# Short-Term Predictive Analyses Committee Meeting

February 21, 2024 | 9:00 a.m. – 9:55 a.m.

Via MS Teams

## Attendees

* Vladimir Majano, Central Office (Vladimir.Majano@dot.state.fl.us)
* Nikhil Puri, Cambridge Systematics (npuri@camsys.com)
* JJ Samus, InNovo Partners (jsamus@innovopartners.com)
* Abigale Donkor, CDM Smith (donkora@cdmsmith.com)
* Dan Beaty, HNTB (Daniel.Beaty@dot.state.fl.us)
* Li Jin, InSight (li.jin@insighttcinc.com)
* Mohammed Hadi, FIU (hadim@fiu.edu)
* Naresh Kotari, AECOM (naresh.kotari@aecom.com)
* Peng Zhu, TransSystems (pzhu@transystems.com)
* Rob Schiffer, FuturePlan (rob.schiffer@futureplan.us)
* Roberto Miquel, WRA (rmiquel@wrallp.com)
* Sheldon Harrison, Cambridge Systematics (SHarrison@camsys.com)
* Srinivas Varanasi, Corradino (svaranasi@CORRADINO.com)
* Dana Reiding, FDOT Central Office (Dana.Reiding@dot.state.fl.us)
* Thomas Hill, FDOT Central Office (Thomas.Hill@dot.state.fl.us)
* Terrence Corkery, FDOT Central Office (Terrence.Corkery@dot.state.fl.us)

## Meeting Notes

Committee Work Plan

* Noted the proposed schedule:
	+ End of Month 5 – Complete Literature review (needs to be added to the schedule)
	+ End of Month 8 – Draft Methodology will be delivered to the committee for review.
	+ End of Month 10 – Methodology will be fully vetted.
* Case Study Feedback
	+ The needs for guidelines included:
		- Screening for LRTPS and TIPs.
		- Supporting 5-Year work program development.
		- Better understanding of available capacity.
			* Dr. Hadi noted that this should be understanding performance measures in general. When you predict capacity, you don’t predict capacity but performance measures.
			* JJ – Capacity means how much additional information can be fit into a given agency's system, not necessarily direct performance measures.
		- Providing preliminary project prioritization.
		- Standardizing processes across agencies.
		- Land use changes/permit applications.
		- Post-processing travel demand model output guidance.
		- Guidance around validate to observed data including OD data.
	+ Dr. Hadi - Predicting behavior based on scenario testing (an example is toll/value of time) to help feed the models.
		- Nikhil discussed the importance of context and our objectives and how the design of the methodology should be deployed. A prediction of patterns/performance. An important distinction between trying to estimate changes in travel behavior versus travel pattern was made. Travel demand models forecast behavior. Whereas this group is tasked with thinking through high-level tools that are agile, scalable and produce short-term forecasts that inform decision-making.
	+ Roberto – Often, the most rigorous portion is the assignment, so finding a way to assess scenario testing quickly could be beneficial to understand.
	+ Srin – Understanding the available capacity to support development is extremely important. Understanding capacity should be necessary, but shifting the capacity to ‘available supply’ or something to help with the messaging is possible.
* Do we have the Tools?
	+ Not much is available, but there are post-processing tools available.
* Stakeholders
	+ JJ – Our stakeholders are broad, expanding past traditional LRPT stakeholders, should this methodology support things outside of that space.
		- Nikhil – The intent is to remain broad to provide as much context as possible.
		- Vlad – MPO representation is extremely small, and we should get more feedback from the MPOs.
			* We will include this in the literature review portion.
		- Thomas – Will provide survey work done by FDOT to understand the needs of FDOT and other model users.
* Next Steps – Literature Review
	+ National, Statewide, Regional, and Local scan of best practices focusing on the identified needs.
		- It was discussed that the literature review will yield a methodology to be used as a reference but not yield a tool.
	+ Naresh – How do we cross-check what we are getting from this against standard practices (ITE trip generation, forecasted growth rates, etc.)?
		- Nikhil – Tools and processes to develop short- and long-term forecasts have been improved over the years. We should leverage existing models and tools, and the research that has gone into model development, validation and application, to guide this process. One of the main points we are trying to solve for is a tool or a suite of tools that helps streamline the forecasting approach to make decision-making process more efficient.
	+ Li – We are talking about short-term and processing, but model runs can be complex and time-consuming.
	+ JJ – This methodology development is an evolving process that is set to create a foundation from which to build.
	+ Thomas – It's important to consider incorporating the model into the effort.
	+ Roberto – Having something that can quickly screen alternatives is essential but challenging.
	+ Dr Hadi – When this is developed, an evaluation/calibration plan should be set up as a next step.
	+ Srin – The challenge is understanding the application of short-term predictive analysis, such as bolstering distribution, and how we get there. It is important to understand how the model fits into the process.

### Action Items

* Provide the presentation to the group and receive feedback.
* Once feedback is provided, the literature review will begin.