ABSTRACT

Kiambu Road -B32- is a class B road that links Kiambu to Nairobi. Due to the increasing population of Nairobi City, many people who work in Nairobi have opted to live along Kiambu Road. Other amenities and businesses have also been set up along the route. This has generated high volumes of traffic on the road. As a result, traffic congestion has become a major problem for the users of this road. During most times of the day some level of traffic congestion is experienced with the worst being experienced during morning and evening peak hours.

The study aims at studying the traffic flow and assessing characteristics of traffic congestion on Kiambu Road. This was achieved by analyzing traffic data obtained along the road and from secondary sources. Various traffic parameters were studied such as traffic volume, variation of daily and hourly flow and vehicle speeds. The capacity and level of service of the road was then determined to assess the capability of the road to handle the traffic. During peak hours, the level of the service of the road was identified to be Level of Service F. This shows that the road has inadequate capacity to handle current and future traffic.

The causes of traffic congestion were identified and recommendations were given on how to improve the traffic conditions. The main cause of traffic congestion along Kiambu Road was found to be inadequate capacity due to the road being a two-lane single carriageway.