CSX East-West Rail Feasibility Study

Project Overview
Background and Approach

• Purpose and Need
• Technology Assessment
• Technical Analysis
  ▪ Ridership
  ▪ Capital Costs
  ▪ Operation and Maintenance Costs
• Evaluation and Refinement
• Finance and Implementation
• Role of SAC
Issues and Opportunities

• Dolphin Expressway (SR 836) one of Miami-Dade’s most congested corridors serving over 200,000 vehicles per day
• Existing industrial railroad network and conditions
• Potential joint freight and passenger use
• State and CSX-owned industrial tracks parallel SR 836 west from the Miami Intermodal Center (MIC)
• Connections to Metrorail, Tri-Rail and Amtrak at the MIC
• Other BRT & Express Bus Plans
Corridor Description

Right-of-Way

• 100’ width
• CSX Ownership
• FDOT Ownership
• Multiple grade Crossings
• Freight Operations
Prior Corridor Studies

2001 SFRTA "Dolphin Extension"

2009 MPO CSX Corridor Study

2005 Peoples Transportation Plan
Dolphin Corridor Commuter Rail
Corridor Socioeconomic Conditions

Population Density

- Residences predominantly located south of the CSX rail corridor
- 139,876 residents located within 1 mile corridor buffer (2010 census)
Corridor Socioeconomic Conditions

Employment Density

- Higher concentration of jobs and employment centers located north of the CSX rail corridor and west of the airport
- 135,524 jobs located within 1 mile corridor buffer (2010 census)
Corridor Land Use

- Mixed employment and residential centers located north of the CSX rail corridor
- Majority residential uses located south of the CSX rail corridor
- Vacant and undeveloped land located west and northwest of the CSX rail corridor
Existing Traffic Conditions

Existing Conditions
Level of Service (2011/2012)

Level of Service
- C or better
- D
- E
- F
Corridor Infrastructure

- Track / Infrastructure / Structures / Grade Crossings
- Current / Future Freight Operations
- Existing Customers, Siding Agreements
- Provide seamless connections to Tri-Rail and Metrorail
Preliminary Service Concepts

Concept One:

- 9.5 mile diesel light rail transit (DLRT) route
- 6 stations in addition to the MIC
- Mostly double tracked to accommodate traffic
- Matches the schedule, frequency and hours of service of the Orange Line
Concept One:

- 10 minute peak period headways
- 15 minute off-peak headways
- 5 minute timed transfers with Orange Line
- Off-peak trains held up to 5 minutes for late arriving connections
- 122nd Ave to Government Center in 38 minutes
- Freight restricted to 10:00 pm to 5:00 am
Preliminary Service Concepts

Concept Two:

- 15 mile diesel commuter rail route similar to Tri-Rail
- 7 stations in addition to the MIC
- Mostly single track with one or more sidings
- Potential to interline or operate as an extension of existing Tri-Rail service
Concept Two:

- 30 minute peak period headways
- 60 minute off-peak headways
- Off-peak trains held up to 5 minutes for late arriving connections
- Krome Ave to Government Center in 52 minutes
- Freight operations accommodated during the midday, evening and overnight periods
Preliminary Service Concepts

Concept Three:

- Diesel light rail route from 137th Avenue and FIU to MIC
- 9 stations in addition to MIC
- Mostly double tracked
- 2 coordinated services on shared track, focusing on different travel markets
Preliminary Service Concepts

Concept Three:

• “Turnpike” route - 11 miles between 137th Avenue and MIC
• “FIU” route - 10 miles between FIU and MIC with 2.2 mile branch south along median of 107th Avenue
• Branch along 107th Avenue could be single track to reduce impacts on roadway traffic
Preliminary Service Concepts

Concept Three:

- 15 minute peak and 15 minute off-peak headways on shared trunk stations
- 30 minute peak and 30 minute off-peak headways to FIU and Turnpike routes
- 5 minute timed transfers with Orange Line
- FIU to Government Center in 42 minutes
- Freight restricted to 10:00 pm to 5:00 am
Preliminary Challenges

• Matching Tri-Rail and Amtrak Schedules
• Matching Metrorail’s Schedule
• Maintain needs of industrial clients
• Provide ample Park-n-Ride facilities
• Maintain potential for future branch line extensions
• Funding and project implementations
Study Advisory Committee (SAC)

• Study Advisory Committee (SAC)
  ▪ May – August/September – November
• Informational Meetings
• Website
## Study Schedule

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Discussion

• 3 Preliminary Service Alternatives
  – MIC to Turnpike (Turnpike Alternative)
  – MIC to Krome Avenue (Krome Alternative)
  – MIC to FIU (FIU Alternative)
  – MIC to Kendall
  – Connection to Douglas Road Corridor
  – Others?
CSX East-West Corridor
Questions

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