

In the past, posted speed limits were lowered as an energy conservation measure. This situation has changed due to more efficient vehicles. The Province also has come under pressure to raise speed limits on primary highways. Posted speed limits may be changed after a road is built. Adherence to speed limits tends to be related to the urgency of a drivers' business and the quality of enforcement, variables which are beyond the control of the design engineer.

On classifying the road, the design speed selected is usually a reflection of terrain, damage to natural environment and cost. Normally this selection is done by posing the question - What speed will a driver select under the most favourable road, traffic, climate and vehicular conditions? TAC suggests a maximum design speed of 140 km / h for its highest classifications. Presently used design speeds need to be examined and, if necessary, modified to suit modern road and vehicular requirements.

Traffic Warrant for Cross-section

The traffic warrant to twin a road and when to move from one cross-section standard to another needs to be examined due to changing size of trucks (length and weight) and also for fiscal restraints. The traffic warrants contained in the 1986 Basic Design Table were based on providing a Level of Service B for Expressway and Arterials and a Level of Service C for Collector highways.

The level of service (see **Schedule 1 - Definitions on page 13 and Table 5 - Level of Service Characteristics by Highway Type on page 14**) depends upon a number of factors including speed and travel time, traffic interruptions, freedom to manoeuvre, safety, driving comfort, convenience and operating cost. These factors are dependant upon traffic (cars and trucks), cross-section (lane width and shoulder width), operating speed, geometric (horizontal and vertical curves), passing sight distances and road side development.