

Smart Traffic Management System based on Traffic Intensity on Busy Road

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Abstract: *Traffic congestion is a common problem in regions across India and other countries. Malfunctioning traffic signals, weak law enforcement, and bad traffic management procedures are also contributing reasons. A major difficulty in Indian cities is a lack of ability to extend existing infrastructure, making smart traffic management the only possible option. Congestion harms the economy, the environment, and the overall quality of life. As a result, solving this issue is becoming more critical. Infrared sensors, distributed network, magnetic coil being identified, and surveillance footage are some for the current roadway management techniques. Despite their effectiveness, these methods have long initial stages and quite costly establishment and upkeep costs. Radio Frequency Identification, also called RFID, is an invention that has been recommended to address these issues. Real-time regulation of traffic can be got done more quickly and affordably by integrating RFID with current traffic signaling systems. Compared to conventional systems, this technology allows for faster identification of obstructions to traffic and provides a more affordable price for installation and setup time. Preventive actions can therefore be taken sooner, which will improve traffic flow and save drivers money and time.*

Keywords: RFID, Image Processing, Traffic Congestion, Autonomous Management