



### Project Number

BDV30-977-12

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## Florida Department of Transportation Research

# Financial Achievability of the Florida Department of Transportation Research Projects: Putting the Financial Analysis Framework into Action

### Current Situation

Research yields many benefits for transportation. Advances in materials, traffic engineering, safety, and other areas are products of focused scientific investigations, with the cumulative result of creating more efficient, economical, and safe transportation infrastructure. For some research efforts, the benefits are easy to see and possibly put into dollars and cents. For others, the economic impacts – costs and benefits – may be more difficult to understand or explain.

### Research Objectives

Florida State University researchers tested and refined the Financial Achievability Model (FAM), previously developed by FDOT, to identify and quantify the benefits of Florida Department of Transportation (FDOT) research projects. In this project, the researchers applied the FAM to both active and completed research projects to demonstrate its application and usefulness and to identify challenges to implementation of the FAM and the processes needed to facilitate implementation.

### Project Activities

The researchers previously developed the FAM in FDOT project BDK83-977-24. The FAM incorporates an understanding of the multiple stages of decision making and execution that are characteristic of research projects. It requires collection of cost-benefit data to better quantify the benefits that could be realized through implementation of a research project.

In this project, the FAM was applied on several FDOT projects as a pilot to evaluate its use and to understand the obstacles to more general implementation. First, the researchers met with FDOT project managers (PMs) to identify projects. The researchers reviewed and analyzed over 170 FDOT projects completed between 2013 to 2015 to understand the FDOT research process.

Eight projects were selected for application of the FAM. Projects were selected that represented a range of FDOT research activities and for which sufficient data were available to provide a good analysis. The researchers surveyed the chosen PMs weekly to document their activities associated with research projects and the time spent on them. Surveys were collected during a five-month period, concluding with a broader wrap-up survey about the process itself.

The FAM was then applied to each of the study projects, leading to recommendations for facilitating implementation of the FAM. The researchers also developed a better understanding of project characteristics that are more suitable for application of the FAM.

### Project Benefits

An improved understanding of the research process and better means of assessing individual projects will help in prioritizing research and ensuring the timely and cost-effective delivery of the most useful research results.

*For more information, please see [www.fdot.gov/research/](http://www.fdot.gov/research/).*



*The fiber-based reinforcing bars shown here were developed through years of research and testing, and because they do not corrode, promise important benefits for the durability and reduced maintenance expense of the structure they will be part of.*