PASSENGER CAR UNIT OF VEHICLES ON MULTILANE URBAN ROADS: - A CASE STUDY OF VADODARA CITY

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Abstract: *This paper presents a concept of Dynamic passenger car unit factor, appropriate for the heterogeneous traffic on Indian roads, and shows that the PCU factor for vehicles type is not a static factor as it is usually assumed. By using two methods of computing PCUs, passenger car unit for seven categories of vehicles are found. And compared those PCU factors to each other shows that PCU values are changes with respect to speed, volumes and composition. It can be also said that PCU value is depends on method of derivation. This PCU factors is the ratio of the projected rectangular area of the vehicle type to the speed of vehicle type, with respect to standard car (small car). Some of the factors affecting PCUs value are classified traffic volume of vehicles, average speed, traffic composition and carriageway width. Speed and Volume data are collected at two urban roads of Vadodara city by video camera technique during morning and evening peak hour.*

Keywords – Dynamic Passenger car unit, Multilane Urban road, Traffic volume, Heterogeneous Traffic

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