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A Synthesis of the State-of-the-Practice for Advancing Planning and Operations Integration Opportunities within Transportation Agencies

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Current Situation

Federal law requires that metropolitan transportation plans include operations and management strategies to improve the performance of existing roads, relieve congestion, and maximize the safety and mobility of people and cargo. Transportation operations include all the activities needed for the day-to-day management and operations of a transportation network.

Research Objectives

Researchers from Florida International University sought to summarize the current state of knowledge and practice among state departments of transportation regarding how to integrate operations considerations into planning functions. This information was intended to serve as a basis for the Linking Planning and Operations Initiative, a project of the Florida Department of Transportation.



The flow of people and goods through Florida's roads and railways is continuous and requires efficient operations management.

Project Activities

The researchers provided background

information about the requirements and concerns that the Linking Planning and Operations Initiative is intended to address. They provided an overview of national guidelines and major milestones in this area, followed by a summary of current practices. Then, they described the three key components used in efforts to link planning and operations and provided timelines of concept development evolution. To provide concrete examples, the researchers conducted a comprehensive, nationwide survey of case studies, emphasizing linkage opportunities, approaches, and challenges. They conclude their report with findings and recommendations for consideration by FDOT, intended to serve as a roadmap for the next phases.

Potential Project Benefits

- Allowing operations considerations to influence planning and design can lead to long-terms economic savings.
- Roads designed for more efficient operations are likely to be safer and provide higher reliability.
- Considering operations at the beginning of a planning effort can lead to new strategies to improve roadway efficiency and safety.