

Chapter 3
Explanation of Terms and Concepts

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3.4 Speeds (improvement of alignment and junctions)

Whereas for speed limits the 85 percentile dry weather spot speed of cars is required, for improvement of alignments and major/minor junctions or accesses, and for new major/minor junctions or accesses on existing roads, the normal design methods are based on the 85 percentile wet weather journey speed of vehicles. The precise point at which the measurements are taken and the timing is important. A point just before the scheme length and a time of free flow are suitable. Measurements must be taken at both ends of the scheme so that traffic approaching from both directions is covered. If different values are obtained the higher speed value should be used in the design process. To get from the dry weather spot speed of vehicles measured to the wet weather journey speed used in design one of the following correction factors should be used -

For AP Dual carriageways ... deduct 8kph

For AP Single carriageways ... deduct 4kph

3.5 Speeds (traffic signal design)

These remarks are confined to areas outside 30mph speed limits. Two types of signal equipment are currently in use related to the following conditions:-

- a) 85 percentile dry weather spot speed of vehicle approach between 55 and 72kph, double vehicle extensions with speed discrimination.
- b) 85 percentile dry weather spot speed of vehicle approach between 72 and 105kph with either triple vehicle extensions with speed discrimination or double vehicle extension with speed assessment.

For a) above measurements should be taken at not less than 80m in advance of the stop line (as seen by traffic) nor more than 100m.

For b) above the values should be 150m to 200m.

To ensure accuracy certain conditions are necessary which are listed at Appendix 1.