TBEST and LYNX’ TDP

Florida Department of Transportation
Public Transit Office

Version 4.0
What is TBEST?
TBEST Standardizes

- Creates a standard methodology for Florida transit agencies for TDP
- Reduces burden on FDOT to evaluate other methodologies
- Reduces burden on agency to create other methodologies
- Acts as both enterprise service and strategic planning tool
TBEST Features

- Uses readily available data
- Industry standard software base
- Fills short term ridership projections gap
- Scenario based modeling with comparison
- GTFS network import and full network editor
- Tools to analyze land use and SE data, network accessibility, model results
- User friendly and quick implementation
TBEST Approach to Modeling
## TBEST Model Structure

### TBEST Transit System Components

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### Distribution File

**LYNX**
TBEST Tools and Functionality
TBEST Future Evolution

• Title VI Reporting and Analysis
• Livability and Destination Visualization
• Integration with APC
• Web-enabled analysis and visualization
LYNX TBEST Implementation

- Configured TBEST for Service Planning within the agency by developing and validating the TBEST model.
- Developed an integration interface with Trapeze transit operations software to continually update the network.
- Developed methods for meeting regulatory compliance by measuring additional trips related to local development.
- Utilized efforts to maintain TBEST to meet FDOT requirements for TDP ridership estimation.
LYNX Implementation Users Schema
LYNX TBEST Base Year Network

- December 2011 Network containing 94 Routes/Patterns and 8008 stops
- Florida (state-wide) Socio-Economic data
TRANSIT DEVELOPMENT PLAN (TDP) 2013-2022
LYNX SERVICE AREA

- Orange, Osceola and Seminole Counties
- 2,500 Square Miles
- 4,500 Bus Stops
- 2,134,411 Population
- 16,502,471 Annual Route Miles
- 28,023,186 Annual Ridership
TDP 2013-2017 (first five years)

**Premium Service:**
- US 192 from US 27 to the FL Turnpike
- SR 50 UCF to West Oaks Mall
- SR 436 Fern Park to OIA
- Kirkman Silver Star to I-Drive
- 528 OIA to Disney
- John Young Downtown to I-Drive
- US 441/17-92 Downtown to Florida Mall
- Orange Ave. Downtown to Sand Lake
- VA Connector

**New Service:**
- Ronald Reagan Blvd/Red Bug Rd
- VA Connector
- Bithlo
- Goldenrod Rd
- Aloma
- Lake Nona to OIA

**Circulators:**
- LYMMO
- S. Orange Ave
- St. Cloud
- Kissimmee
- Conway
- Meadow Woods
- Lake Nona
TDP YEARS 2018-2022 *(second five years)*

**Premium Service:**
- SR 436 Apopka to Fern Park
- US 441 Apopka to Downtown
- Innovation Way
- John Young Downtown to I-Drive
- US 441 Florida Mall to Kissimmee
- US 192
- US 17-92 Winter Park to Downtown

**Circulators:**
- Orlovista/ Kirkman
LYNX TDP Process

• TDP plans created by year by Service Planning
• Plans digitized in ArcGIS
• Plans digitized and attributes edited as scenarios in TBEST (each scenario given its own Transit System for performance)
• Run models
• Export reports
TDP Base Weekday Boardings and Performance Measures Variables Dec2011

- Total Boardings: 94,961
- RevenueServiceTrips: 3,251
- RouteRevenueServiceMiles: 44,838
- RouteRevenueServiceHours: 2,346

Legend:
- Total Boardings
- RevenueServiceTrips
- RouteRevenueServiceMiles
- RouteRevenueServiceHours
TDP_2013 Weekday Boardings and Performance Measures Variables
Dec2011

- New service – Lake Nona
- New service – Bithlo service
- New service – Osceola
- LYMMO expansion
- New express routes
- 12 adjusted routes
Next Steps
Documentation

• Based on the experience at LYNX, CUTR and Florida DOT have adopted and published a guidebook for “TBEST IMPLEMENTATION PROCEDURES FOR STRATEGIC AND SERVICE PLANNING”

• Another document published to be used as reference for Florida’s transit agencies is “TBEST – GUIDELINES FOR TRANSIT DEVELOPMENT PLAN RIDERSHIP REVIEW AND REPORTING”
  http://tbest.org/tbest-guidance-documents/
Questions and Contact

Rafiq Basaria  
LYNX GIS Planning Technician  
rbasaria@golynx.com  
407-254-6062

Stanimira Bourova  
LYNX GIS Coordinator  
mbourova@golynx.com  
407-254-6043

Rodney Bunner  
Software Developer  
Center for Urban Transportation Research (CUTR)  
rbunner@cutr.usf.edu