

Appendix D

More and Better data

As a former engineer long familiar with spreadsheet and databases this analyst realised that police Stats19 files must hold more than enough relevant collision data. Having established that they are available from the National Data Archive he obtained some **3.9m records of every reported injury collision from 1987 to 2011** and a rather larger number of injury records.

Freedom of Information requests secured **records of camera locations and installation dates by month from 23 of 42 partnerships/police forces**. Those two datasets (Table 3) are **more than sufficient to allow accurate analysis** without resorting to others' probability theories, mathematical models, subjective estimates, questionable assumptions or (what seems to be) wishful thinking.

Table 3 From Police Stats19 records:

Police Areas Covered.....23 of 42, > 60% of GB collisions

Camera Sites analysed.....3,848 installed from 1994 to 2006

Collisions (1987-2011) Fatal/Serious (FSC) Slight (SLC)

In **23** police areas.....**662,660**.....**3,190,610**

Within **1km** of a camera***180,194**.....**984,200**

Camera locations and installation dates in the same 23 areas

Transport for London official data for 750 sites (July 2014 report)

Go Safe (Wales) official data for some 150 sites (2015 report)

Most other partnerships data is too low in volume and quality to provide accurate results

Although most of this analysis covers collisions, injury data was also obtained, though not for the most part analysed because the results would inevitably be very similar.

* by comparing the location of each collision with that of every camera in the same police area

Continued

Advantages of Stats19 data over partnership data

Stats19 and camera site data cover many more police areas than partnership data currently do and provide **ordnance survey grid references** to within 10m (later 1m) of every collision and camera location. **This allows accurate and automated Pythagorean calculation of the distance between each collision and the nearest camera.**

The data also allow collision numbers to be summed by month instead of year, significantly **increasing accuracy, especially in the most important months after installation** when numbers should fall most noticeably if cameras were effective.

Collisions may be summed into groups of **0-250m, 251- 500m and 501- 1000m radius** to allow graphs to be drawn of **collisions within circular sites centred on the cameras.**

0-250m Red-light camera data may be split into **0-50m and 51-250m** groups because these cameras are primarily **targeted at collisions near traffic light.** London and Manchester' data were limited to **500m radius** due to high camera density.

These much larger volumes of inherently less volatile data improves accuracy while monthly totals allow better monitoring of short-term changes. By reducing data volatility they also reduce trend adjustment errors.

All the following data is available at www.fightbackwithfacts.com/the-speed-camera-delusion/

One Excel file includes these 13 sheets of data

25-year data for FC, FSC and SLC, aligned by calendar dates

12-year data for FC, FSC and SLC, relative to installation

12-year data for FC, FSC and SLC, relative to installation, trend-adjusted

25-year data for FC, FSC and SLC trends in the 23 police areas.

Equivalent data for injuries as opposed to collisions is available on request, although there is no particular need to analyse them as for obvious reasons, they provides very similar results.

The same file includes Camera Partnership data for location, type, speed limit and installation date.

Stats19 records of some 3,848 collisions, showing location, month, speed limit, camera type plus **details of every match of location within 1km** are available on request, on DVD due to their size.

Alternatively, all of the above on 1 DVD