Automated, low-cost pedestrian crossing carriage for efficient traffic control and pedestrian safety

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Abstract

Disorganized city planning and a huge rise in use of automobiles on the road have caused massive traffic congestion in cities across the world. Pedestrian crossing designed to facilitate movement across the road network, have unfortunately become a hindrance to movements of traffic. Though the smart zebra lines had been introduced, it has not contributed much to reduce the time that holds vehicle lines under the traffic lights. Moreover, the establishment of transfer hubs and underground crossings remain silent in local context because of their cost. Even though there are plenty of pedestrian crossing mechanisms available, they are not secure and not ideal for the disabled, elderly, children, and the sick. Considerable numbers of police officers have to spend their time on traffic controlling duties though it's inefficient and wastage of human resources. A number of studies have focused on automated vehicles and robots as tools to ease problems of congestion. This paper, it focuses on the design of an automated guided carriage system for pedestrian transportation in an efficient and secure manner.

Keywords: *Pedestrian carriage, Zebra lines, Traffic congestion*