COMPREHENSIVE HIGHWAY MANAGEMENT SYSTEMS: HIGHWAY INVENTORY

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ABSTRACT

The design of an effective policy for organizing the transport system, at a national and regional level, mainly depends on the adequate knowledge of the existing road network characteristics and performance. To fulfill this, it is necessary to employ a comprehensive highway management system. These systems are in fact a congregation of data, and the corresponding collection and processing mechanisms, as well as of methods appropriate for decision making and necessary field interventions. This task is currently being achieved in our country manually, leading to undesirable increases in terms of time and funds spent.

The reliability of these Comprehensive systems depends on the existence of mechanism which feed and update their databases in regular time intervals. Thus, it is necessary to establish a highway inventory system. This particular process is perhaps the most important one of all processes of such as highway management system, since it has a direct impact to the system’s effectiveness and reliability and furthermore to its own existence.

Nowadays, it is possible to collect, retain and process highway data with technologically advanced techniques. GIS play an important role towards this direction at it is also the case of GPS and video-logging techniques for the inventory - mapping of road networks. Therefore, for any effort to establish a comprehensive highway management and inventory system, it will be necessary to take into account these technological possibilities.