

## **ABSTRACT**

This study delves into the intricate relationship between urban planning and transportation engineering in Eastleigh, Nairobi's bustling Kamukunji constituency. As the business district undergoes rapid growth and transformation, exacerbated traffic congestion emerges as a pressing concern. The primary objective of this research is to analyse and optimize transportation facilities to alleviate congestion and enhance urban mobility. Through a comprehensive methodology encompassing traffic flow analysis, stakeholder consultations and qualitative infrastructure analysis, this study aims to identify the root causes of congestion and propose targeted interventions to improve traffic management and infrastructure utilization. By leveraging insights gained from this analysis, this research seeks to contribute to the sustainable development of Eastleigh and inform urban planning efforts in similar dynamic urban contexts.