

ABSTRACT

A traffic engineering survey was undertaken in George Town, the capital city of Cooperative Republic of Guyana towards installation of advanced traffic control systems. This report is prepared on the basis of analysis of traffic flow details and other data collected during number of field visits and covers the findings and recommendations of the study. Intersection drawings of fifty intersections are prepared by conducting total station survey and attached in this report. Geometric improvements for intersections are suggested along with details of signalisation. Classified directional Traffic volume surveys are conducted at intersections. It was found that percentage of cars are varying from 52 to 79 at various intersections. Mini buses, which are the main form of public transport in George Town consists of 14 to 34 % of traffic at various intersections. Volume capacity ratio at many intersections are nearing over saturation levels. It is observed that Camp street and Regent street junction has a v/c ratio of 0.89. By the year 2011, v/c ratio at this intersection is projected to cross one and before that geometric modifications are to be strictly implemented at this junction and many others . A projection of traffic volume at number of intersection indicate number of intersections need to go for geometric improvements in the near future. Pedestrian footpaths are not continuous and pedestrians have to often travel through roads increasing the conflict. A separate pedestrian stage is proposed at all intersections to increase the pedestrian safety. Mini buses, doing the mantle of public transport, don't have terminal facilities and hence create traffic congestion and chaos by parking in sides of roads and Stabroek market area. Proper terminal facilities need to be provided to Mini buses by properly utilizing vacant land in the nearby areas. Optimised signal time plans for signals working on fixed time plans are generated using Traffic Network Study Tool (TRANSYT). In some corridors, adjacent signals are coordinated and the coordinated signal time plans are also developed. This report also gives the theoretical frame work on feasibility study on traffic signals, geometric improvement of junctions, signal time plan selection etc.