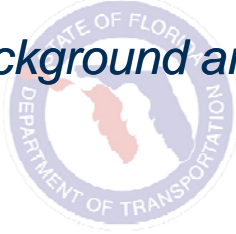



Workshop Background and Structure




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Project Development Activities

- Standard set of planning and engineering activities for an FDOT project (called phases):
 - Planning
 - Project Development & Environment
 - Design
- Process is well established
 - Issues analyzed in each phase are well known
 - Products from each phase have names
 - Standard modeling tools are regularly updated


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Project Development Activities

		Traditional Activities			
		Name	Issues	Products	TDM Model
MPO	Regional Planning Studies		Needs & Cost Feasible	TIP and LRTP	MPO Model Update
	Project Planning Studies		Project purpose and need; funding sources and priority; presence in TIP and LRTP	Concept Report with tentative project features and planning level cost estimates	Latest version of MPO Model
FDOT	Project Development and Environmental Studies		Environmental impacts; engineering issues and project location; public acceptance; and funding	Environmental documents; engineering report; and public hearing transcript	Project validated version of the MPO model
	Design		Detailed design features	Design package; right-of-way; and permits	Same model

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- ## Express Lane Projects
- Express lane projects are more complex than most projects (widening and other toll projects)
 - Toll rates change throughout the day to manage congestion
 - Express lanes typically located in the median of expressway
 - Toll rates influence overall corridor demand as well as the split in demand between the express lanes and the general purpose lanes
 - Travel demand forecasts and traffic operational analyses are essential in each phase
 - Two new threads of analysis
 - Traffic operations (perhaps not new but expanded)
 - Traffic and revenue
 - Important aspects from traditional work
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Express Lane Projects

Traditional Activities				Traffic Operations	Traffic and Revenue
Name	Issues	Products	TDM Model		
FDOT	Project Planning Studies	Project purpose and need; funding sources and priority; presence in TIP and LRTP	Concept Report with tentative project features and planning level cost estimates	Latest version of MPO Model	
	Project Development and Environmental Studies	Environmental impacts; engineering issues and project location; public acceptance; and funding	Environmental documents; engineering report; and public hearing transcript	Project validated version of the MPO model	
	Design	Detailed design features	Design package; right-of-way; and permits	Same model	

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- ## Express Lane Projects
- Purpose of this Workshop is to discuss the activities, issues, products, data and modeling tools in each phase of the project development process
 - Guidelines
 - Supply relevant information
 - Work at an appropriate levels of detail and effort
 - Collect more and more-refined data and improve models through project development
 - Maintain consistency across phases of development (minimize reversals)
 - Don't waste effort
 - Avoid lengthening project development schedule
 - Maintain consistency across activities within each phase
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Design Traffic vs. Revenue Traffic

- Traffic analysis covers the same ground with similar models and techniques
- Fundamentally different purposes (design and revenue)
- Analyses must be consistent on project features, operations and schedule
- Good reasons to expect different traffic estimates


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Design Traffic vs. Revenue Traffic

- Traffic forecasts and operational analysis for design – established procedures at FDOT
 - Purpose is to specify design features of the project so that the constructed project will be useful in the design year
 - Factors of safety lead to generally higher traffic estimates
 - Final results are the design
- Traffic forecasts and revenue analysis leads (but are incidental) to revenue estimates – less common at FDOT
 - Purpose is to produce reliable toll revenue estimates for the opening and subsequent years (for financial purposes)
 - Factors of safety in estimation process tend toward lower traffic estimates
 - Final results are the revenue estimates

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Traffic and Revenue Studies

- T&R Studies have a long history, with well established approaches for each phase of development
- T&R Studies for express lane projects are complex
 - Value of time, vehicle operating costs and reliability
 - Time-of-day, direction of travel and segment variations
 - Relationship between express lanes and general purpose lanes
 - Pricing policies (pricing to manage traffic and pricing to raise revenue and finance improvements)
 - Toll operations (ETC participation, video tolling, cost of collection toll variance)
- Quantity, quality and currency of data increase through project development

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Traffic and Revenue Studies

	Traditional Activities	Traffic and Revenue Supporting Express Lane Projects				
		Activities	Issues	Products	Data	Revenue Tools
FDOT	Project Planning Studies	Level 1 T&R Study	Financial feasibility	Sketch-level T&R estimates, tolls and toll rates, bonding capacity and project alternatives	Traffic counts and any other readily available data	MPO Model with minor adjustments and updates
	Project Development and Environmental Studies	Level 2 T&R Study	T&R implications of various alternatives, leading to selection of a preferred alternative; some details for that alternative	Planning-level T&R estimates based on time of day characteristics and observed travel patterns	Traffic counts by time of day, travel surveys and other model improvements	Project validated version of the MPO model with time of day and other features
	Design	Level 3 T&R Study	Detailed analysis of the designed project	Comprehensive T&R suitable for investment decisions (detailed forecast of toll, traffic and revenue); and risk analysis	Traffic counts, travel survey, VOT, VOC, reliability, and independent SE forecasts	T&R model for the project with toll diversion

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Workshop Structure

- **Morning (combined)**
 - Presentations on Florida's Current Practices
 - Presentations on National Current Practices

- **Afternoon (break-out)**
 - Planning Workshop
 - Operations Workshop

- **Tomorrow Morning (combined)**
 - Presentations on the latest and upcoming techniques
 - Workshop Summaries
 - Comments, Questions and Discussion
 - Closing Remarks

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