

Florida Transportation Forecasting Forum Work Plan

Introduction

To ensure that travel forecasting in Florida continues to provide valuable information, FDOT's Systems Forecasting & Trends Office (SFTO) engaged a working group to brainstorm the next generation of travel demand modeling and travel forecasting. The working group met several times between September 2022 and July 2023, to provide ideas on how to develop Florida's travel forecasting practice moving forward. These contributions culminated in the identification of three core principles:

➤ *Relevancy & Timeliness*

Transportation forecasting tools, including travel demand models, must be responsive to the needs of decision-makers, providing what they need when they need it. Travel demand have models historically supported the development of MPO long range transportation plans, as well as provide information for traffic studies, corridor or project plans, project development & environment (PD&E), traffic operations, and access or interchange management.

As transportation needs, behaviors, policies, and projects change, evaluating the relevancy and timeliness of forecasting tools is important. We must understand the needs of decision-makers, transportation planners, and engineers, including tolerance for accuracy and timing – both for the forecasting period and for the delivery of results.

➤ *Accessibility & Communication*

Transportation forecasting tools and practices should be accessible by users based on their needs and skill level. Outputs should be easy to understand and use. Information should be clearly presented and commensurate with the needs and abilities of the user to access, interact with, and make decisions based on the information.

➤ *Consistency & Efficiency*

Modeling and other forecasting tools should use consistent methodologies and data to be defensible, repeatable, and efficient. Guidance and training is necessary for consistency and should identify efficiencies in model methodologies, data, development, and processing.

Placing these core principles at the center of travel forecasting and modeling work ensures that the state of the practice advances in ways that support the public interest and provide added value to decision-makers.

The Florida Transportation Forecasting Forum (TFF)

The Florida TFF, formerly the Florida Model Task Force, employs task-oriented committees made up of volunteer members charged with developing guidance, tools, and other products to advance the state of the practice. SFTO provides technical staff support to each committee. This collaboration between SFTO and the TFF allows for an incremental and iterative process ensuring Florida's travel forecasting and modeling practice is effectively meeting the needs of users now and in the future.

Transportation Forecasting Resource Hub

FSUTMS Online has served as a portal to connect travel demand modeling professionals with modeling resources and information for the past two decades. Maintained by SFTO, FSUTMS Online is used to distribute modeling guidelines and standards, coordinate registration for meetings and modeling training, and download travel demand models. This important resource will continue to serve a vital role in supporting the transportation forecasting and modeling communities; however, in an effort to rebrand in conjunction with launching the refreshed TFF, a new site is being created.

FSUTMS Online is transitioning to the Transportation Forecasting Resource Hub. This new hub provides an opportunity to extend the reach and appeal of this portal and its resources to new users that may not have previously interacted with FSUTMS Online. This redesigned site will also allow for the addition of new functionality, as needed. As the Florida Transportation Forecasting Forum committees conduct their work, their final products will be posted on the resource hub.

2024-2025 Work Plan

Florida Transportation Forecasting Forum

Task	Description	Status
Communicating the Value of Forecasting Committee	This committee is developing talking points for decision makers to clearly communicate the value of forecasting tools, updating the MPO handbook, updating the Transportation Forecasting Forum mailing list to include broad group of stakeholders (including decision makers), and developing a webinar to explain in non-technical terms the benefits of forecasting tools in the overall planning process.	In progress
Communicating through Visualization Committee	This committee is leading efforts to investigate methods and best practices of visualizing inputs and outputs of model data.	In progress
New Data Committee	This committee is identifying all the data that is of a critical need, based on feedback from FDOT, MPOs, decision makers, and the MTF. Recommendations will include the pros and cons of each data set and guidelines and methods for using these data by stakeholders.	In progress

Task	Description	Status
Short-term Predictive Analytics Committee	This committee is conducting a scan of local, regional, statewide, and national practices that considers performance measures, data needs, influencing factors, and tools for 5-year horizons and provide recommendations for next steps.	In progress
FTFF Annual Meeting	Annual Forum planned for December 2024.	Coming soon

Guidance and Training

Task	Description	Status
Travel Demand Model Manual	This manual will provide guidance on accepted and preferred practice within Florida concerning travel demand modeling. It will cover methods, data needs, and application of travel demand models. This manual will be available online and follow similar recent FDOT online manual formats, such as the FDOT Design Manual. This will replace FSUTMS.	In progress
Context Classification in Modeling	This guidance will address using context classification as a characteristic in travel demand model networks either in lieu of or as a supplement to the more traditional facility type / area type characteristics currently in use.	Initiated
Resilience & Travel Demand Modeling	This effort will include a national scan for notable practices that connect vulnerability assessments with travel demand modeling.	Initiated
Visitors & Travel Demand Modeling	This effort will include a literature review and national scan for notable practices in evaluating improvements in travel demand models with inclusion of specific visitor data.	Initiated
Training Plan	This training plan is a continuation and extension of SFTO's current training program. The training plan will lay out a series of courses intended to educate participants on topics such as what modeling is, when modeling should be done, and what kind of modeling should be done. Trainings will de-emphasize learning how to use modeling software and will instead focus on first principles, accepted practice, and procedural knowledge.	In progress
Webinar	June 6, 2024 Webinar hosted by SFTO. Demonstrating Real-World Uses of Travel Demand Models	June 6, 2024
Microsimulation Training	Development of a basic microsimulation course and related materials.	Initiated

Technical Support

Task	Description	Status
Model Migrations	This effort will finalize the remaining model conversions in Florida that transition the state's travel demand models from the legacy Cube modeling software platform to the TransCAD (District 5) and VISUM (all other districts) modeling platforms.	Ongoing
District Modeling Coordinators Meeting	In-person meeting of the District Modeling Coordinators is scheduled for March 27-28, 2024. At that meeting, we will determine frequency of future meetings.	March 27-28, 2024
Software Licensing	Ongoing maintenance of software licenses.	Ongoing
CTPP/ACTS	Ongoing support for CTPP/ACTS via AASHTO.	Ongoing
Dunn & Bradstreet Employment Data	Ongoing access to employment data.	Ongoing

Tools and Job Aids

Task	Description	Status
Land Use Model	This effort will finish out the development of a land use model intended to work with regional travel demand models to better reflect the interactions between land use forecasting and transportation forecasting.	Target Completion: Summer 2024
FAF Disaggregation	FAF disaggregated data will be available via an easy to use interface.	Coming soon
Hurricane Evacuation Model (TIME)	The TIME model will be converted from CUBE.	Coming soon
Scoping Template	These templates will provide a starting point for FDOT Districts, MPOs, and other interested partners in developing scopes of work for travel demand modeling and transportation forecasting tasks.	Coming soon
Data Field Guide	This document will identify and describe available data and data sources that are relevant to transportation forecasting and modeling. It will address not only current and industry standard data products and how to acquire them, but also identify emerging data sources and their potential applications.	Coming soon
Transportation Forecasting Resource Hub	This new web site will be hosted by FDOT and will replace FSUTMS Online.	March 2024

Task	Description	Status
Performance Measures Methodology	The Sourcebook Methodology document is a resource for definitions of performance measures used by FDOT and includes methodologies and data sources for calculating each measure.	Available now
Travel Time Reliability Explainer	Job aid to explain, in layman's terms, travel time reliability as a performance measure.	Coming soon

Other Studies

Task	Description	Status
Revenue Forecast	FDOT develops a revenue forecast every four years for the MPOs to use in their LRTP process.	Available now to MPOs; next forecast will kick off in mid-2026
Macroeconomic Study of FDOT's 5-Year Work Program	Florida Statutes require FDOT to periodically complete a macroeconomic study of its 5-year Work Program.	Summer 2024
Trail Economic Study	FDOT has partnered with the Regional Planning Councils to analyze the economic value of trails.	Summer 2024