

1. Overview

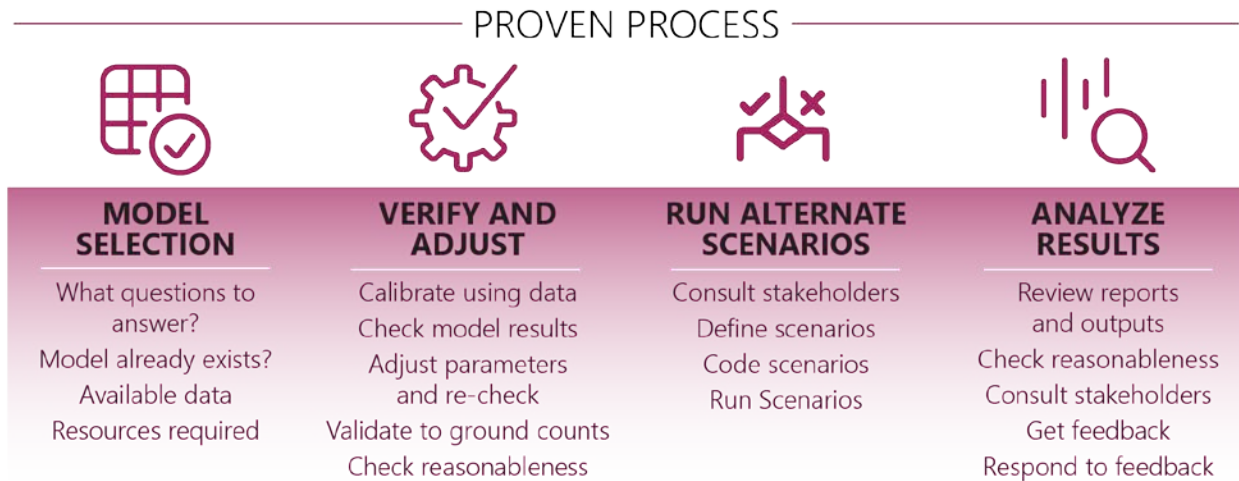
This portion of the Travel Demand Modeling Manual is designed to guide model users in the proper application of travel demand models to meet project needs. These models are primarily developed by FDOT to support transportation planning and analysis for an assortment of activities including:

- Long Range Planning.
- Project-level Traffic Forecasting.
- Site Impact Analysis.
- Interchange Access Requests.

Though models can be applied to a range of other activities, those listed here are the most common applications of a travel demand model. This document will guide the reader with these particular applications in mind.

Proven Process

The topics covered in this document include:







This proven process guides modelers in how to use established data to yield reliable results that will address the needs of project stakeholders. The chapters in this document provide additional details on where to acquire the models necessary for your project, what kinds of data you will need to create your project scenarios, what to consider when setting up the model and preparing your scenarios, and what to focus on when providing results to project stakeholders.

This document does not provide details on developing a model. Occasional references will be made to activities related to model development as they pertain to the use of a model. For further guidance on the development of travel demand models, the reader should refer to FDOT’s [Travel Demand Modeling Manual: Developing a Travel Demand Model](#).

Modeling Project Roles

The primary audience for this document is those individuals who are overseeing projects that will use travel demand models, as well as those individuals who are directly working with the models and model data. There are four main roles related to projects that use travel demand models. An individual may fill multiple roles, such as an FDOT District Model Coordinator serving as both the model owner and the project coordinator. Understanding your role in a travel demand modeling project will help you to contribute productively and efficiently to the project. Specific guidance for each of these roles will be called out with the corresponding icons below to help you focus on information related to your role.

 Stakeholder	 Project Coordinator	 Modeler	 Model Owner
Has a vested interest in the project's outcomes and may represent a wider group	Originates and/or directs projects that have modeling tasks	Technical expert on the development, preparation, and use of the model	Maintains, archives, and distributes the model
Provides input throughout the project to ensure that their interests are being addressed	Responsible for deciding how modeling will be used in the project and what resources to spend on modeling	Responsible for preparing inputs, running the model, and communicating results	Main point of contact for model acquisition and answering technical questions about the model
<i>Ex: FDOT Offices, MPOs</i>	<i>Ex: FDOT project manager</i>	<i>Ex: Consultant, Agency technical staff</i>	<i>Ex: the FDOT District Model Coordinator, MPO staff in some cases</i>

Process Workflow

The process flowchart on the following page shows the workflow for using a travel demand model. This model is typically used to answer questions about future travel patterns on a regional transportation system.

1. A **stakeholder** interested in the model's results will typically bring these questions to the attention of a modeling team.
2. The **project coordinator** will then assess the questions being asked, determine which model is the appropriate tool for the project, define scenarios and prepare a scope of work.
3. A **modeler** will then take this information and prepare an approach, acquire the model, ensure that the model is running correctly, prepare and run the scenarios, and provide results.
4. An iterative process will then take place where the modeler, project coordinator, and stakeholders to confirm the reasonableness and suitability of the results.
5. Once the results are finalized, they will be published and archived as appropriate.

