

# FSUTMS and TBEST Applications in the FTA New Starts Process

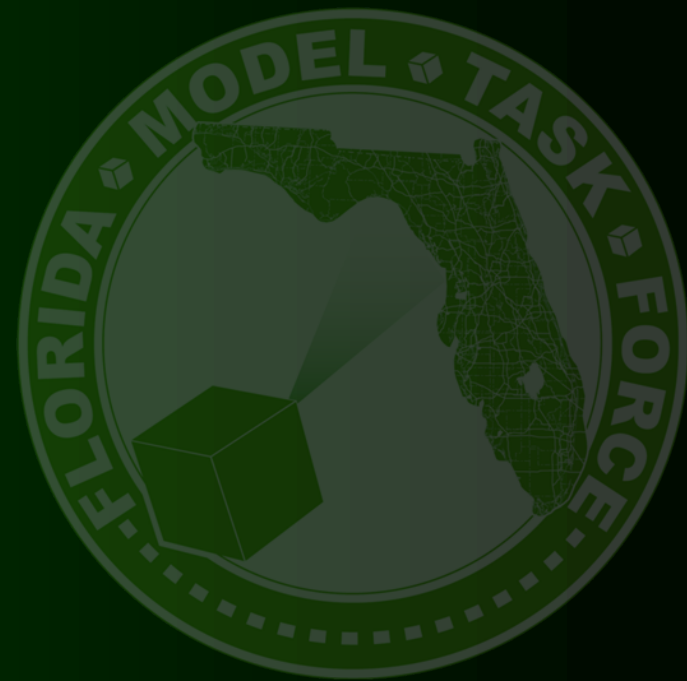
*presented to*

**Model Task Force  
Transit Subcommittee**

*presented by*

**Diane Quigley, AICP  
Florida DOT Public Transit Office**

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# Project Background

- **Transit Boardings Estimation and Simulation Tool (TBEST)**
  - GIS based tool
  - Developed and supported by FDOT Public Transit Office
  - Adopted by FDOT as the methodology for providing ridership forecasts for Transit Development Plans (TDPs)
  - Simulates travel demand at the individual stop-level while accounting for:
    - Network connectivity
    - Spatial and temporal accessibility
    - Time-of-day variations
    - Route/stop competition

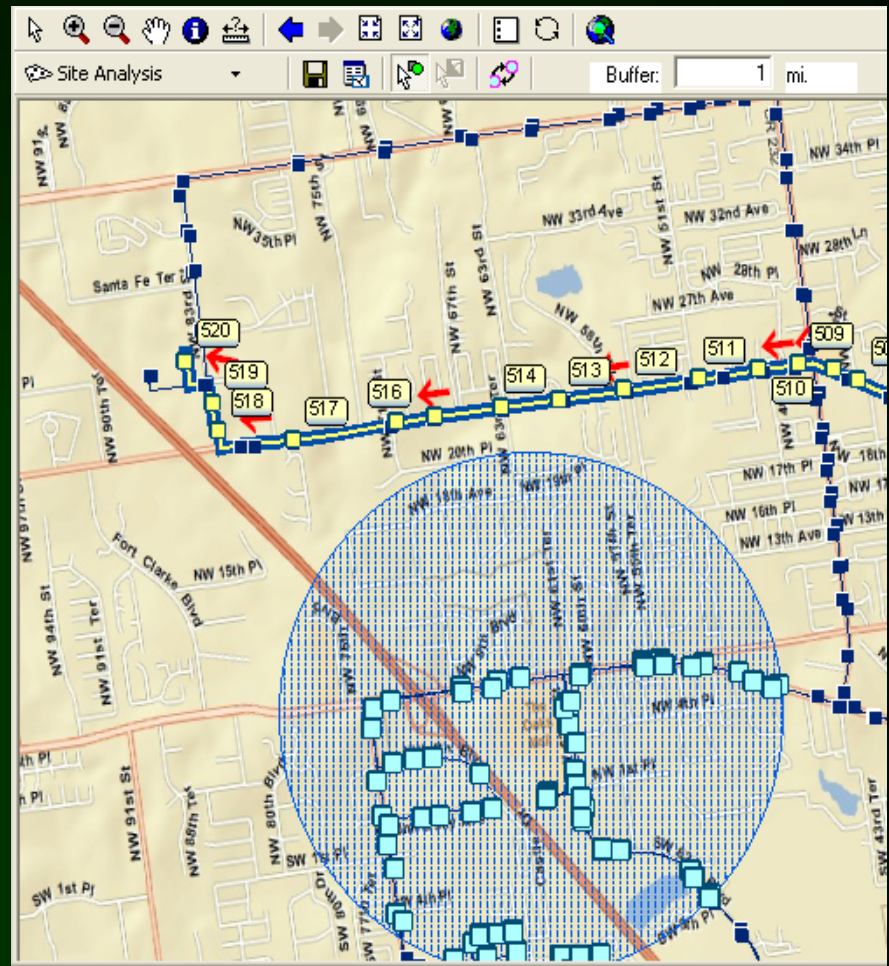


# Transit Scale Analysis

Uses address level employment and block level population data to determine access to bus stops.

Uses sophisticated measures of accessibility to activities via the transit network

Determines the demand from transferring passengers at stops where transferring can take place



# Project Background

- **Florida Standard Urban Transportation Model Structure (FSUTMS)**
  - Developed and supported by FDOT Systems Planning Office
  - Standard travel demand model used throughout the State of Florida
  - Four-step model used to forecast highway and transit demand





# Project Work Tasks

- **Development of Modeling Guidelines for Local Agencies within the State of Florida Entering into the FTA Process**
  - **Review of Travel Demand Forecast Analysis Requirements for FTA New, Small and Very Small Starts Projects**
  - **Review of TBEST Structure and Generated Output**
  - **Review of FSUTMS Structure and Generated Output**
  - **Analysis of Modeling Practices Used in Successful New Starts, Small Starts, and Very Small Starts Projects on a National Scale**
  - **Development of Recommendations for the Use of TBEST and FSUTMS in FTA Applications**



## End Products

- **Guidebook for local agencies preparing to initiate a New Starts, Small Starts or Very Small Starts grants process**
  - **Individual Reviews of FTA Starts Program Requirements and TBEST/FSUTMS Output**
  - **Comparison of Requirements and Output**
  - **Recommended model and TBEST enhancements for compliance with FTA Program Requirements**

# Project Schedule

Task #	Task	Month										
		1	2	3	4	5	6	7	8	9		
1	Review of New Starts, Small Starts, and Very Small Starts Requirements	█										
2	TBEST Structure and Modifications Necessary to Address FTA Requirements		█									
3	FSUTMS Structure and Modifications Necessary to Address FTA Requirements		█									
4	Analysis of Successful National New Starts, Small Starts, and Very Small Starts Project Modeling Practices				█							
5	Recommendations for the Use of TBEST and FSUTMS for FTA Applications					█						
6	Development of Guidebook for Local Agencies Entering into the FTA Process						█					
7	Review and Finalization										█	





# Technical Advisory Group

- **Consists of:**
  - **FDOT / Other Public Agencies**
  - **Local Transit Agencies Currently Using TBEST**
  - **Volunteers in the Modeling Community**
- **Will interact via teleconference at milestones in the project timeline to review and provide input on the work completed**
- **Contact Daniel Harris in the Transit Office for further information**

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