



# FSUTMS and TBEST in FTA New Starts and Small Starts Projects



*presented to*

**MTF Transit Committee**

*presented by*

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# The Project

- **Development of FSUTMS and TBEST Modeling Guidelines for Local Transit Agencies in Florida Entering into the FTA Starts Process**








## Changes in Starts Project Evaluation

- FTA changing criteria for evaluation of transit projects
- Currently preparing an Advanced Notice of Proposed Rulemaking
- Comments gathered and Notice of Proposed Rulemaking will be released in next 18 months



# Project Tasks & Schedule

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Task 1	Review FTA Requirements								
Task 2		Review TBEST							
Task 3		Review FSUTMS							
Task 4			Review FL & National Submissions						
Task 5					Recommendations				
Task 6							Guidebook		
Task 7									



Technical Advisory Group Meeting



# Task 1

## *Review of Travel Forecast Analysis Requirements for FTA New Starts and Small Starts Projects*

- **Submission Specifications**

- **Travel Forecasts Template**
- **Other Required Reports**
  - Changes over Time
  - Changes between Alternatives
  - Quality Control
- **Optional Reports**
  - Back-Up Materials
  - Case for the Project
  - Supplementary Data (ARRF, Off-Model Estimations, etc.)
- **Certification of Technical Methods**
- **Documentation of Uncertainties**



# Task 1

## *Review of Travel Forecast Analysis Requirements for FTA New Starts and Small Starts Projects*

- **Travel Forecasting Tools**
  - **Regional Travel Demand Models**
    - FSUTMS in Florida
  - **SUMMIT Model**
    - Developed by FTA to Evaluate User Benefits
  - **Supplementary Applications**
    - ARRF
    - TBEST
    - Alternative-Specific Effects Analysis
  - **Off-Model Methodologies**



# Task 1

## *Review of Travel Forecast Analysis Requirements for FTA New Starts and Small Starts Projects*

- **New Starts**
  - **Total Cost Greater than \$250 Million**
  - **20- or 25-Year Forecast Horizon**







# Task 1

## *Review of Travel Forecast Analysis Requirements for FTA New Starts and Small Starts Projects*

- **Small Starts**

- **Small Starts**

- Under \$75 Million per Year (Total cost less than \$250 million)
- Opening Year Forecast

- **Very Small Starts**

- Less than \$3 Million per Mile (Total cost less than \$50 million)
- **Current Ridership Counts**
  - ◆ Off-Model Mobility Impact Assessment Calculations
  - ◆ Requires 3,000 existing weekday riders to benefit from project





# Task 2

## *Review of TBEST for New Starts and Small Starts Applications*

- **Methodologies**

- **Stop-Level Socio-Economic Data**
- **Stop to Stop Impedance Matrix**
- **Transit Network Inter-Relationships**
- **Transit Network Accessibility**
- **Direct and Transfer Boardings Estimation**



## Task 2

### *Review of TBEST for New Starts and Small Starts Applications*

- **Input**

- Socioeconomic Data
- Transit Network
- Ridership Counts (Route/Stop)

- **Output**

- Impacts of Service Changes
- Land-Use Analysis
- Query Analysis
- Route-Level Service Performance Reporting



## Task 2

### *Review of TBEST for New Starts and Small Starts Applications*

- **Starts Project Application in Florida**
  - Feasibility Study Tool
  - Supplementary Measure of Aggregate Ridership
- **Potential for Further Development for Application**
  - Method of Determining Access Mode
  - Techniques for Alternative Comparison





# Task 3

## *Review of the FSUTMS Model for New Starts and Small Starts Applications*



- **Data Requirements**

- **Travel Characteristics Data**
- **Transit On-Board Surveys**
- **Highway Speed and Count Data**
- **Transit Speed and Ridership Count Data**



# Task 3

## *Review of the FSUTMS Model for New Starts and Small Starts Applications*

- **Model Processes Related to Starts Projects**
  - Major Markets & Travel Patterns
  - Highway Network: Path & Speed
  - Transit Network: Path & Speed
  - Mode Choice Coefficients & Constants
  - Assignment





# Task 3

## *Review of the FSUTMS Model for New Starts and Small Starts Applications*

- **On-Going Starts Project Application in Florida**
  - Tampa Rail Project by HART
  - South Florida East Coast Corridor Study by FDOT 4





# Task 4

## *Analysis of Acceptable Methodologies Used in FTA Starts Projects*



- **Florida Projects**

- **Looking for Florida Submissions**
  - **Templates/Application Materials**
  - **Study Details**
  - **Forecasting Documentation**

- **National Projects**

- **Looking for National Submissions**
  - **Templates/Application Materials**
  - **Study Details**
  - **Forecasting Documentation**





# Task 5

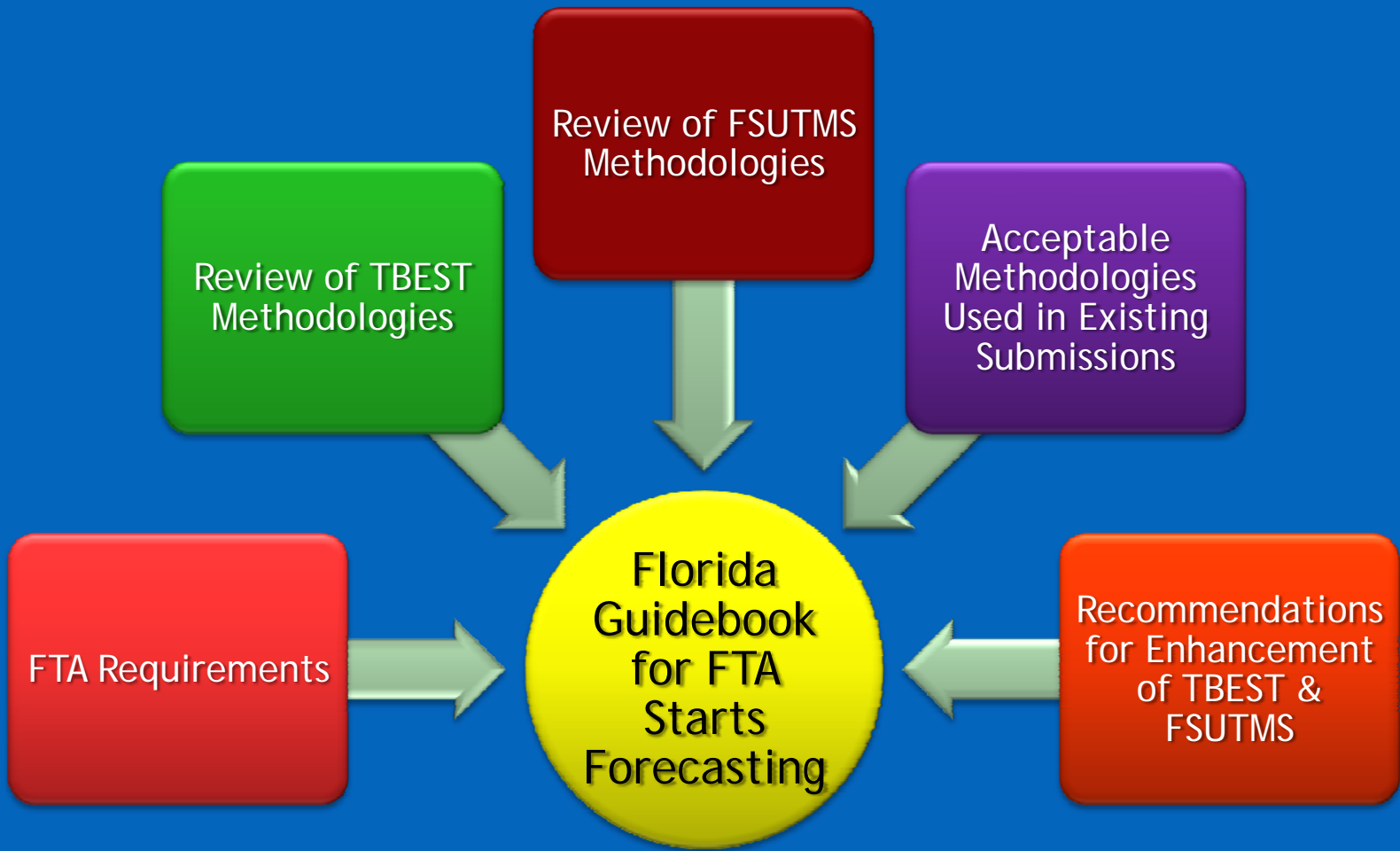
## *Development of Recommendations for Use of TBEST & FSUTMS in Starts Applications*

- TBEST
- FSUTMS



# Task 6

## The Florida Guidebook for Model Application in FTA New Starts and Small Starts Projects





# Task 7

## *Technical Advisory Group*

- Meetings: March 15, June 23, & August 25
- 20 Members from:
  - FTA
  - FDOT
  - MPO
  - Transit Agencies
  - Universities
  - Consultants





# Questions or Comments?

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