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Intelligent Transportation Systems (ITS): An issue from Amman City, Jordan

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Abstract.

The increase of urban population in the World followed by the increasing use of information technology; has led to the creation of a new concept in the architecture - the concept of "Smart Cities". The basic idea of smart cities is to improve the quality of life of inhabitants in various fields, such as economy, administration, health, traffic, education, …etc. and transportation is among one of those. Intelligent transportation systems lead to remarkable improvement in transportation system performance, such as reducing congestion and increasing safety with traveller convenience. Internet technology enables elements within the transportation system- vehicles, roads, traffic lights, message signs, …etc.- to become intelligent by embedding them with microchips and sensors and enabling them to communicate with each other through wireless technologies. This study explores the role of using Intelligent Transportation Systems (ITS) to solve transportation problems within the city of Amman. The issues of congestion in Amman arise from many issues among them: the lack of street capacity, lack of efficient public transportation services and dependence on private cars, facilities to accommodate the increase in means of transportation, absence of proper management based on modern transport and technical development. This paper discusses the challenges of applying intelligent transportation systems in Amman city, since it's not really activated in a proper way to solve transportation problems, and to achieve the best of these systems successfully.

Keywords: architecture, public transportation, safety, smart city, traffic congestion,