

ABSTRACT

This project covers the investigation of current bottlenecks and their improvement at the cross junction at Kincar stage on the Benedicta-Githunguri road. The road can be classified as an urban road coz it experiences mixed traffic modes, is located in an urban center where there is economic adjacent land use. The road has a 7m carriage way each lane having 3.5m from the centerline. It currently provides access to residential apartments, schools, hospitals, recreational facilities and many small scale business. The intersection at Kincar tends to experience heavy traffic during the peak hours, more so, during the evening peak hours. This project seeks to provide reasonable solutions to this problem and others that were identified in the cause of study. The cross-junction experiences significant traffic volumes upstream of the intersection functional area due to the conflicts that occur among the different modal interactions. Some of the causes of these conflicts are lack of crosswalks for pedestrians at the intersection, improper use of the intersection area by drivers, lack of any form of traffic movement control at the shared facility, poor placement of bus stops, access delays etc. This research aims to come up with suitable mitigation measures. For a sustainable approach the joint use of intersection corridors by different modes of transport will be considered. Not only will the movement of vehicles be investigated but also the movement of people, distribution of goods and provision of services