

Seminar Talk on
Modeling Transportation and Traffic in India

Abstract

Modeling transportation basically involves development of relationship between the demand for transportation and the land-use, socio-economic and transportation system characteristics. The Indian socio-economic and transportation system characteristics are highly complex and wide ranging and hence, formulation and quantification of appropriate causal variables for modeling is a challenging task. The first part of the talk will focus on this aspect. The traffic on Indian roads is highly heterogeneous and the vehicles move on the roads without any lane or queue discipline. Hence, the commonly adopted procedure to model lane based traffic flow is not applicable for modeling this type of traffic comprising vehicles of wide ranging static and dynamic characteristics. The approach to modeling of this type of traffic flow is distinctly different. An appropriate methodology for modeling heterogeneous traffic flow has recently been developed at Indian Institute of Technology Madras and the same will be discussed in the second part of the presentation.
