

Southwell Road Speed Test

Monitoring Period

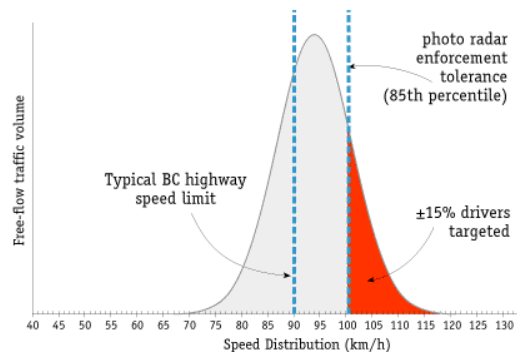
Speeds were monitored and logged in both directions continuously over the period Mon 16th September to Sunday 22nd September.

Analysis Method

The standard analysis is that the measurements are grouped into one hour slots so that there are 48 measurement subsets for each day and 336 subsets for the whole period. There are two key measures that must be satisfied for the traffic authorities to enact speed control measures the first considers the flow rate and the second considers the 85th percentile speed.

Flow rate - measured as the number of cars in any one hour past the measurement point. The flow rate necessary for control measures to be considered is 200 cars per hour or an average of 3.3 cars per minute in either direction. For the measurement period flow is presented as two tables of 168 figures representing the volume of cars.

24hr 85th percentile speed - human nature dictates there will always be motorists who speed. The traffic authorities accept this and will only invest in road calming measures if a specific percentage of drivers is seen to repeatedly exceed a set speed over time. The percentage of interest is the 85th percentile of the subset under consideration and the threshold for concern at this point is the speed limit +20% which in the case of station lane equates to 36mph. The chart illustrates this for a road with a 90km/hr speed limit.



The analysis uses an algorithm to build a data set which shows the calculated speeds at 8 chosen percentile points for 24 one-hour slots in each direction. This results in a table for each direction with a 192 possible measurement, in some cases the vehicle numbers may not be sufficient to merit a table entry. Further processing leads to a single 24hr 85th percentile figure for each direction.

Station Lane Result

	Maximum flow rate	24hr 85 th percentile speed
South east bound >	246 (Tue 17 th 08:00-09:00)	35.2mph
North west bound>	243 (Tue 17 th 16:00-17:00)	34.5mph

Due to the above result the decision of the traffic authorities is that no additional road calming measures are required on Station Lane.

FPC Analysis

> The combined flow rate exceeded 200 cars per hour Mon to Fri between 07:00-20:00 and Sat and Sun between 07:00-18:00

> When both directions are considered over the full time period out of a total of 22,356 cars 3,360 were found to have exceeded the ACPO limit for action which is 35mph according to the document:

<http://library.college.police.uk/docs/appref/ACPO-Speed-Enforcement-Guidance.pdf>

The peak periods for such offences were 06:00-08:00 and 15:00-19:00.

> Our most appropriate approach for speed calming, given the road traffic authorities will not implement calming measures, is most probably a community speed watch operating between the peak periods for offences detailed above.