Analysis of Smart Traffic Management System

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Abstract*: Smart Traffic Management Systems (STMS) leverage technology to optimize traffic flow, reduce congestion, and improve road safety. This project analyzes the components, benefits, and challenges of STMS, exploring various technologies like adaptive traffic signal control, real-time traffic monitoring, and connected vehicle integration. The analysis includes an examination of the causes and impacts of traffic congestion, highlighting how STMS can mitigate these issues. Finally, the project assesses the effectiveness of STMS implementations and proposes recommendations for future development and deployment.*

Keywords: Smart Cities, Artificial Intelligence (AI), GPS, Incident Management, Sensors (Loop detectors, cameras, radar), Variable Message Signs (VMS)

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