عنوان مقاله:

Analysis and Evaluation of the Technical and Economic Application of RFID, GPS and GIS in Road Transportation

محل انتشار:

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نویسندگان:

Mohammad Boroomand - Department of civil Engineering, Tafresh University, Tafresh ۳۹۵۱۸ ۷۹۶۱۱, Iran

Ali Mohammadpour - Department of Research & Development, Omran Mohit Zist Co., Tehran ۱۹۹۵۹۴۳۴۵۳, Iran

خلاصه مقاله:

Today, with the growing population and increasing demand for the use of private cars, managing the demand without the use of smart electronic devices, will be complicated and somewhat impossible. One of the methods of demand management is the use of intelligent traffic control systems and pricing accordingly. In this research, in addition to investigating the use of intelligent radio frequency identification systems (RFID), geographic information systems (GIS), and global positioning systems (GPS) in road transportation, a model has been presented to obtain appropriate values. The toll rate and pricing based on the car's useful presence time in the high-traffic area are introduced using smart systems and the use of the Laspeyres index economic relation is presented as an innovation in this research. From the results of this research, we can mention the reduction of vehicle density in the region, improvement of vehicle control in the city, and encouraging people to use the public transportation system.

کلمات کلیدی:

Road Transportation, crowdedness Pricing, Radio Identification System (RFID), global positioning system (GPS), geographic information system (GIS), Demand management