

**Modeling 101 (1:30 pm – 2:45 pm)**

Terry Corkery, SFTO, welcomed everybody to the session and outlined the rationale. There was healthy discussion in the session from both new and experienced model users. The major themes outlined include the following key topics:

- What kind of data does the model use as inputs and how are they collected? Terry went through and explained the general process of modeling.
- There was discussion regarding the problem of confidential land use development data and its incorporation into models. It was explained that the general process of updating land-use can involve a lot of moving parts but usually the community finds a way to incorporate the information as needed. A comment was then made that every county should be using detailed comprehensive plans that incorporate zoning, but the discussion then evolved to the logistics of making zoning changes and the stakeholders who drive that process. Often the developers are the ones who drive the process.
- The next discussion reconsidered using models for current year analyses. It was agreed that models have increasingly been used for such analyses. Interim year analyses were also discussed.
- A question came up regarding where new model users/stakeholders go to dig deeper in modeling concepts. The SFTO online resources were then referenced, and Terry mentioned that more detail on this information will be shared later in the meeting.
- A comment was made that some existing training material tends to be high-level. The question was then asked what tools can provide detailed explanations of how models work and share available resources. There was interest in a tool to split Traffic analysis Zones (TAZs). Terry responded that FDOT is working with PTV to help with training to get stakeholders up to speed as necessary.
- There was discussion of District 5 and the TransCAD model. Jason Learned, FDOT District 5, mentioned that late Spring or early summer of 2026 is the earliest anticipated general availability of that model. He mentioned this timeline is driven by the logistics of getting forecast year networks ready and available for decision-making.
- A question was raised regarding the validation RMSE ranges. Terry Corkery clarified to the group that this is a topic more suited for model development rather than application, which represented the majority of attendees in the room. Following up on the validation theme, there was a general question on “what does validation mean?”. Terry Corkery outlined the concepts using the flipchart, including validation base year, land-use, and algorithm. Another question involved the typical items that are the focus of validation. There was general agreement that some items should not be adjusted, particularly estimated survey relationships and other structural and coefficient inputs to the model, but modelers should make the tweaks that are deemed necessary to improve calibration and validation.
- There was then a question on whether model appliers should worry about standards that developers focus on. The consensus agreed that the answer is no, unless there is an obvious error that was not caught in development, which are rare.
- Rolando Valdes, SFTO, asked how do aggregate and disaggregate modeling compare to each other and the distinction. There was also a question of whether one is more favorable than the other. This question primarily involves the difference in concept between the 4-



step trip-based models and Activity-Based models. There was then discussion of the differences between model types and the appropriate usage, such as managed lanes analysis as an example, where ABM approaches are better versus simple capacity analyses in less dense regions.

- Another topic that arose was the integration between safety and travel models. Jason Learned mentioned predictive safety tools have been used in PD&E studies. The discussion then pivoted to direct versus indirect application of models to safety and the agreement was that it is usually done as a post processing effort to model application.
- The final item of discussion regarded the sensitivity of models, particularly ABM's, due to various changes in items like toll rates, transit fares, etc. The response was that it depends on how well the ABMs are built. Others added that in their experience, the models are sensitive to such change and may be successfully used to test policy implications of such changes.

The session concluded and Terry Corkery encouraged everyone to take a look at the online SFTO website, [FL Transportation Forecasting Resource Hub](#), which is intended to be a resources for both new and experienced model users.