Recommendations for improving corridor management in inter-city metropolitan areas through interconnection of advanced traffic information

Summary

 Intelligent transport system (ITS)-based integrated corridor management (ICM) is needed to improve corridor management in inter-city metropolitan areas.

▪ Thus far, in Korea, corridor management in inter-city metropolitan areas has been conducted by taking transport infrastructure investment strategies including the expansion of roads and mass transportation routes, rather than traffic management strategies.

▪ For travelers using a corridor to efficiently switch paths or means of transportation, there is a need for ITS-based integrated corridor management that interconnects advanced traffic information real-time.

 The analysis of requirements for the introduction of ICM would be useful for drawing integrated management strategies for individual corridors.

▪ The requirements for the introduction of ICM are analyzed by reviewing stakeholders for individual corridors, relevant traffic planning, ITS infrastructure and materials, and traffic operation status.

▪ Based on the analysis, specific ICM strategies can be mapped out about better interconnection of ITS information, switching paths or means of transportation, as well as increased efficiency of traffic operation.

 For efficient implementation of the ICM strategies, it is required to overhaul the traffic planning system for inter-city metropolitan areas.

▪ To reduce risks involving the ICM projects, it is needed to institutionalize corridor system management plans focused on ITS-based traffic management strategies.

▪ It is necessary to redefine the role of traffic planning for inter-city metropolitan areas and step up cooperation among institutions to support the interconnection and coordination between individual ICM projects or corridor system management plans.

Policy recommendations

❶ It is suggested to interconnect advanced traffic information and expand integrated traffic operation to enhance sustainability of transport infrastructure in inter-city metropolitan areas.

❷ It is recommended to figure out the requirements for the ICM for individual corridors. Building on this, the guidelines for a series of analysis procedures should be prepared to come up with

strategies to improve traffic operation.

❸ It is suggested to undertake ICM research development and pilot projects through partnership among institutions, as well as between the public and private sector, under the aid of the central government. Then, the resultant social benefits should be evaluated to publicize them to the public.

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