C MCTC flow diagrams

Summer - peak hour 10:15-11:15 (Friday 18th Aug)

Autumn - 07:15-08:15 (Wednesday 4th Oct 2017)

Autumn - 16:15-17:15 (Wednesday 4th Oct 2017)


| | |
|-----|------------------------|
| 100 | total vehicles |
| 10% | % heavy goods vehicles |

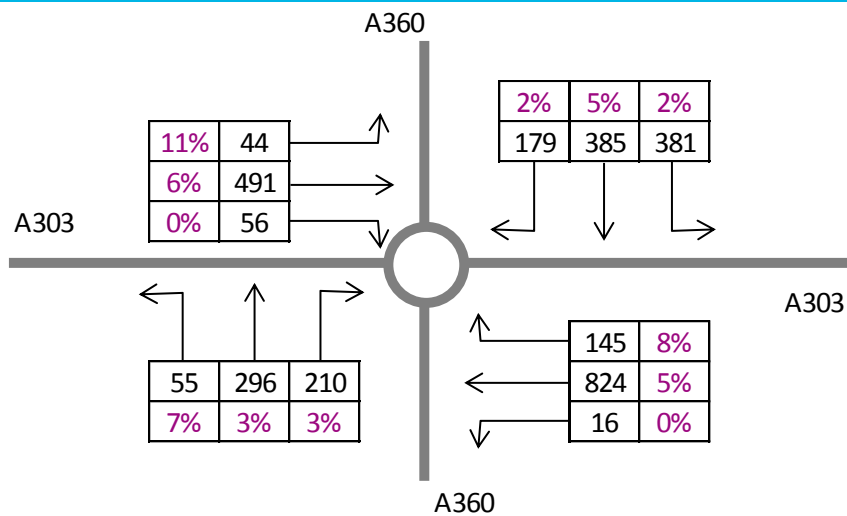
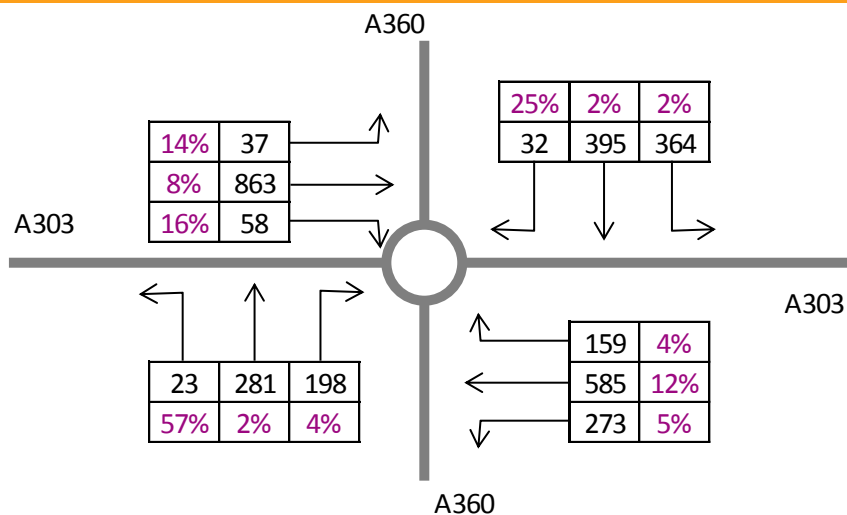
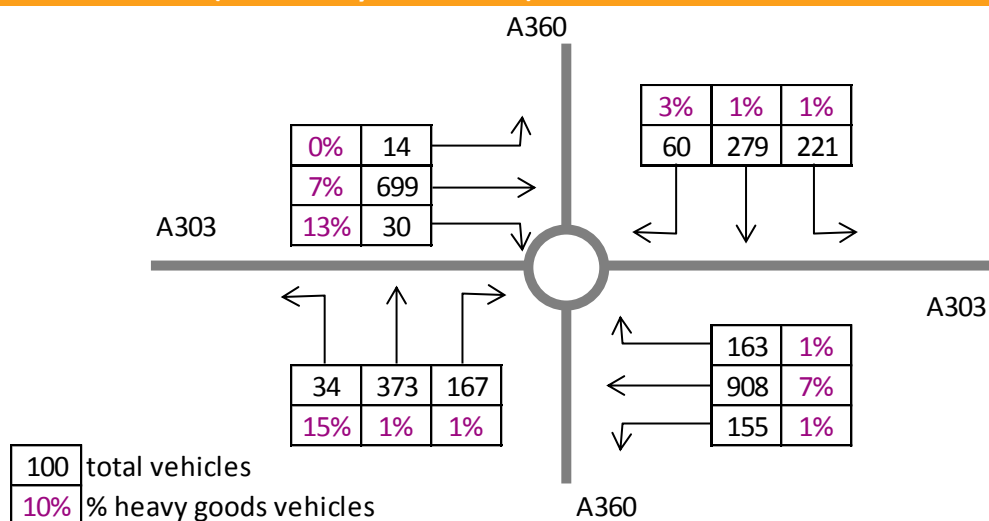
Figure C-1: Peak hour junction turning movements – Site 27 (A303/B3083 Berwick Rd)

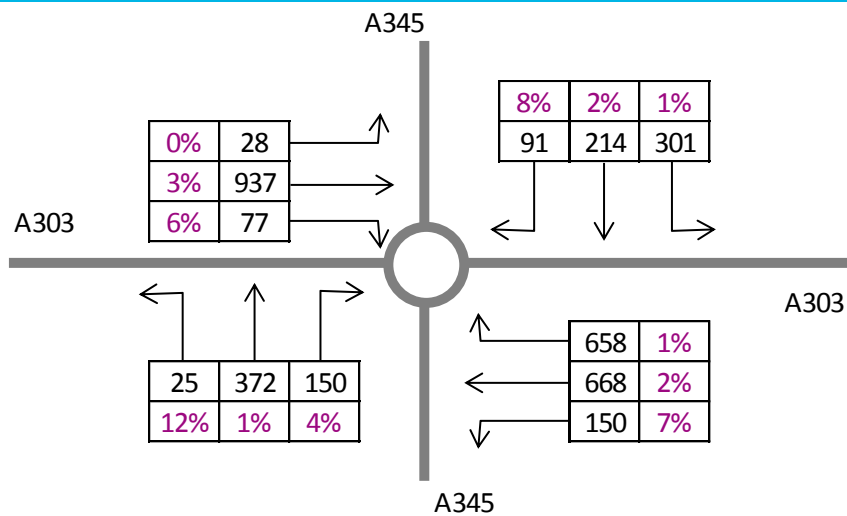
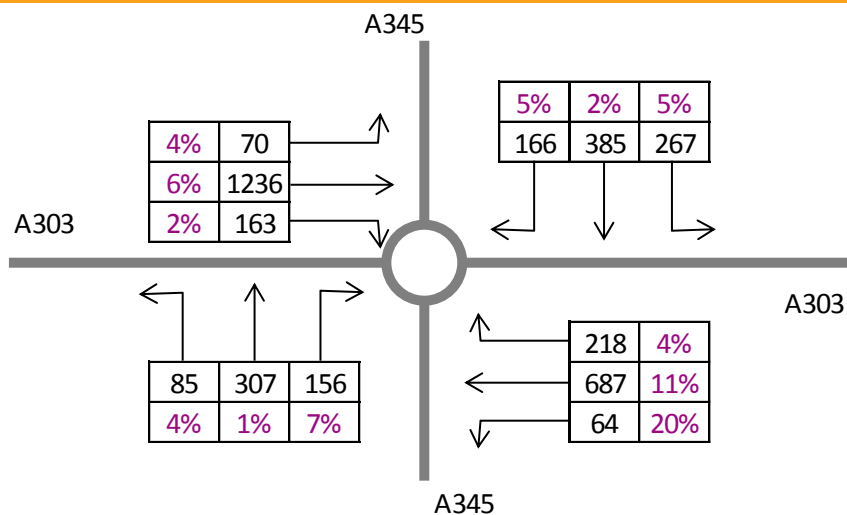
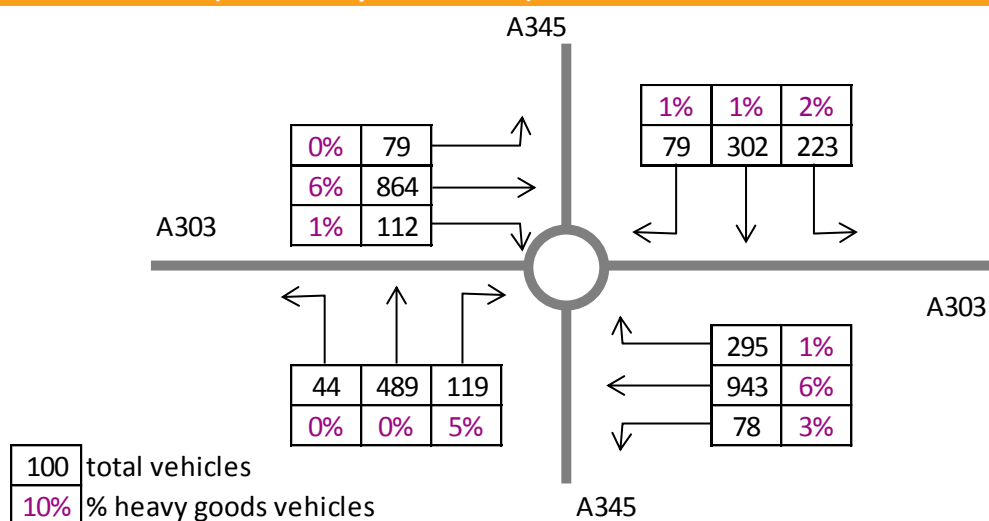
Summer - observed peak hour 10:30-11:30 (Friday 18th Aug)

Autumn - 07:15-08:15 (Wednesday 4th Oct 2017)

Autumn - 16:15-17:15 (Wednesday 4th Oct 2017)


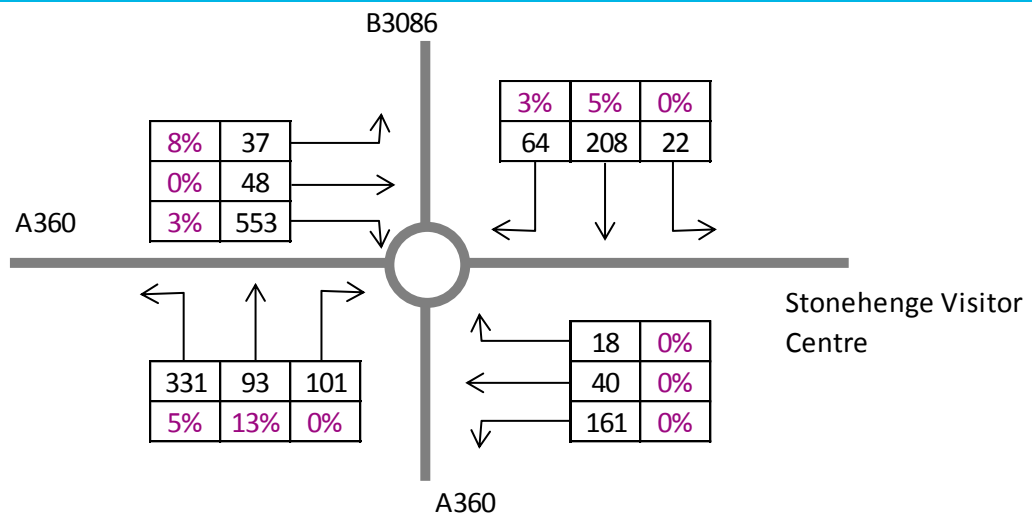
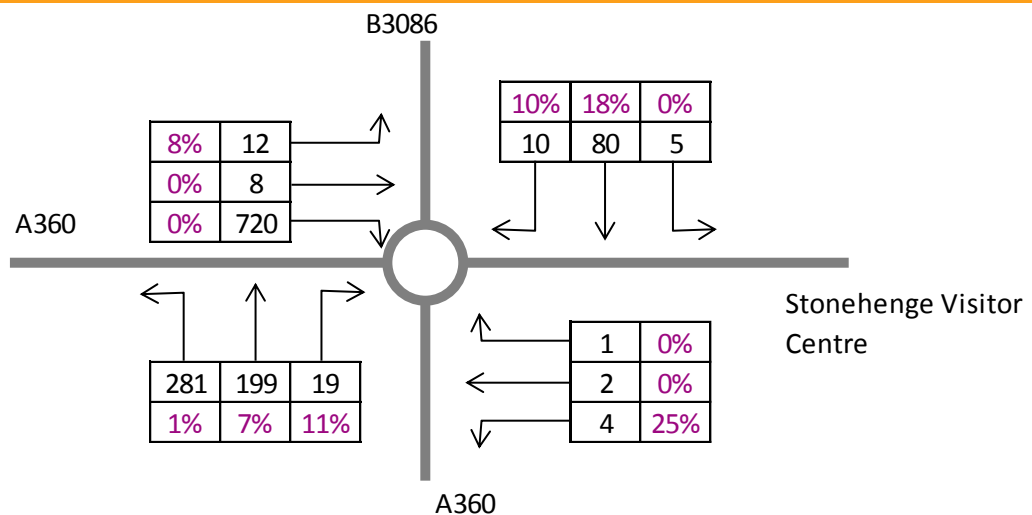
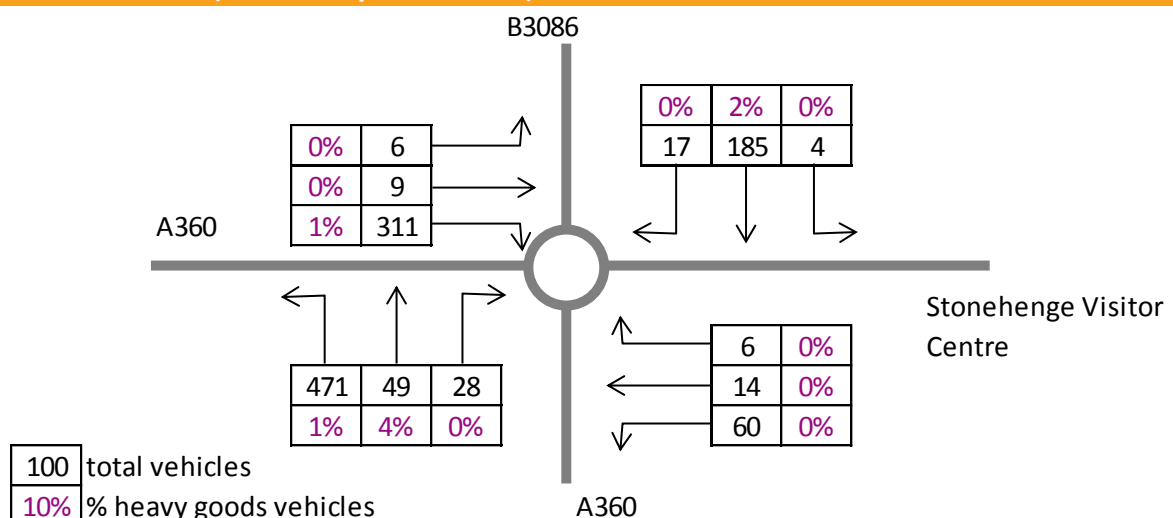
| |
|-----|
| 100 |
| 10% |

total vehicles
% heavy goods vehicles

Figure C-2: Peak hr jcn turning movements – Site 28 (A303/B3083, Winterbourne Stoke)

Summer - observed peak hour 15:30-16:30 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:30-17:30 (Wednesday 4th Oct 2017)

Figure C-3: Peak hr jcn turning movements – Site 30 (A303/A360, Longbarrow rbt)

Summer - observed peak hour 16:00-17:00 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:45-17:45 (Wednesday 4th Oct 2017)

Figure C-4: Peak hour jcn turning movements – Site 32 (A303/A345, Countess rbt)

Summer - observed peak hour 15:15-16:15 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:30-17:30 (Wednesday 4th Oct 2017)

Figure C-5: Peak hr jcn turning movements – Site 26 (A360/B3086 Airman's Corner)

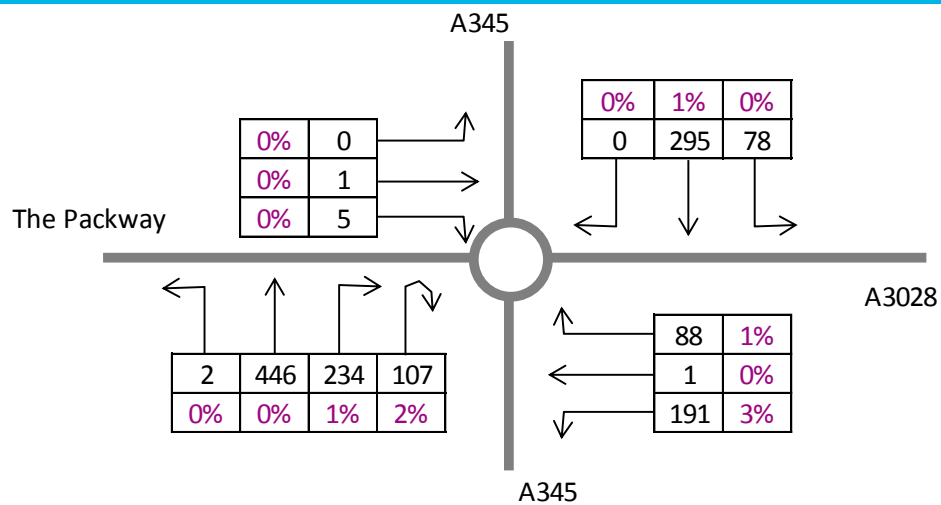
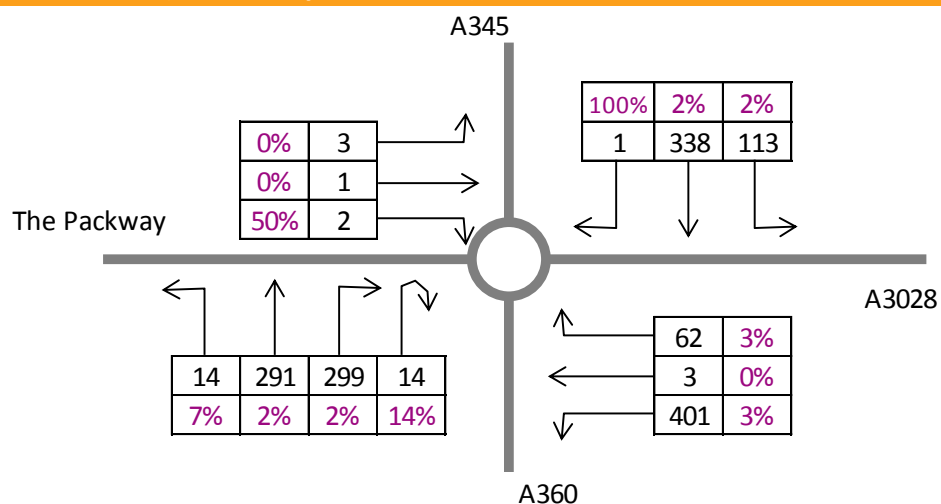
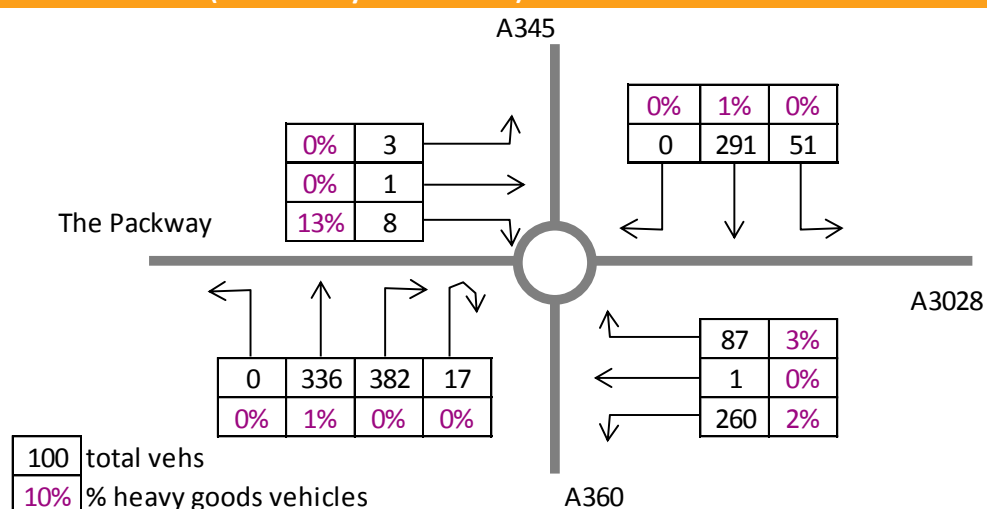
Summer - observed peak hour 16:00-17:00 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:30-17:30 (Wednesday 4th Oct 2017)


Figure C-6: Peak hr junction turning movements – Site 16 (A345/A3028/The Packway)

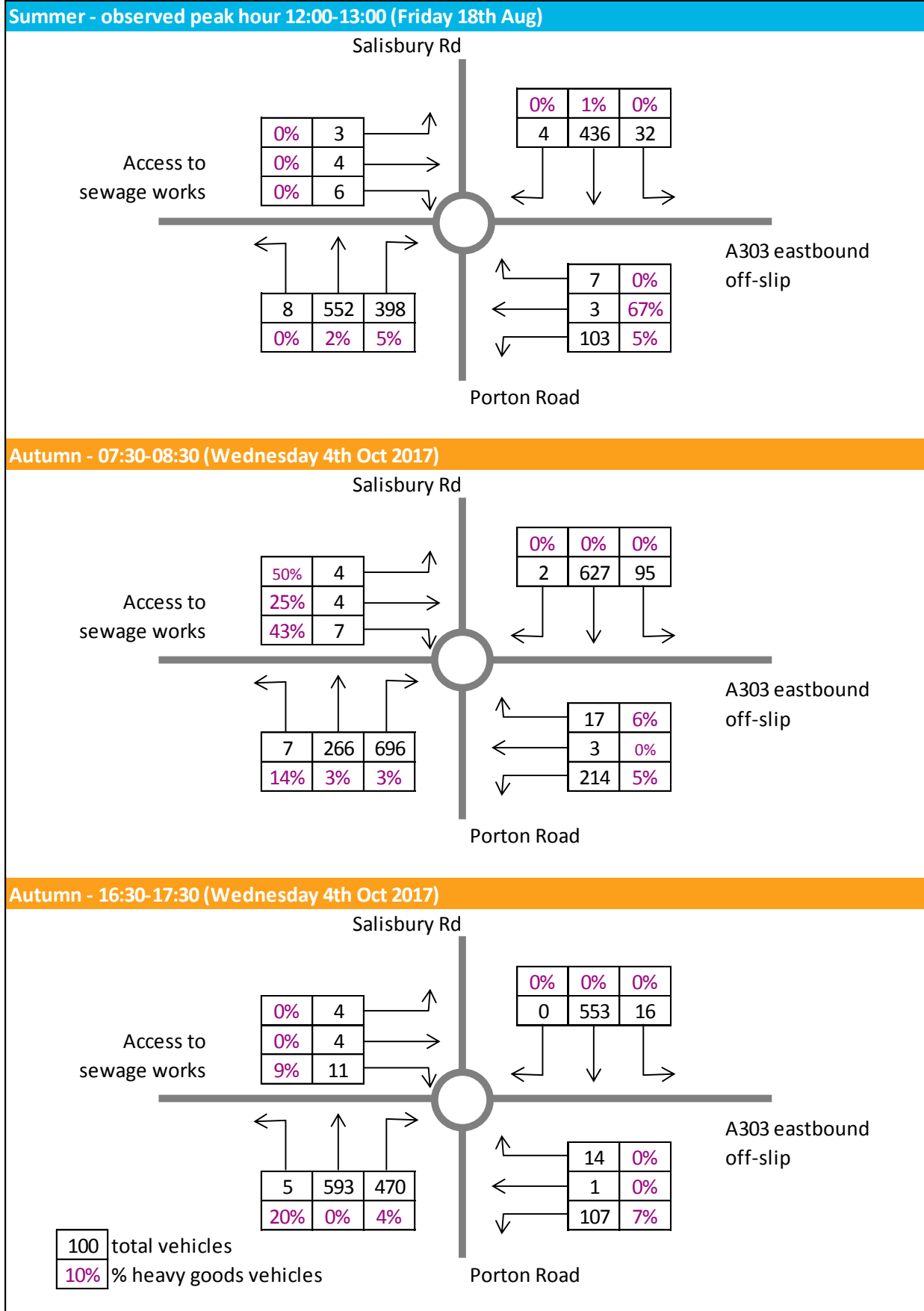


Figure C-7: Peak hour junction turning movements – Site 35 (Salisbury Rd/Porton Rd/A303 slip roads)

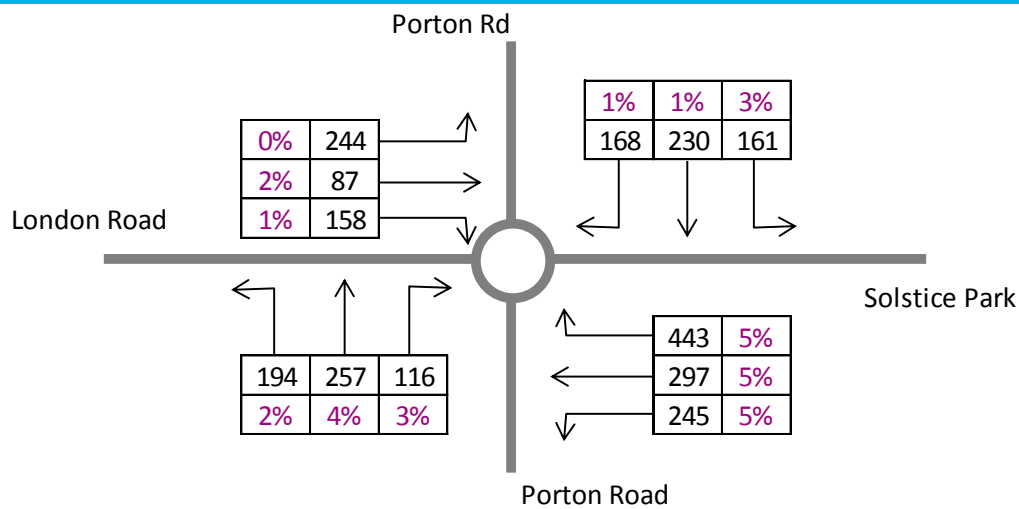
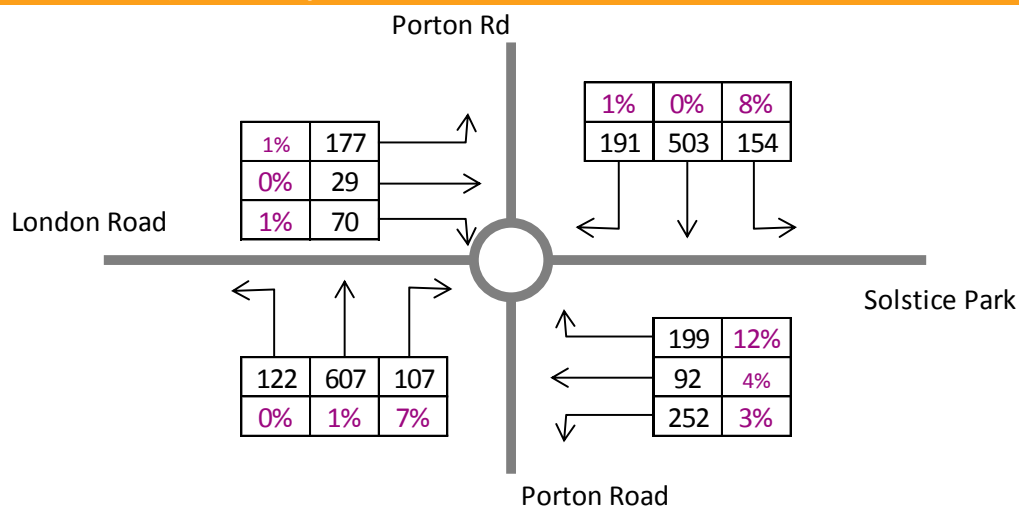
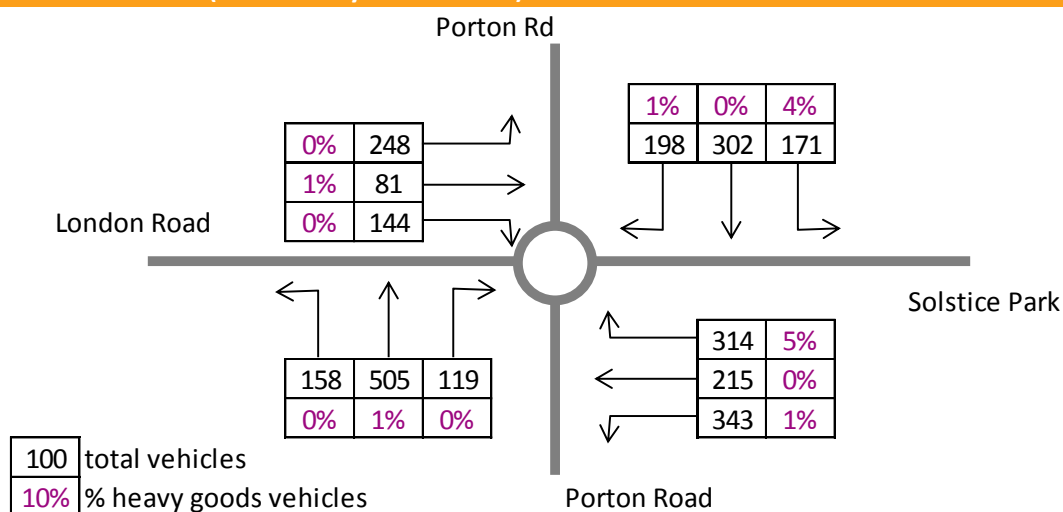
Summer - observed peak hour 12:00-13:00 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:30-17:30 (Wednesday 4th Oct 2017)


Figure C-8: Peak hour junction turning movements – Site 34 (Porton Rd/London Rd/Solstice Park Ave)

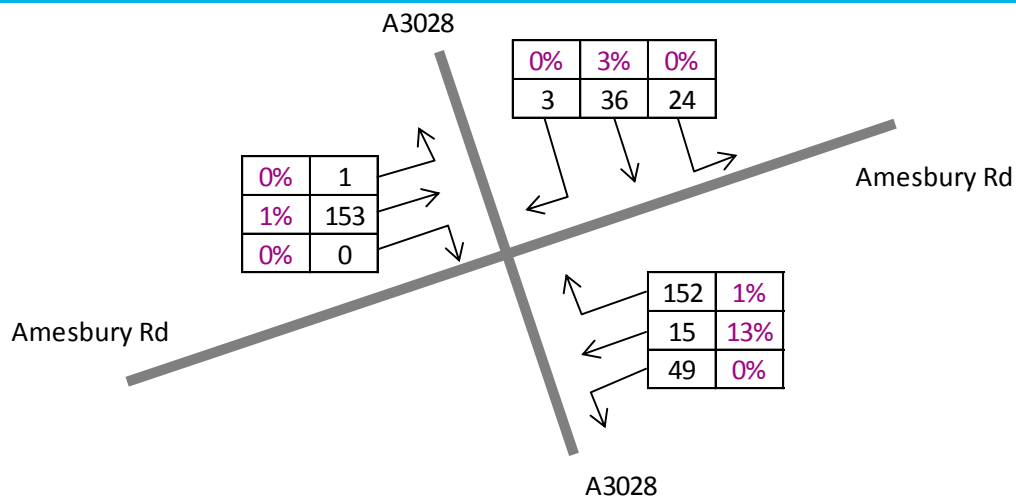
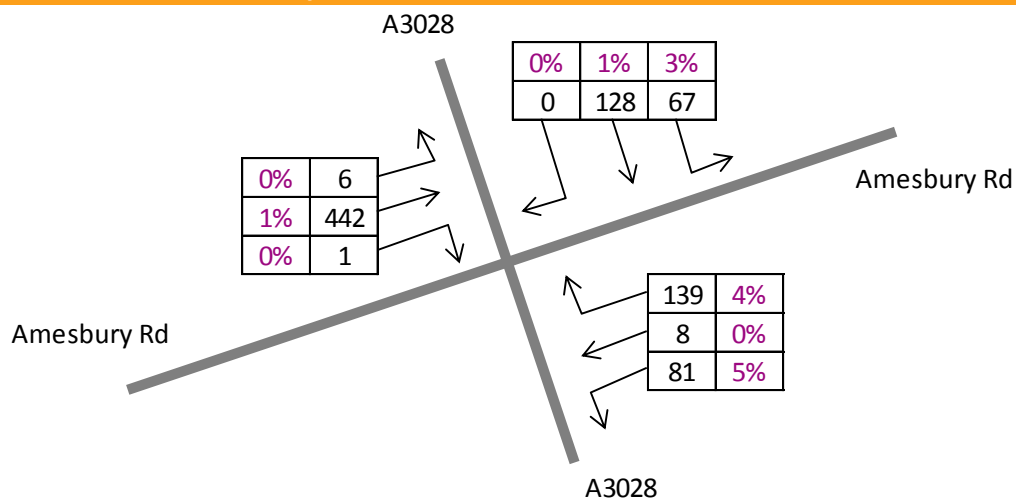
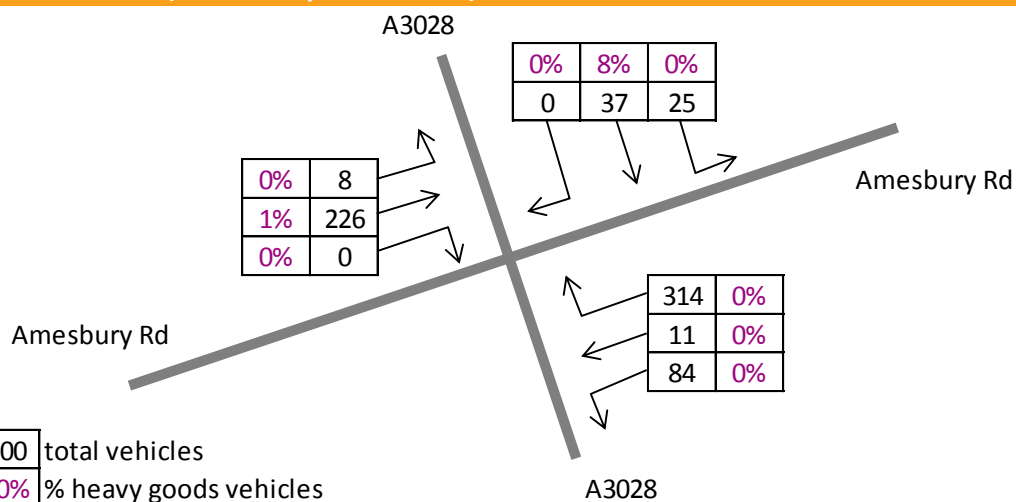
Summer - observed peak hour 14:45-15:45 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:30-17:30 (Wednesday 4th Oct 2017)


Figure C-9: Peak hour junction turning movements – Site 45 (A3028/Double Hedges/Amesbury Rd)

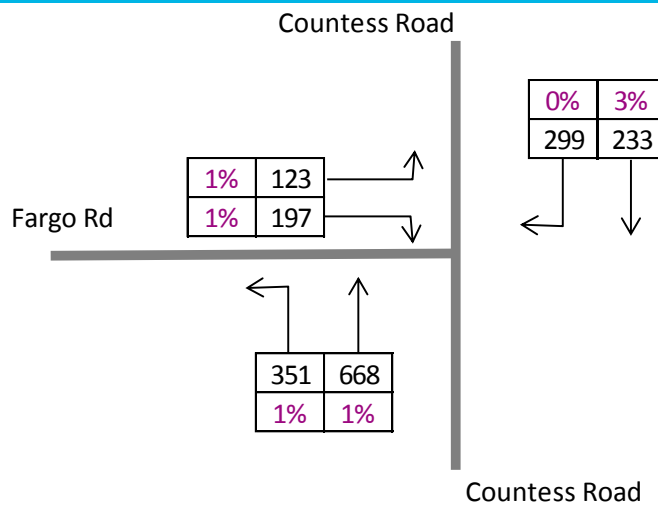
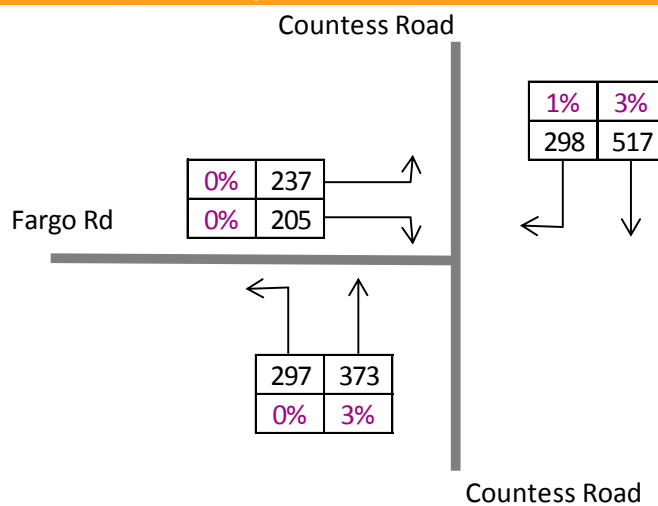
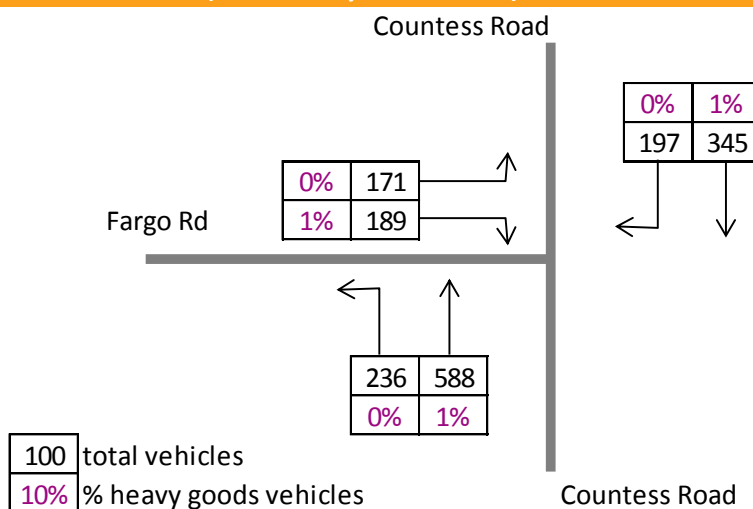
Summer - observed peak hour 16:15-17:15 (Friday 18th Aug)

Autumn - 07:30-08:30 (Wednesday 4th Oct 2017)

Autumn - 16:45-17:45 (Wednesday 4th Oct 2017)


Figure C-10: Peak hour junction turning movements – Site 51 (Countess Rd/Fargo Rd)

Appendix D Stonehenge visitor surveys




| VISITOR INTERVIEW FORM | | DATE | | SITE No. | | LOCATION | | TIME | | | | | |
|---|--|---|-----|--|--|---------------------------------------|--------------------|---|--|---------------------------------------|--------------------|---|-----------|
| INTERVIEWER | | CHECKED BY | | CODED BY | | DIRECTION | | | | | | | |
| Q1 - What type of vehicle did you arrive in | | Q2 - How many occupants were in the car (including the driver)? | | Q3 - Would you please tell me the exact address you have JUST come from, i.e. before being stopped? Include postcode if possible | | Q4 - And your reason for being there? | | Q5 - Would you please tell me the exact address you are going to NEXT? Include postcode if possible | | Q6 - And your reason for going there? | | Q7 - What is your reason for being at the Stonehenge Visitor Centre | |
| 1 | Car | 1 | 8 | Firm or | | 1 | Home | Firm or | | 1 | Home | 1 | Education |
| | | | | House Name | | | | House Name | | | | 2 | Work |
| 2 | Taxi | 2 | 9 | | | 2 | Holiday Home | | | 2 | Holiday Home | 3 | Leisure |
| 3 | LGV  | 3 | 10 | Number and Street | | 3 | Work | | | 3 | Work | | |
| 4 | OGV1  | 4 | 11 | Town | | 4 | Employers Business | Number and Street | | 4 | Employers Business | | |
| 5 | OGV2  | 5 | 12 | Country | | 5 | Education | | | 5 | Education | | |
| 6 | PSV  | 6 | 13 | Postcode | | 6 | Shopping | | | 6 | Shopping | | |
| 7 | Other | 7 | 14> | | | 7 | Personal Business | Town | | 7 | Personal Business | | |
| | | | | | | 8 | Visit Friends | | | 8 | Visit Friends | | |
| | | | | | | 9 | Recreation | Country | | 9 | Recreation | | |
| | | | | | | 10 | Other (specify) | | | 10 | Other (specify) | | |
| | | | | | | | | Postcode | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Figure D-1: Stonehenge visitor centre interview questionnaire (English language version)

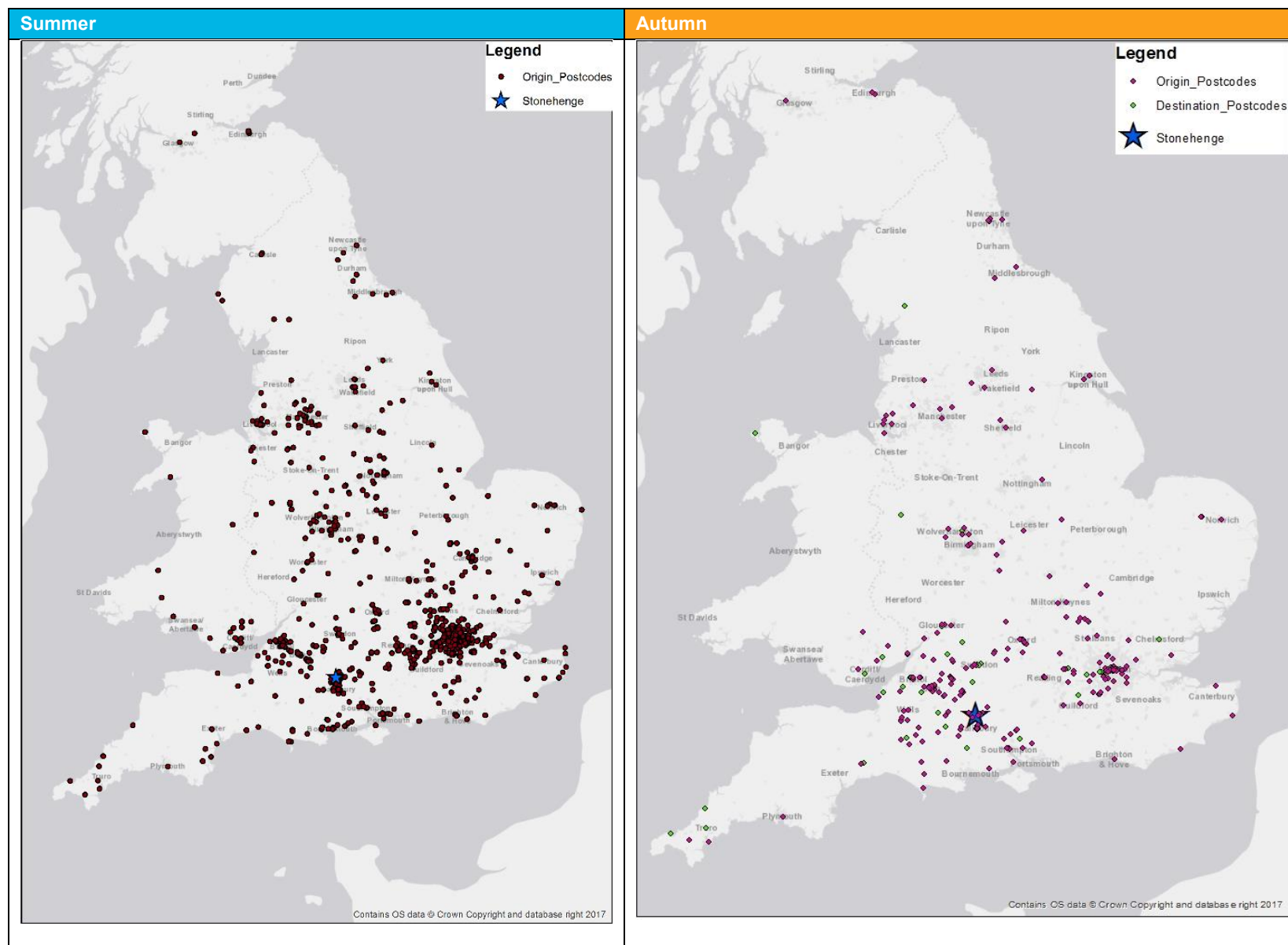


Figure D-2: Plot of ODs of journeys to/from Stonehenge visitor centre

Appendix E Survey data filenames

E.1 ANPR filenames

Summer

- a. 1006-WTR Stonehenge - ANPR O-D 18-8-17.xlsx
- b. 1006-WTR Stonehenge - ANPR O-D 19-8-17.xlsx
- c. 1006-WTR Stonehenge - ANPR O-D 20-8-17.xlsx

Neutral

- a. 1006-WTR Stonehenge - ANPR O-D 03-10-17.xlsx
- b. 1006-WTR Stonehenge - ANPR O-D 04-10-17.xlsx
- c. 1006-WTR Stonehenge - ANPR O-D 05-10-17.xlsx

E.2 ATC filenames

Summer

- a. 3606-WAL A303 Stonehenge - ATC Report (Site C2 - Site C13) Wk 1.xlsm
- b. 3606-WAL A303 Stonehenge - ATC Report (Site C2 - Site C13) Wk 2.xlsm
- c. 3606-WAL A303 Stonehenge - ATC Report (Site C14 - Site C26) Wk 1 .xlsm
- d. 3606-WAL A303 Stonehenge - ATC Report (Site C14 - Site C26) Wk 2.xlsm
- e. 3606-WAL A303 Stonehenge - ATC Report (Site C29 - Site C36) Wk 1.xlsm
- f. 3606-WAL A303 Stonehenge - ATC Report (Site C29 - Site C36) Wk 2.xlsm

Neutral

- a. 3606-WAL_September_survey_wk1_(Site_2_-_13).xlsm
- b. 3606-WAL_September_survey_wk1_(Site_14_-_26).xlsm
- c. 3606-WAL_September_survey_wk1_(Site_27_-_36).xlsm
- d. 3606-WAL_September_survey_wk2_(Site_2_-_13).xlsm
- e. 3606-WAL_September_survey_wk2_(Site_14_-_26).xlsm
- f. 3606-WAL_September_survey_wk2_(Site_27_-_36).xlsm

E.3 MCTC filenames

Summer

- a. 3606-WAL Stonehenge - Sites M1- M10 Report.xlsm
- b. 3606-WAL Stonehenge - Sites M11 - M20 Report.xlsm
- c. 3606-WAL Stonehenge - Sites M21 - M30 Report.xlsm
- d. 3606-WAL Stonehenge - Sites M31 - M40 Report v2.xlsm
- e. 3606-WAL Stonehenge - Sites M41 - M51 Report.xlsm

Neutral

- a. 3606-WAL Stonehenge - Sites M1- M10 Report.xlsm
- b. 3606-WAL Stonehenge - Sites M11 - M20 Report.xlsm
- c. 3606-WAL Stonehenge - Sites M21 - M30 Report.xlsm
- d. 3606-WAL Stonehenge - Sites M31 - M40 Report.xlsm
- e. 3606-WAL Stonehenge - Sites M41 - M51 Report.xlsm

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