



MIAMI-DADE  
METROPOLITAN  
PLANNING  
ORGANIZATION

# CSX East-West Rail Feasibility Study

## Project Overview

**JACOBS**

# 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



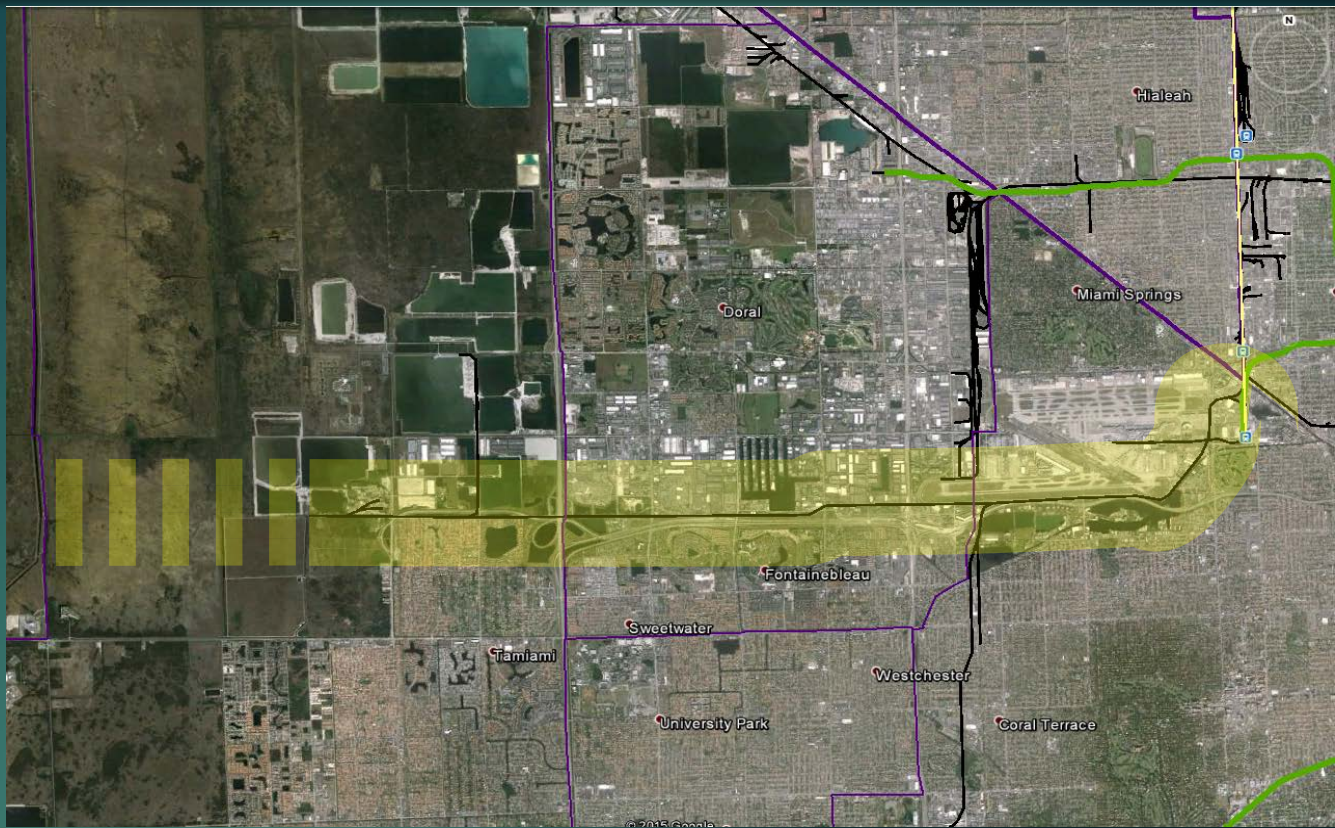
# Issues and Opportunities

- 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

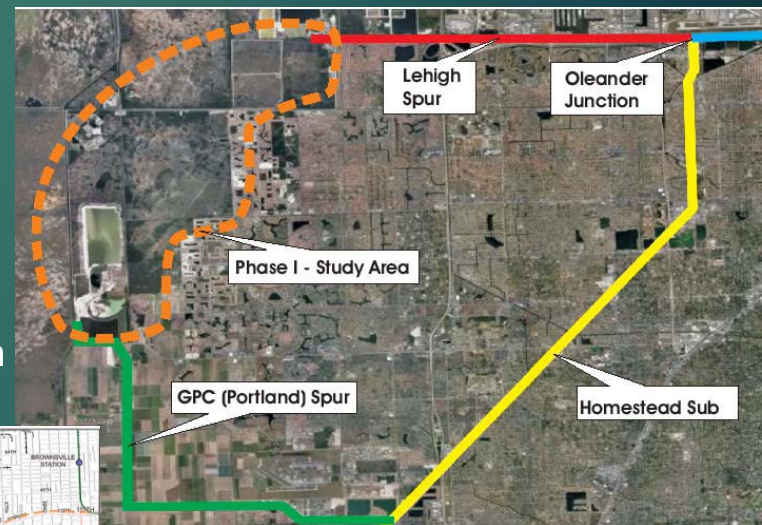
## 2001 SFRTA "Dolphin Extension"



## 2005 Peoples Transportation Plan Dolphin Corridor Commuter Rail



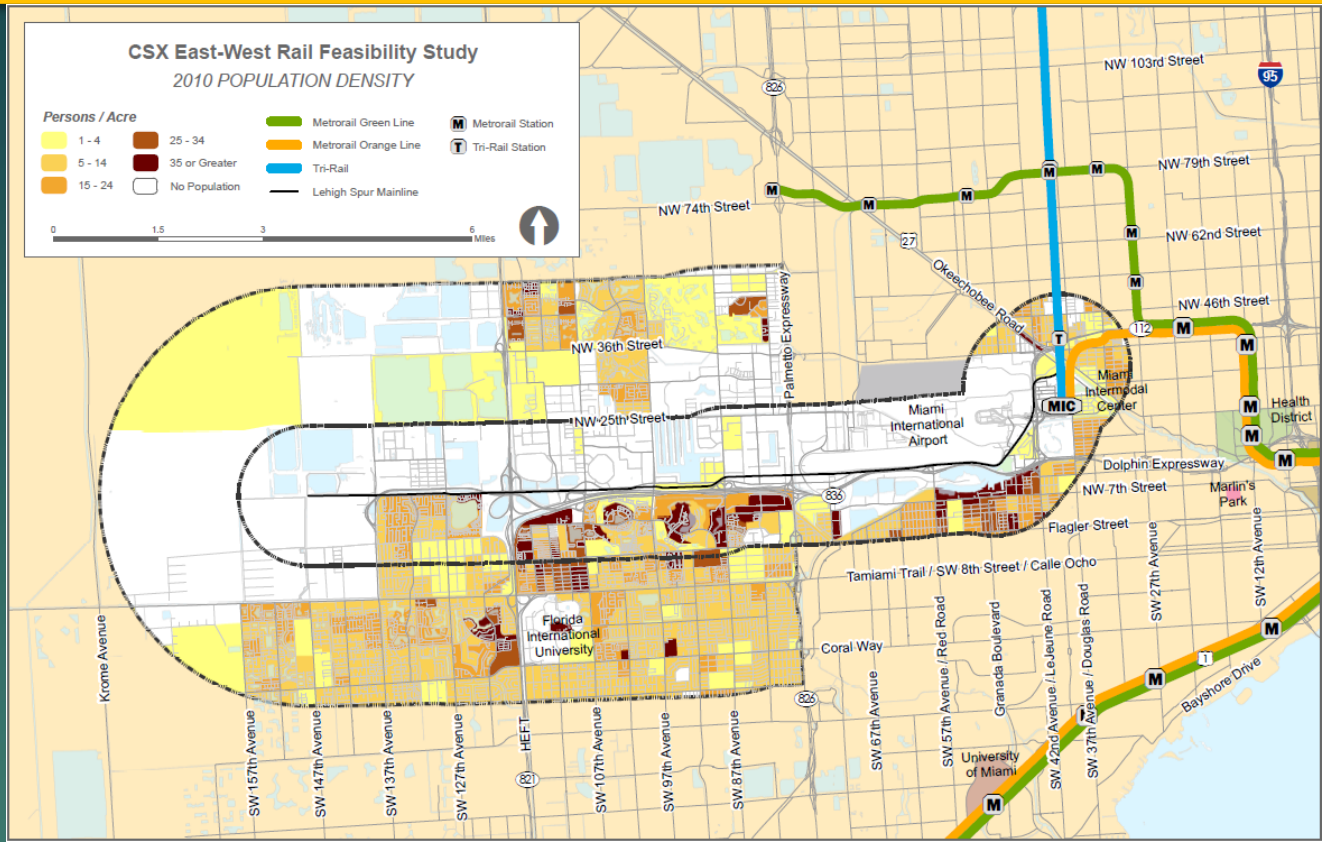
## 2009 MPO CSX Corridor Study



# Corridor Socioeconomic Conditions

# Population Density

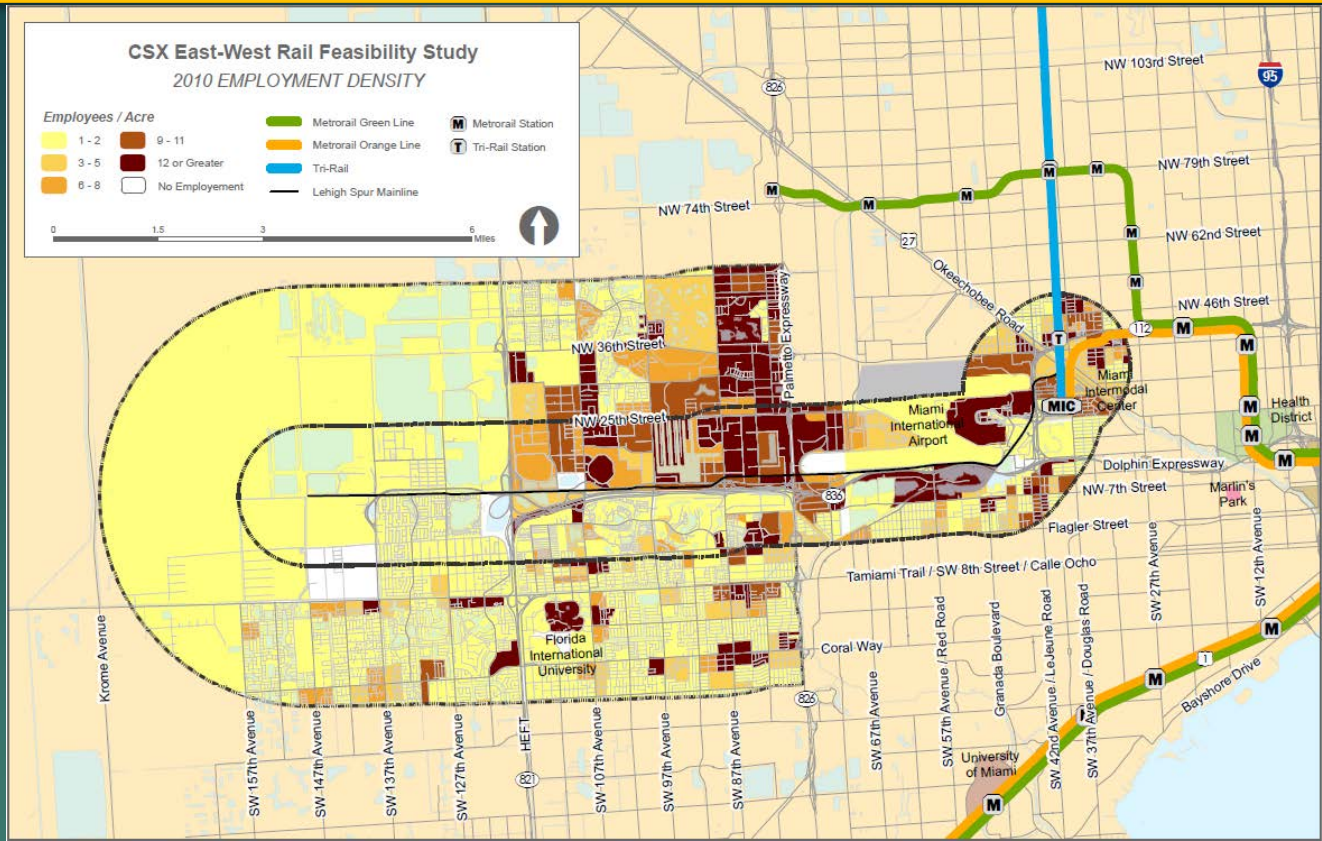
- Residences predominantly located south of the CSX rail corridor
- 139,876 residents located within 1 mile corridor buffer (2010 census)



# Corridor Socioeconomic Conditions

# Employment Density

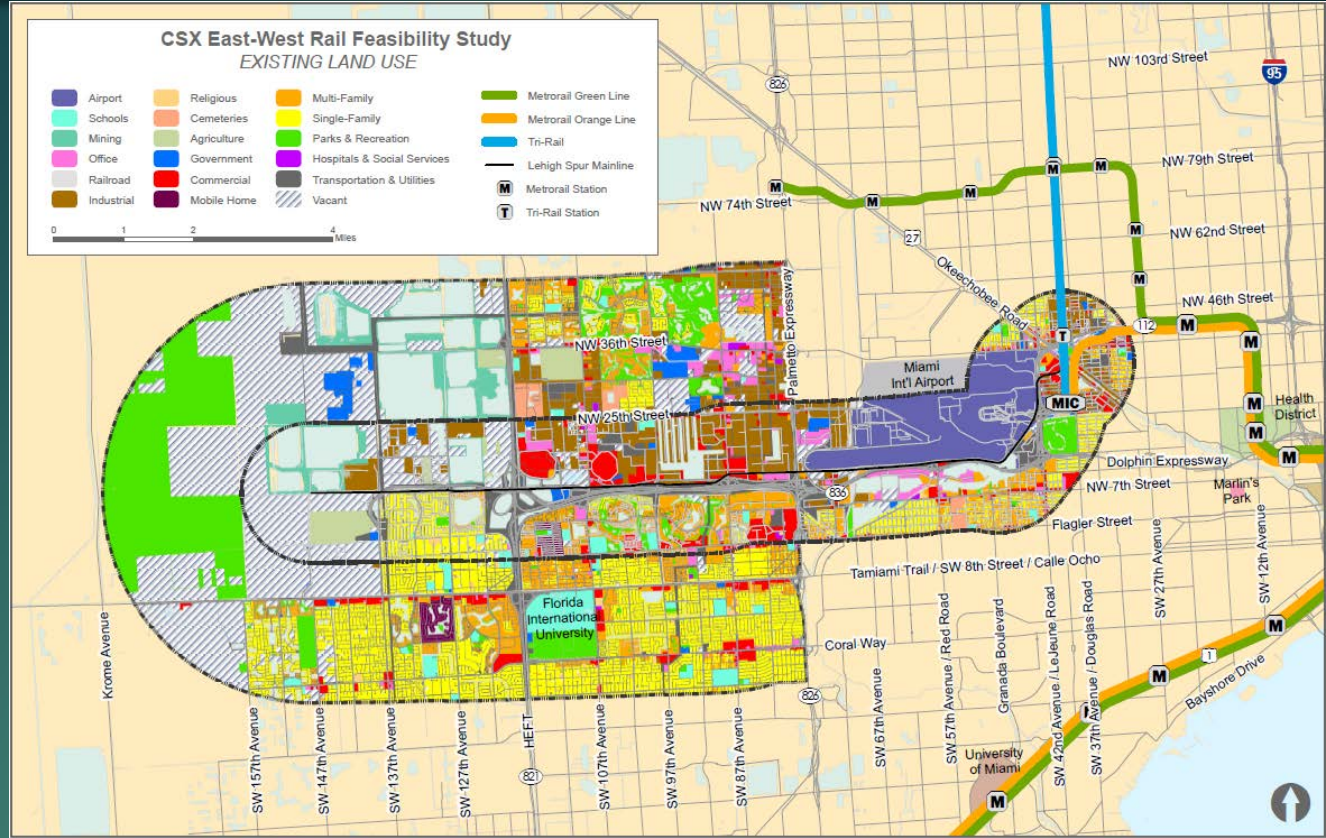
- Higher concentration of jobs and employment centers located north of the CSX rail corridor and west of the airport
- 135,524 jobs located within 1 mile corridor buffer (2010 census)





# 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







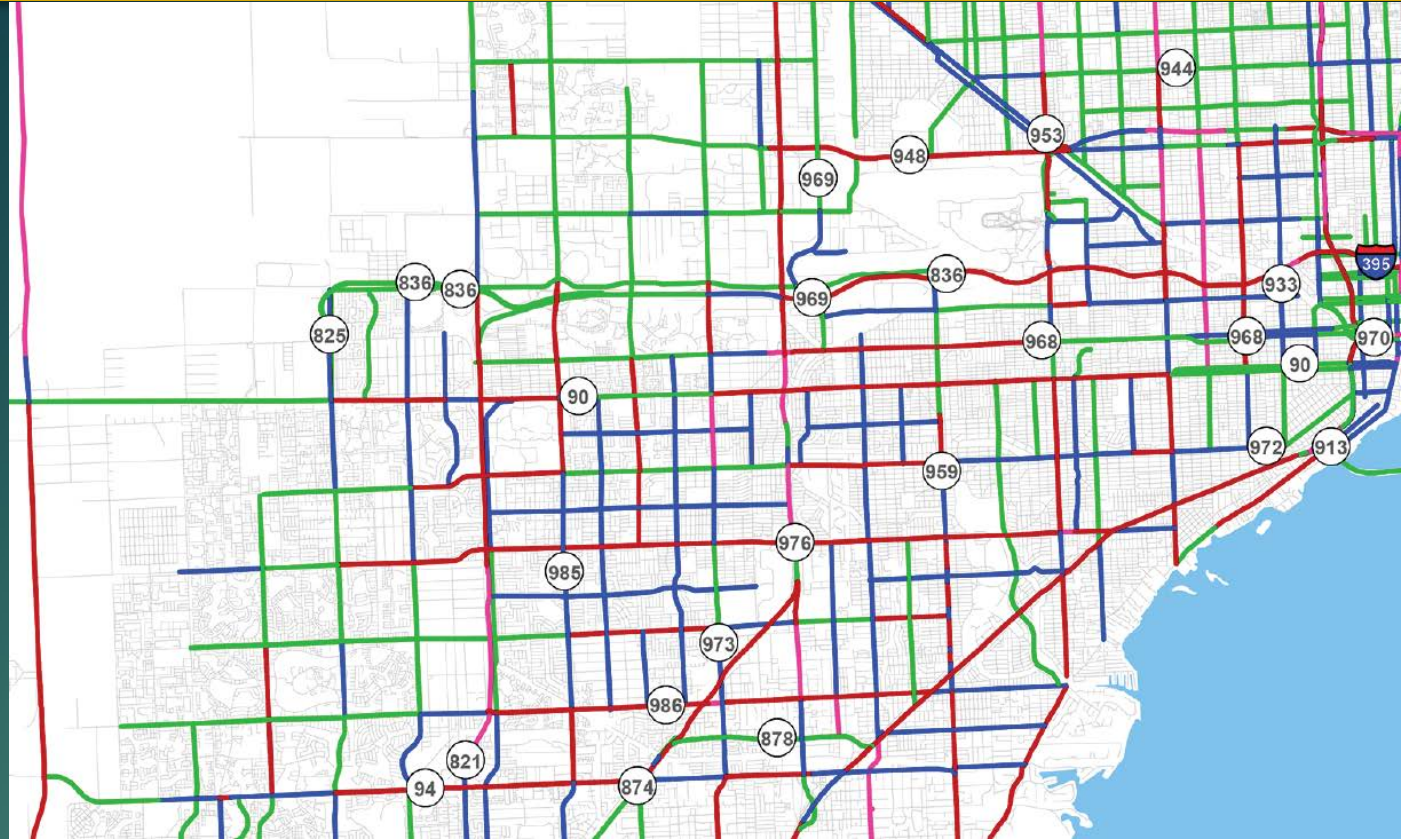


# Existing Traffic Conditions

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:

- 
- CSX East-West Rail Feasibility Study  
DOLPHIN DIESEL LIGHT RAIL
- Legend:
- Metrorail Station
  - Tri-Rail Station
  - Proposed New Station
  - Orange Line
  - Green Line
  - Proposed New Service
  - Light Spur Mainline
- Map Labels:
- NW 103rd Street
  - NW 79th Street
  - NW 62nd Street
  - NW 46th Street
  - NW 36th Street
  - NW 25th Street
  - NW 7th Street
  - Flagler Street
  - Tamiami Trail / SW 8th Street / Calle Ocho
  - Coral Way
  - SW 10th Avenue
  - SW 9th Avenue
  - SW 8th Avenue
  - SW 6th Avenue
  - SW 5th Avenue / Red Road
  - Granada Boulevard
  - SW 42nd Avenue / Le Jeune Road
  - SW 37th Avenue / Douglas Road
  - Bayshore Drive
  - SW 12th Avenue
  - Health District
  - Martin's Park
  - Dolphin Expressway
  - Miami Intermodal Center
  - Miami International Airport
  - Florida International University
  - University of Miami
- Travel Time: 38 minutes
- Proposed New Service: 5:00 am to 5:00 am

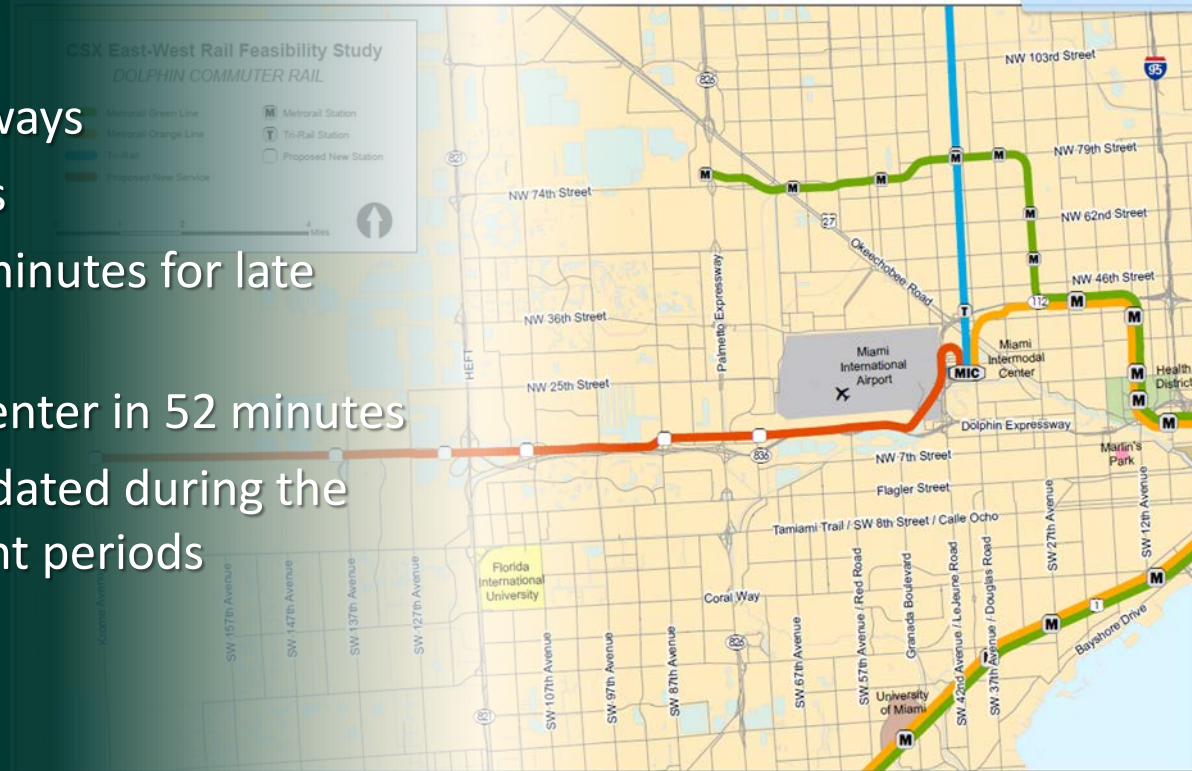
## Concept Two:

- 
- CSX East-West Rail Feasibility Study**  
**DOLPHIN COMMUTER RAIL**
- Metrorail Green Line  
 Metrorail Orange Line  
 Tri-Rail  
 Proposed New Service
- Metrorail Station  
 Tri-Rail Station  
 Proposed New Station
- 0 1 2 4 Miles
- Map showing the proposed Dolphin Commuter Rail route (orange line) connecting the Metrorail Green Line (green line) and Metrorail Orange Line (yellow line) in Miami. The route runs from Krome Avenue in the west to the Health District in the east, passing through the Miami International Airport and the University of Miami. Key landmarks and streets shown include: Krome Avenue, SW 15th Avenue, SW 14th Avenue, SW 13th Avenue, SW 12th Avenue, SW 10th Avenue, SW 9th Avenue, SW 8th Avenue, Coral Way, SW 67th Avenue, SW 57th Avenue / Red Road, Granada Boulevard, SW 42nd Avenue / LeJeune Road, SW 37th Avenue / Douglas Road, Bayshore Drive, NW 103rd Street, NW 79th Street, NW 62nd Street, NW 46th Street, NW 36th Street, NW 25th Street, NW 7th Street, Flagler Street, Tamiami Trail / SW 8th Street / Calle Ocho, and the University of Miami. Major highways shown include I-95, I-27, and I-36. The map also indicates the location of the Miami Intermodal Center (MIC) and the Health District.

# Preliminary Service Concepts

## 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





## Concept Three:

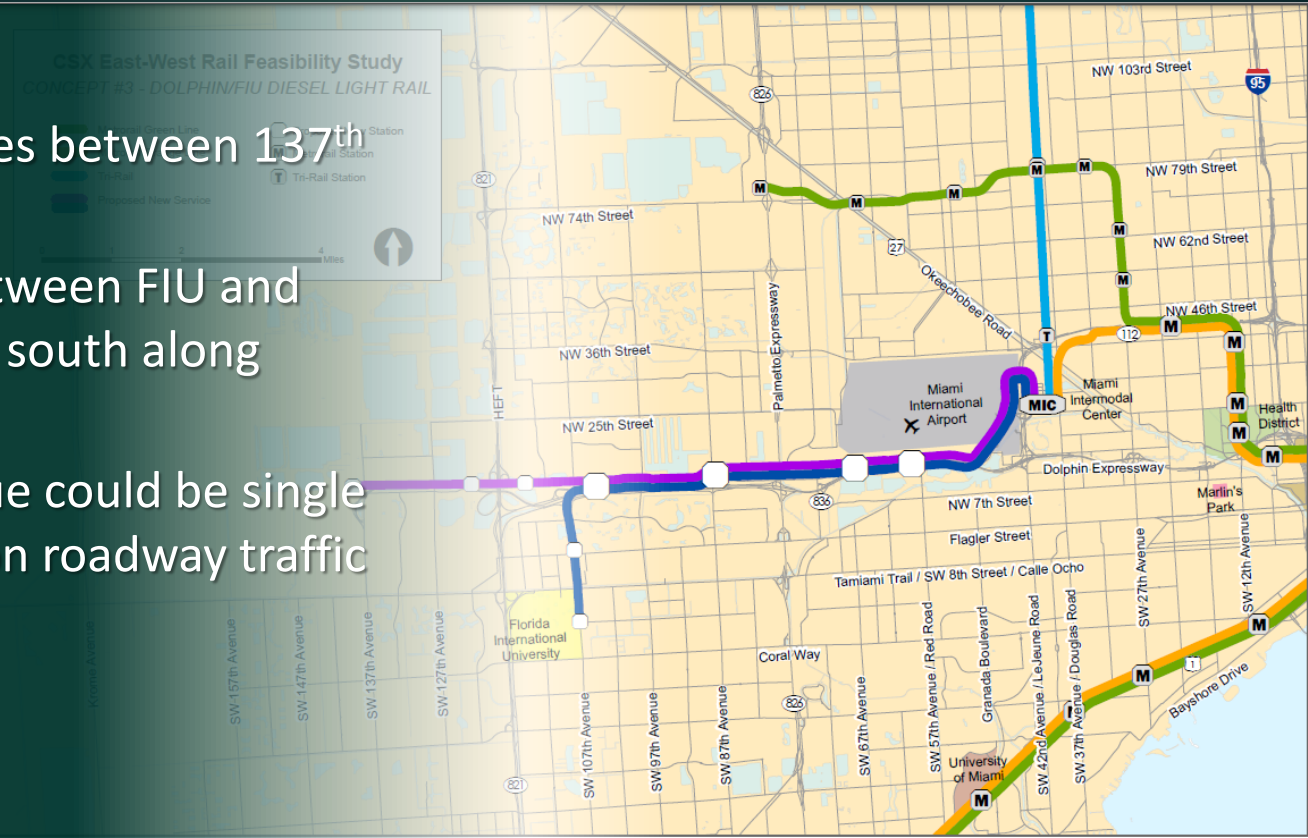
- Diesel light rail route from 137<sup>th</sup> Avenue and FIU to MIC
- 9 stations in addition to MIC
- Mostly double tracked
- 2 coordinated services on shared track, focusing on different travel markets



# Preliminary Service Concepts

## Concept Three:

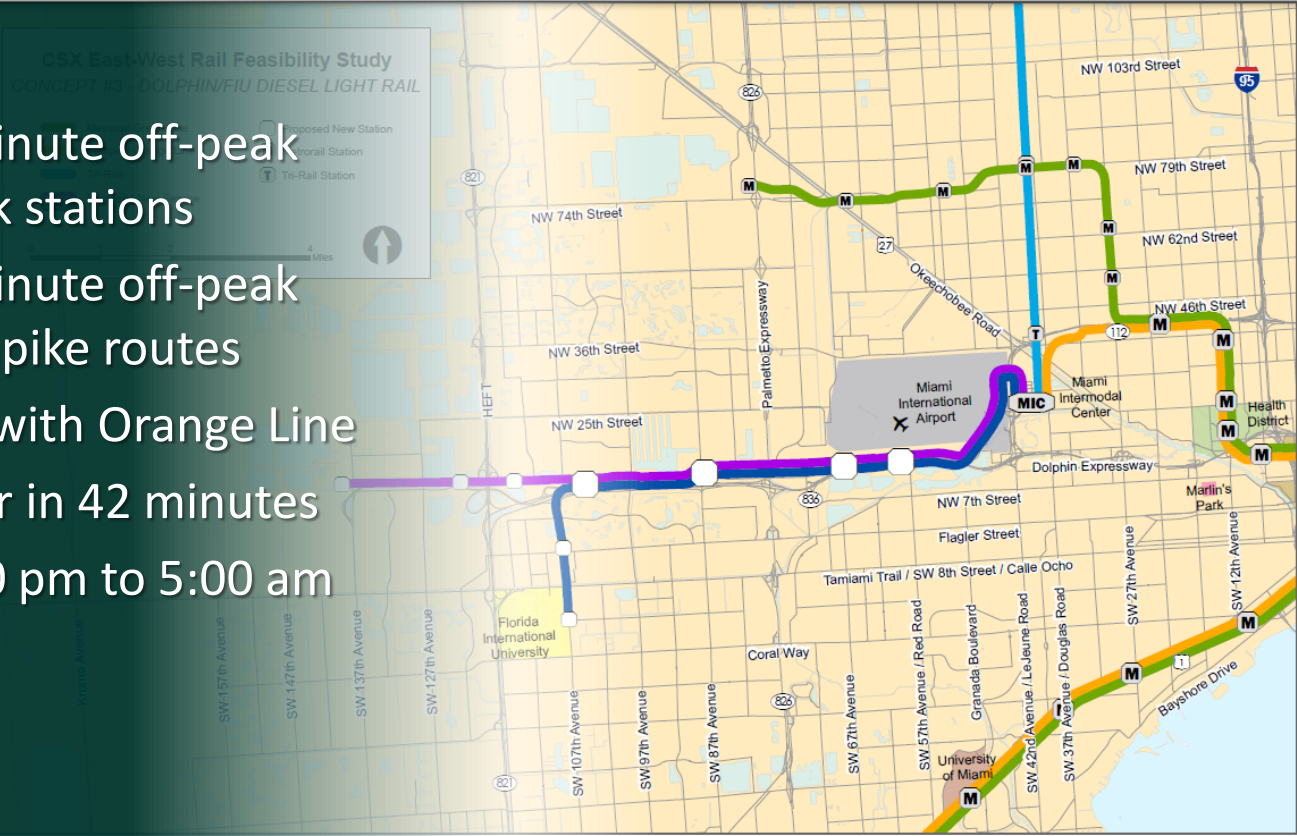
- “Turnpike” route - 11 miles between 137<sup>th</sup> Avenue and MIC
- “FIU” route - 10 miles between FIU and MIC with 2.2 mile branch south along median of 107<sup>th</sup> Avenue
- Branch along 107<sup>th</sup> Avenue could be single track to reduce impacts on roadway traffic



# 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

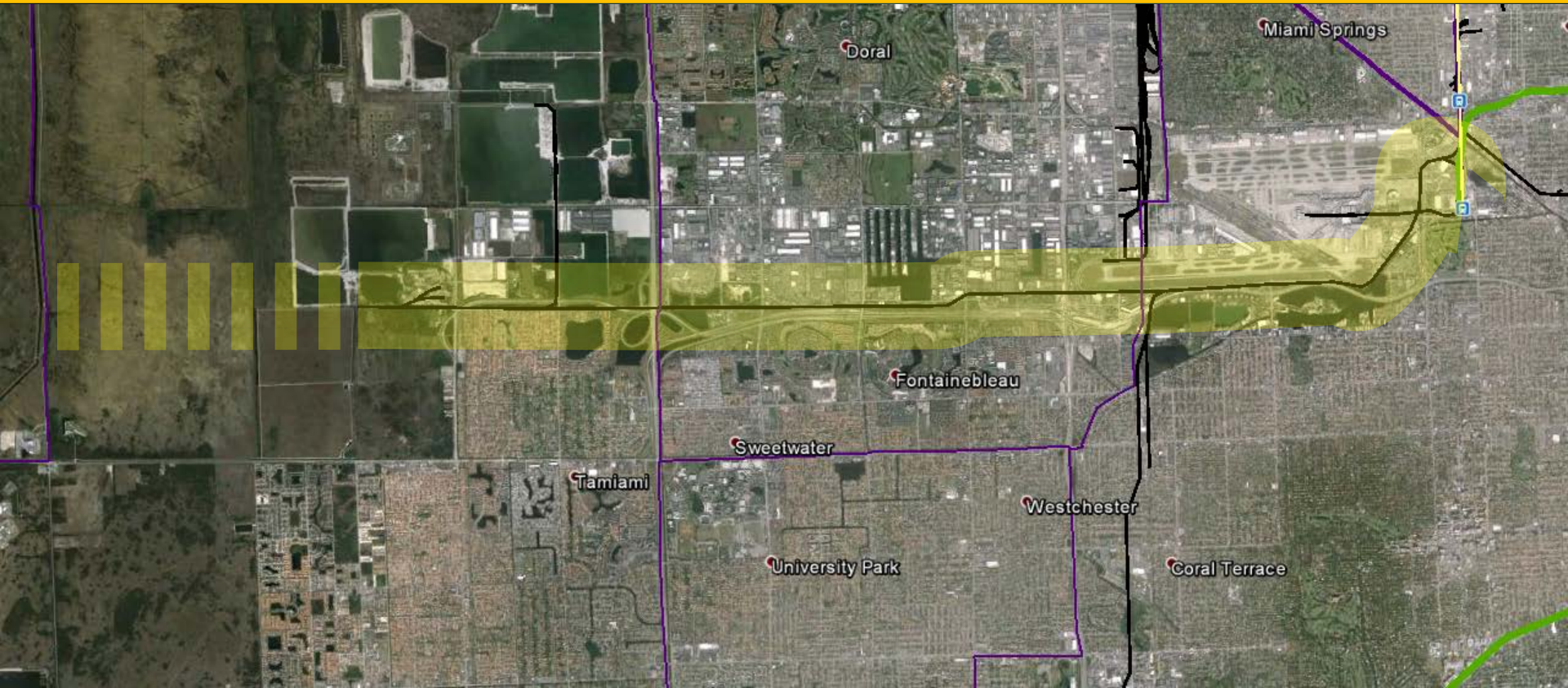
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# Discussion

- 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

## CSX East-West Rail Feasibility Study

### **Project Overview**