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Project Manager
Gabrielle Matthews
FDOT Public Transit Office

Principal Investigator
Albert Gan, Ph.D.
Florida International University

Florida Department of Transportation Research

Evaluation of Software Platforms for Transit Service Planning for Potential Statewide Applications

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Current Situation

Transit agencies stayed vigilant through the COVID-19 pandemic. To accommodate social distancing requirements, they made several adjustments such as increasing the number of vehicles in their fleets and the frequency of stops on their routes.

The agencies used transit software platforms to manage those critical adjustments. As a result, transit agencies increasingly depend on these platforms.

While several software platforms are commercially available, not all are conducive to the applications, functionalities, and capabilities transit agencies may need. Transit agencies would benefit from a guiding document that helps them select the most appropriate software platform for their needs.



A recent FDOT research project investigated transit management software and developed guidance to assist agencies with selecting platforms that best meet their needs.

Research Objectives

The objectives of this research were to identify and review commercially available software platforms for transit service planning; gauge agencies' experiences and needs; and create a checklist template to assist transit agencies with identifying, evaluating, and selecting software platforms to meet their needs.

Project Activities

Following a survey of Florida transit agencies, the research team at Florida International University held a series of web meetings with agencies based in and outside of Florida to learn about their general practices and identify software platforms they used. The team then selected and evaluated six of these platforms. The evaluation criteria included platform features and capabilities, applications, use of data, user support, and user-friendliness.

The team then identified four transit service planning applications that had not been included on any of the evaluated platforms but that agencies could benefit from. They included features like run times, average vehicle speeds in the area of routes, and real-time alerts. The research team then presented the applications to the transit agencies via a webinar to propose improvements agencies should request from the software platform vendors.

Last, the team developed a checklist template to assist agencies with selecting the most appropriate platform for their needs.

Project Conclusions and Benefits

Transit agencies are now better equipped to select the most appropriate transit software platform for service planning needs.

For more information, please see fdot.gov/research.