



THE DATA COLLECTION SPECIALISTS

Megan and James Bottomley

**60005 - Staffordshire ATC
Survey**

**Saturday 22nd – Friday 28th
February 2025**

Jigisha Parekh



Contents

1. Data Quality Assurance
2. Method of Survey.
3. Incidents Encountered During Surveys.

Appendix 1 - Maps of Survey Locations

Appendix 2 – ATC Survey Results

Data Quality Assurance:

Data Revision: Rev. 1

Analysis and Report by: Jigisha Parekh
Date: 06/03/2025

Checked by: Joe Maclaren
Date: 06/03/2025

Approved by: Joe Maclaren
Date: 06/03/2025

Method of Survey:

ATC SURVEYS:

Classified volume and speed data were collected via ATC units positioned in Staffordshire. Data was collected from Saturday 22nd – Friday 28th February 2025. Data is shown in hourly intervals and by direction.

The following points was surveyed:

- Garston Village Road, Whiston, Staffordshire

The Vehicle Classifications used in this survey numbered in the data are as follows:

1. Pedal Cycles
2. Motorcycles
3. Passenger cars with or without trailers
4. LGVs with or without trailers
5. 2 axles rigid HGV
6. 3 axles rigid HGV
7. 4 axles rigid HGV
8. 3 axles articulated HGV
9. 4 axles articulated HGV
10. 5 or more axles articulated HGV
11. Buses and coaches

There are five tables provided in the excel output.

The 'class' pair of sheets provide detailed hourly flows using the classifications above.

The 'speed' pair of sheets provide detailed observed speeds by hour using actual speeds summarised into groups of speed known as 'bins'. For example the 5>=10 column shows the number of vehicles in an hour that had measured speeds between over five and ten miles per hour.

Two speed values are provided in the third and fourth columns.

The mean average speed is the actual average speed observed in each hour.

The 85th percentile value is the speed where all measured speeds are listed in ascending order and then counted down from the highest value until 15% of the values have been taken into account. This is therefore the speed at and below which 85% of vehicles within the sample are travelling. It is only calculated if there are more than 10 speeds measured in that given hour. (Highways England document CA185, Vehicle Speed Measurement).

The main purpose of 85th percentile speed values are for highway design purposes where the design is to be based on observed speeds rather than speed limits. Its main use is for calculating visibility splay distances using actual road performance rather than the speed limit.

In most, but not all cases, the visibility distances estimated using true traffic data will be lower than those from the speed limit values, which include an allowance for traffic exceeding the speed limit. Visibility distances are estimated using an industry standard agreed equation although interpretation and use of this can vary by highway authority (but otherwise defaults to Department for Transport standards).

The Analysis sheet summarises all four preceding sheets to show more clearly the key results. For speeds it shows both 85th percentile and average speeds to allow a logic check to be undertaken of the results.

Incidents Encountered During Surveys:

There were no significant events or unforeseen circumstances to affect the results of the surveys.