

# District One Rail Traffic Evaluation Study

TPO Update  
February 12, 2009

[www.fdotrailtrafficevaluation.com](http://www.fdotrailtrafficevaluation.com)

FDOT Rail Traffic Evaluation



# Agenda

- Scope and Purpose of Study
- Preliminary Findings
  1. Identify Impacts / Potential Mitigation
  2. Evaluate Freight Routing
  3. Passenger Rail Feasibility Assessment



# Scope of Work

## Four Work Elements

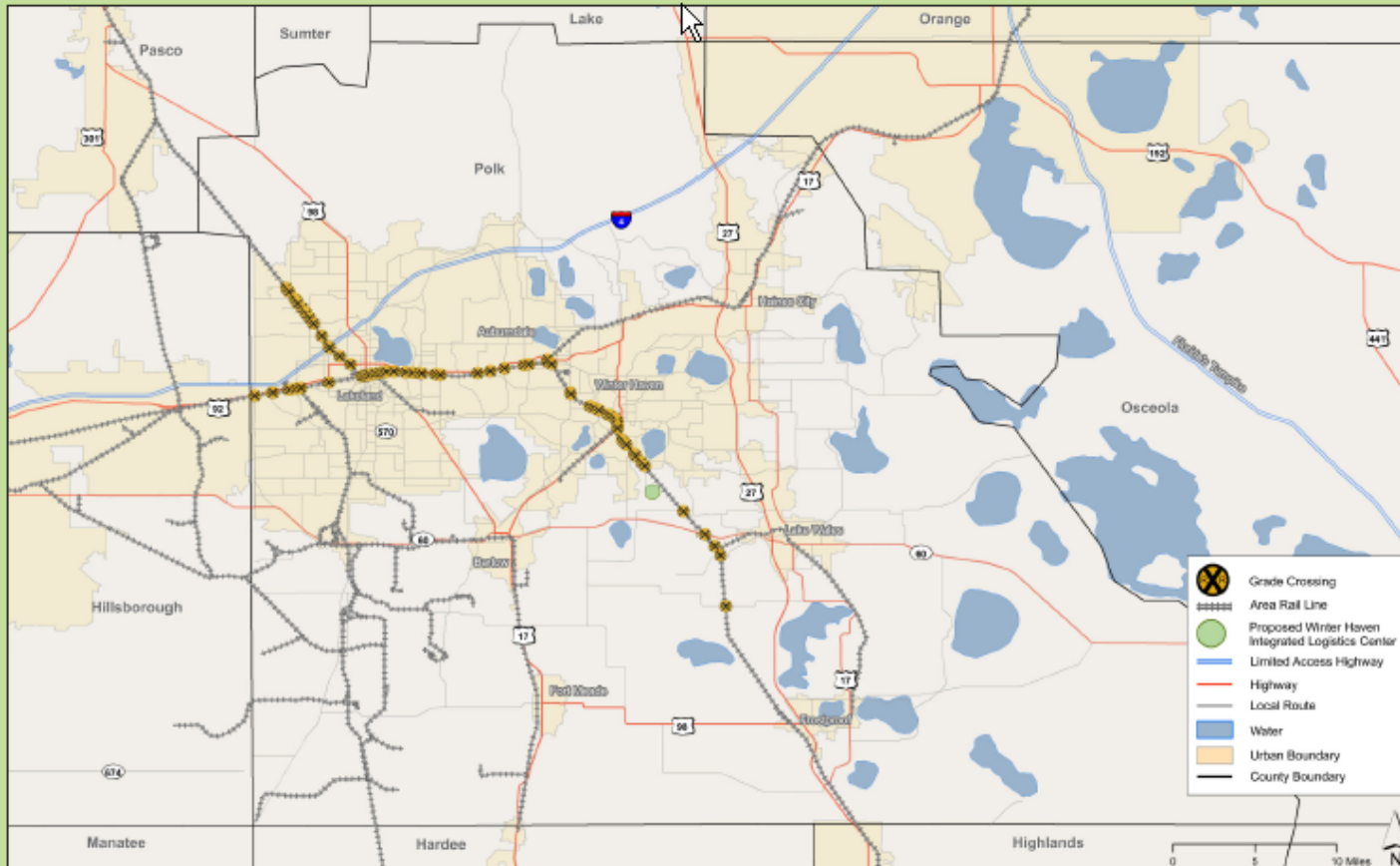
1. Identify Impacts / Identify Potential Mitigation
2. Evaluate Freight Routing
3. Passenger Rail Feasibility Assessment
4. Public/Stakeholder Outreach

# Traffic Impacts and Potential Mitigation



# Study Area

## Grade Crossing Overview



Source: FDOT, Polk TPO, ESRI Data

### 75 Grade Crossings Under Evaluation



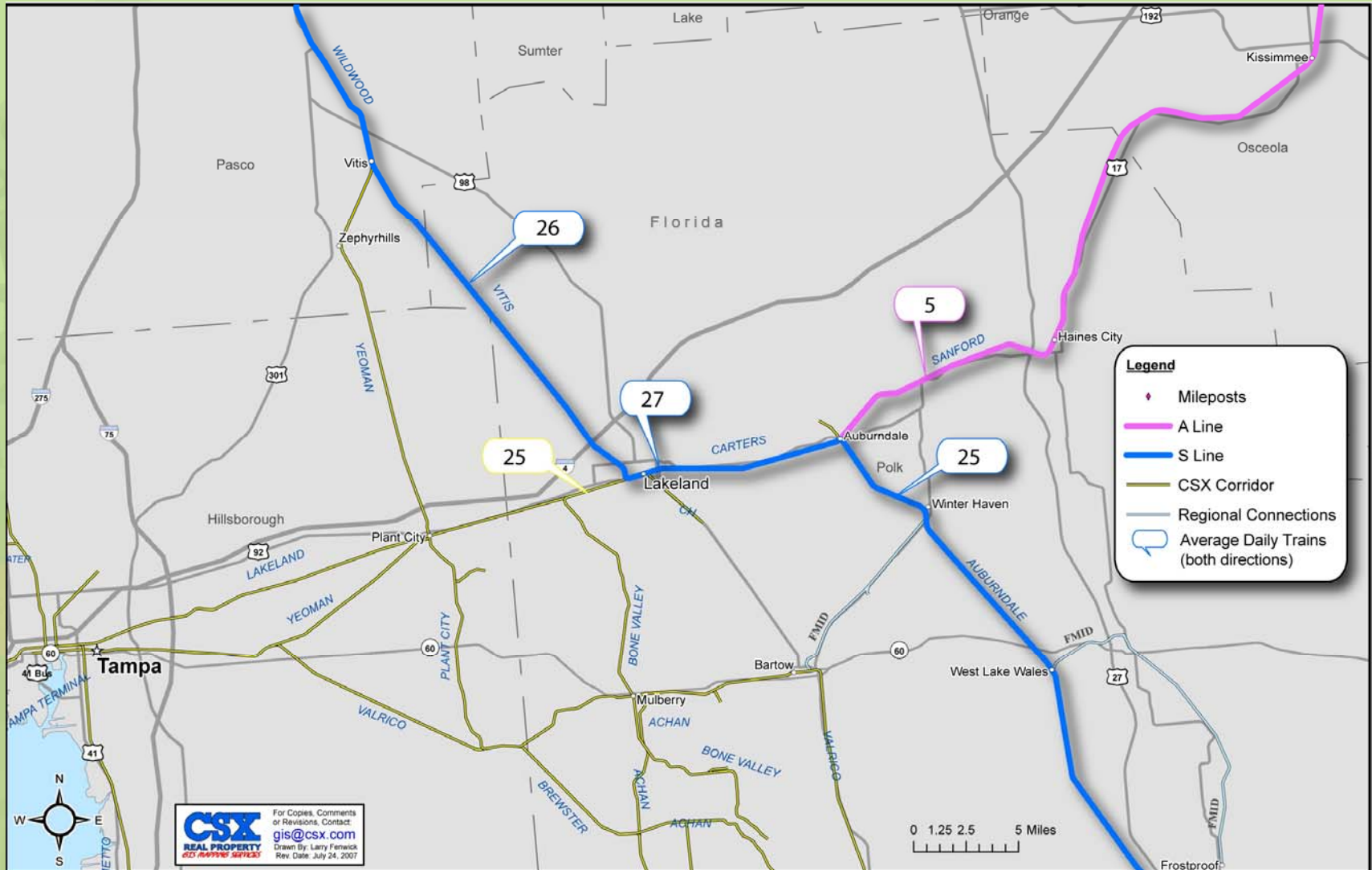
# Identify Impacts / Develop Potential Mitigation

- Existing Conditions (2008)
- Future Conditions (2030) Analysis
  - Without Freight Relocation
  - With Freight Relocation
- Identify Potential Mitigation Strategies





# 2030 (Forecasted) Train Movements





# Findings

- 3 Locations Will Experience Level of Service Changes in 2030
  - 10<sup>th</sup> Street (Lakeland)
    - Level of Service D to F
  - Lake Shipp Drive (Winter Haven)
    - Level of Service D to E
  - McKean Street (Winter Haven)
    - Level of Service D to F

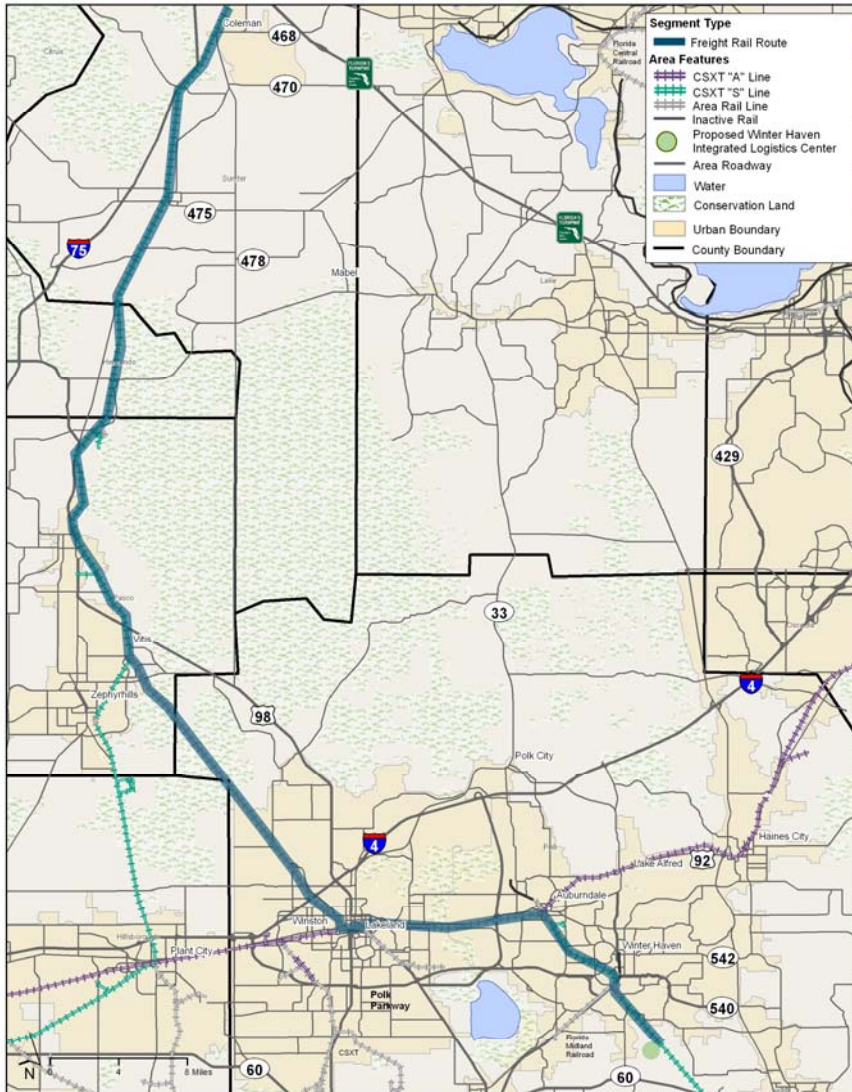
# Freight Rail Routing



# Corridor Relocation

- Opportunities and Constraints
  - Underutilized / Abandoned Rail ROW's
  - Utility Corridors
  - Transportation Corridors
- Freight Operations
- Land Use Considerations
- Costs

# Current Plan



Source: Bureau of Transportation Statistics National Transportation Atlas Database; FDOT, FDEP, ESRI Data

Freight Rail Routing  
Rail Traffic Evaluation  
November 2008

- Total Mileage - 79
- ROW Needed - 0
- Grade Crossings
  - 107 (Existing)
- Adjacent Developed Areas
  - Lakeland
  - Auburndale
  - Winter Haven

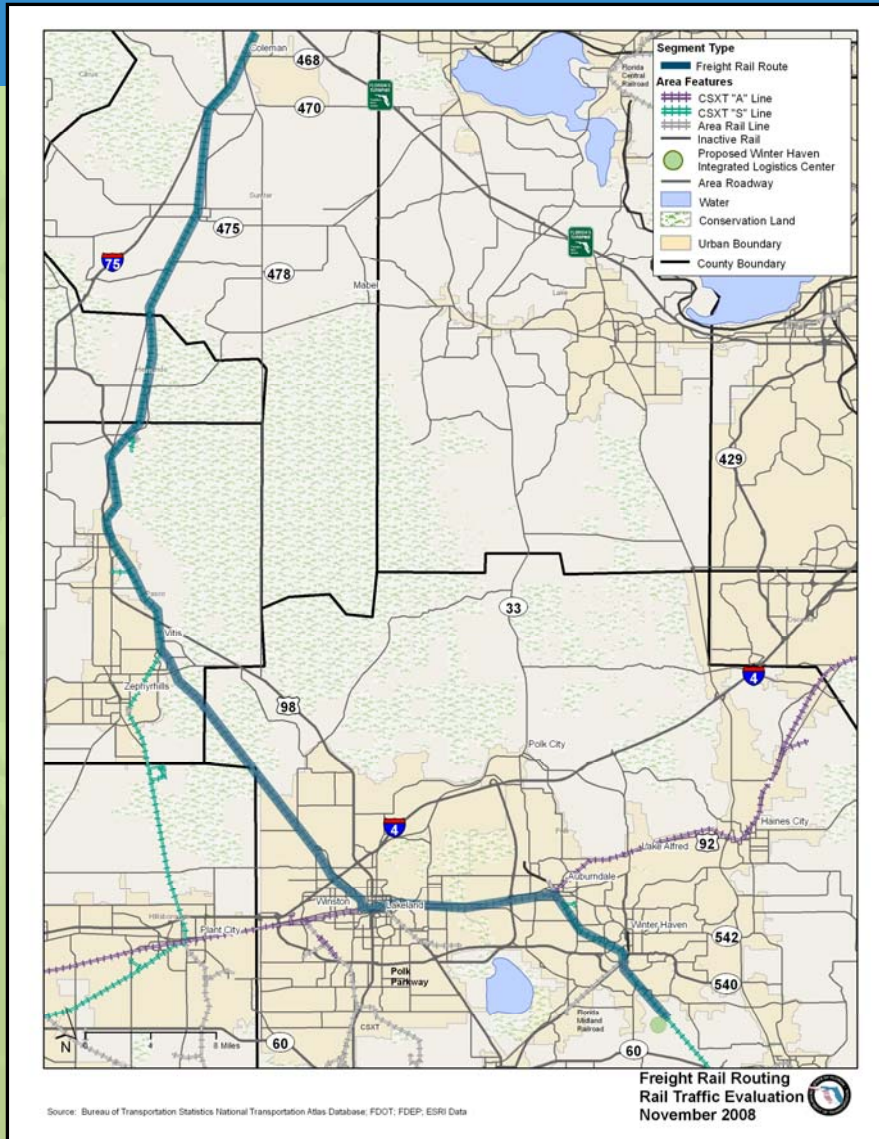
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Florida Department of Transportation

# Current Plan



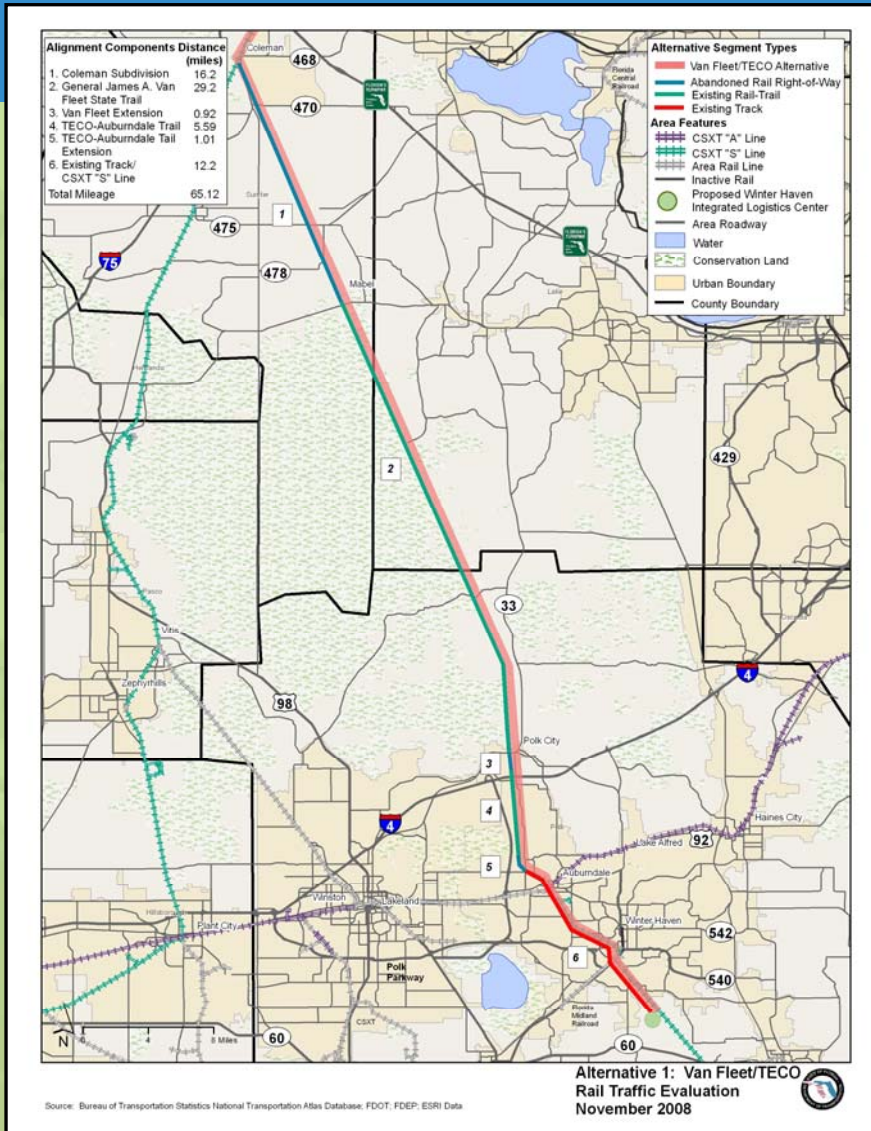
- **Advantages**
  - No ROW Acquisition
  - Uses Existing Rail Corridor
  - Quiet Zone – downtown Lakeland
  - Operating Improvements - Lakeland
- **Disadvantages**
  - Freight Traffic – downtown Lakeland
  - 2010/2011 Increase by 4 Trains
  - 2030 Forecast Additional 7 Trains

# Alternatives Under Evaluation





# Alternative 1: Van Fleet / TECO



## Advantages

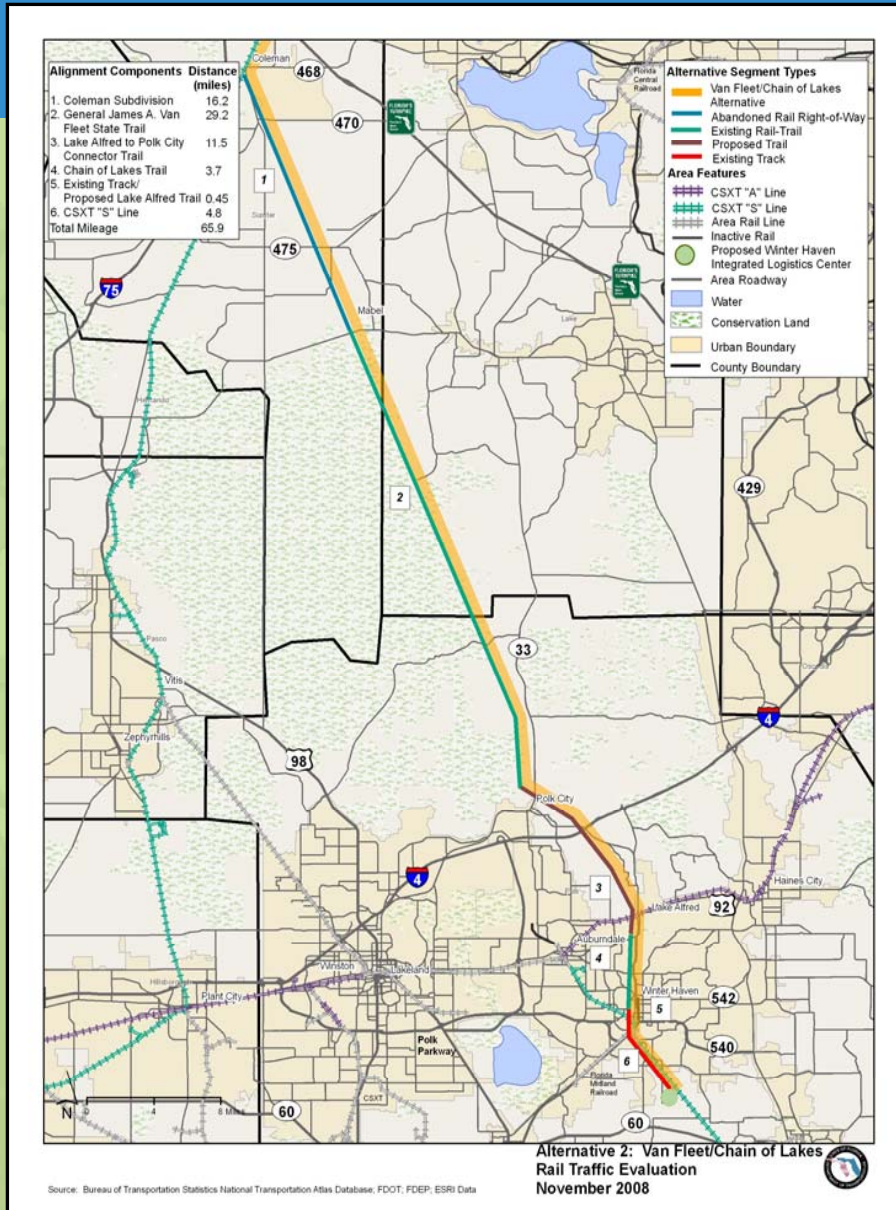
- Shorter Travel Distances
- Lower Operating Costs
- Less Grade Crossings
- Some Future Trains Rerouted from downtown Lakeland

## Disadvantages

- Extensive ROW Acquisition
- Higher Infrastructure Needs
- Grade Separations
- Parkland Impacts
  - Van Fleet / TECO Trails
  - Lake Myrtle Park / Sports Complex



# Alternative 2: Van Fleet/Chain of Lakes



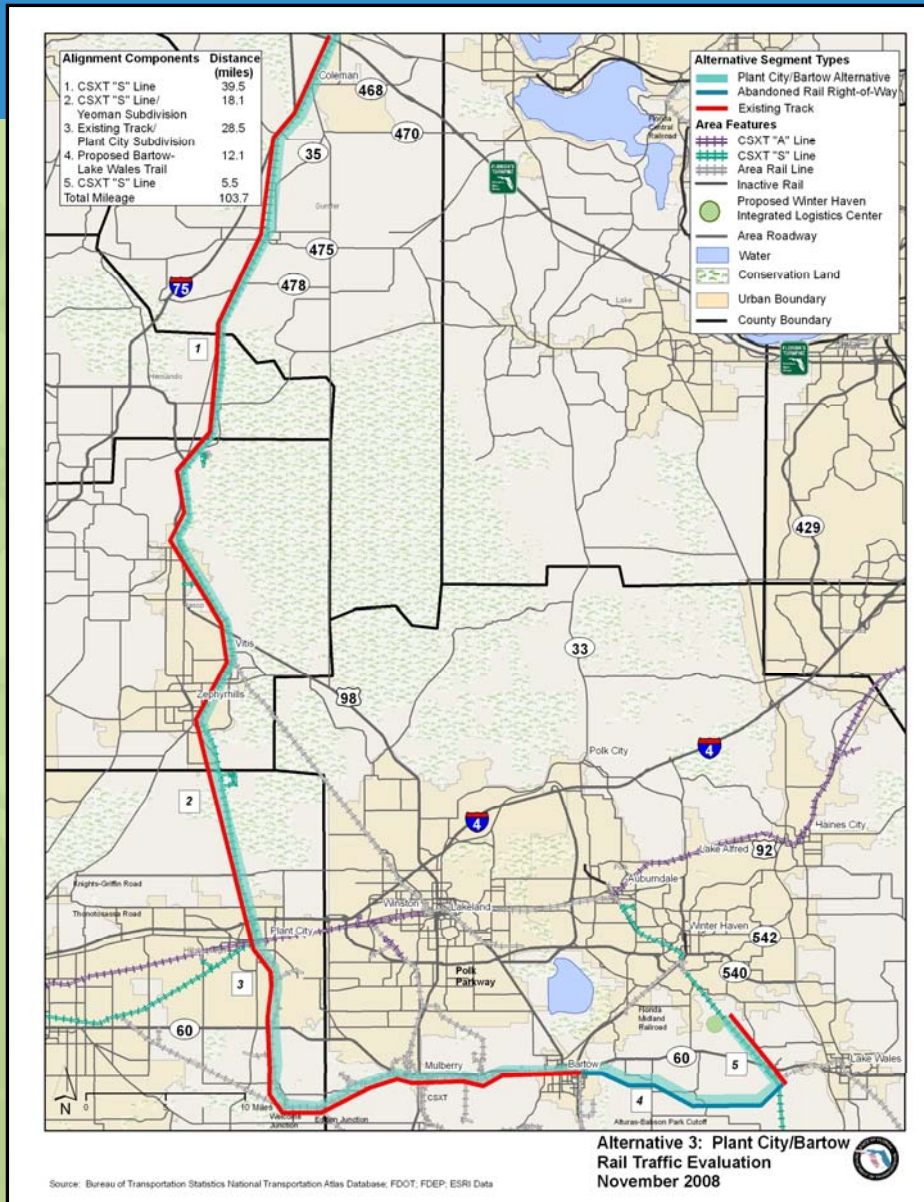
## Advantages

- Shorter Travel Distances
- Lower Operating Costs
- Less Grade Crossings
- Some Future Trains Rerouted from downtown Lakeland

## Disadvantages

- Extensive ROW Acquisition
- High Infrastructure Needs
- Grade Separations
- Parkland Impacts
  - Van Fleet / TECO Trails
  - Chain of Lakes Trail

# Alternative 3: Plant City / Bartow



## Advantages

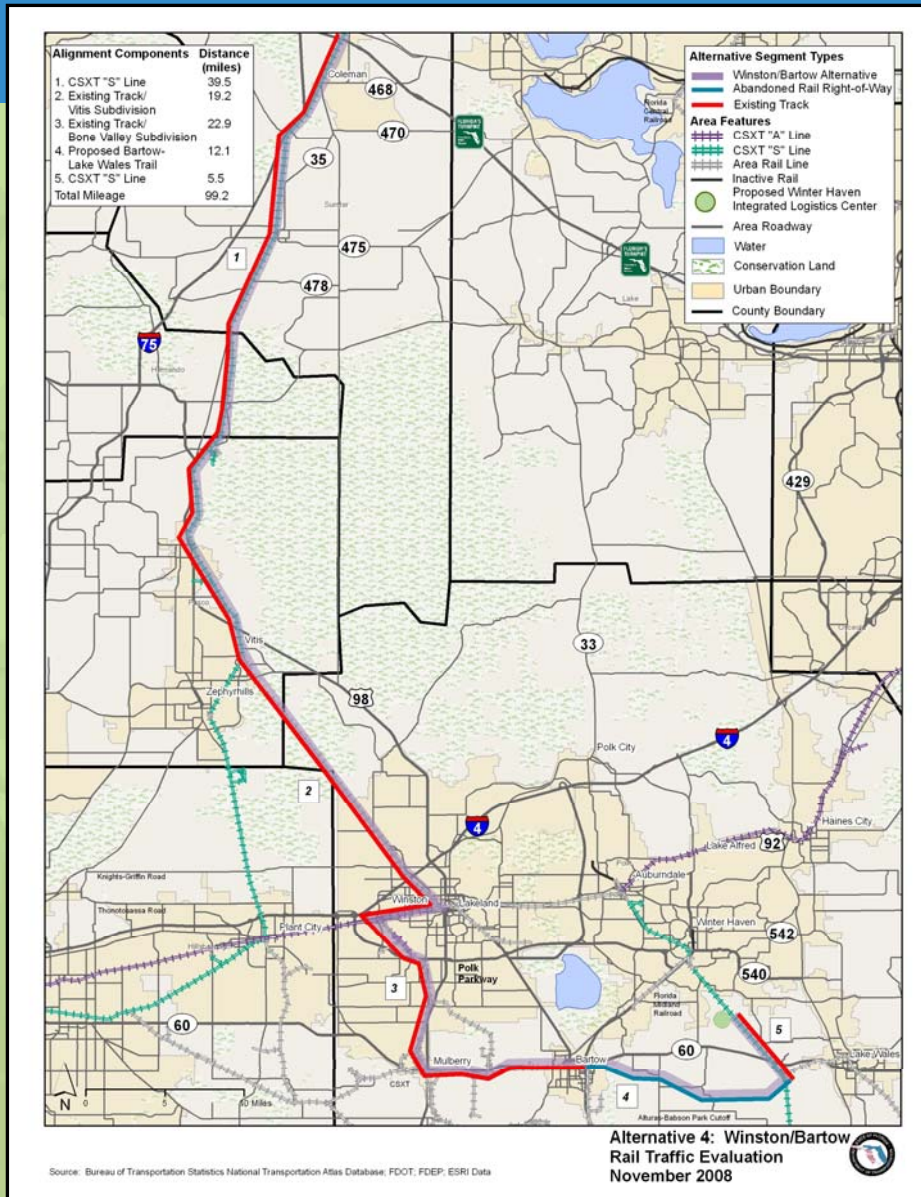
- Some Future Trains Rerouted from downtown Lakeland
- Moderate ROW Acquisition

## Disadvantages

- Longer Travel Distances
- Higher Operating Costs
- CSX Operational Concerns
- High Infrastructure Needs
- Grade Separations
- More Grade Crossings
- Complex Operating Environment
  - Plant City
  - Bone Valley Phosphate Trains



# Alternative 4: Winston/Bartow



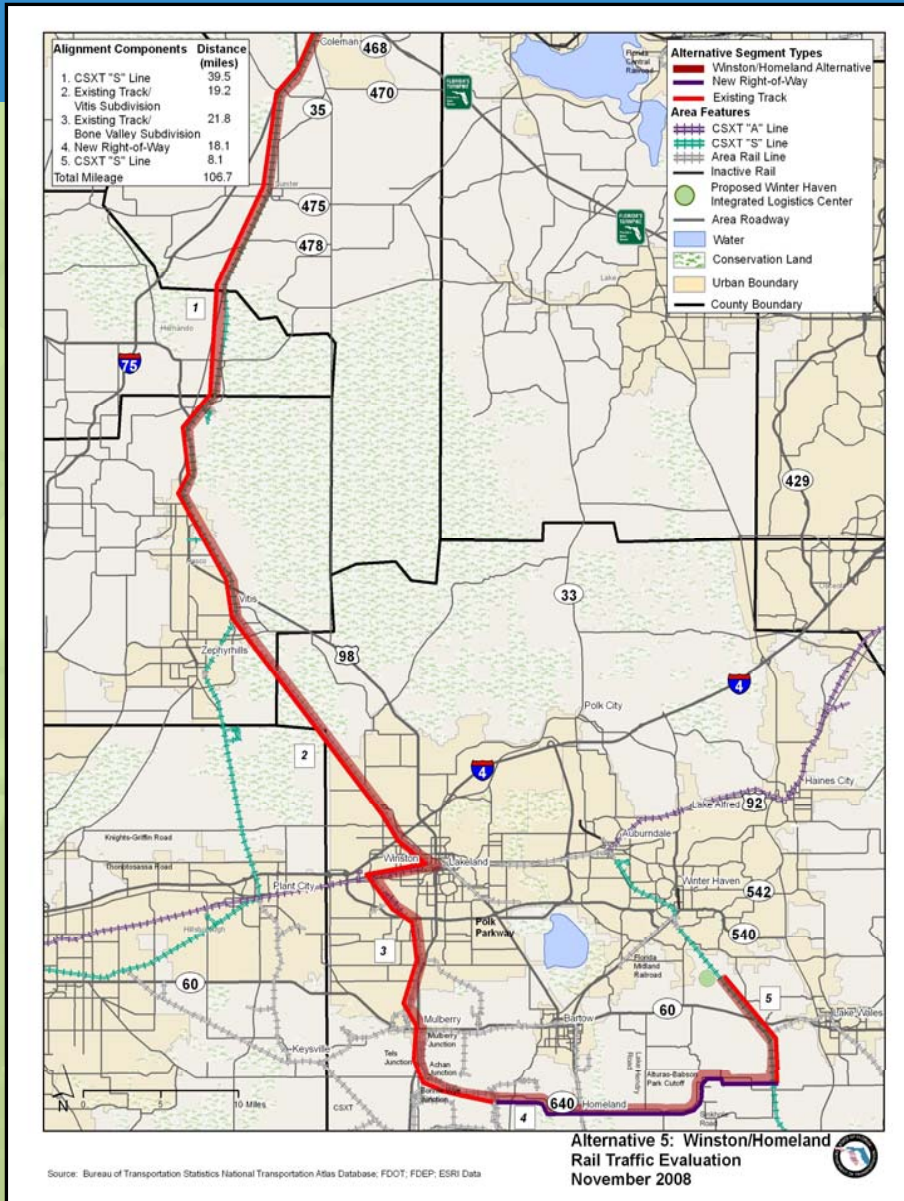
## Advantages

- Some Future Trains Rerouted from downtown Lakeland
- Moderate ROW Acquisition

## Disadvantages

- Longer Travel Distances
- Higher Operating Costs
- CSX Operational Concerns
- High Infrastructure Needs
- Grade Separations
- More Grade Crossings
- Complex Operating Environment
  - Winston Yard / Bone Valley

# Alternative 5: Winston / Homeland



## Advantages

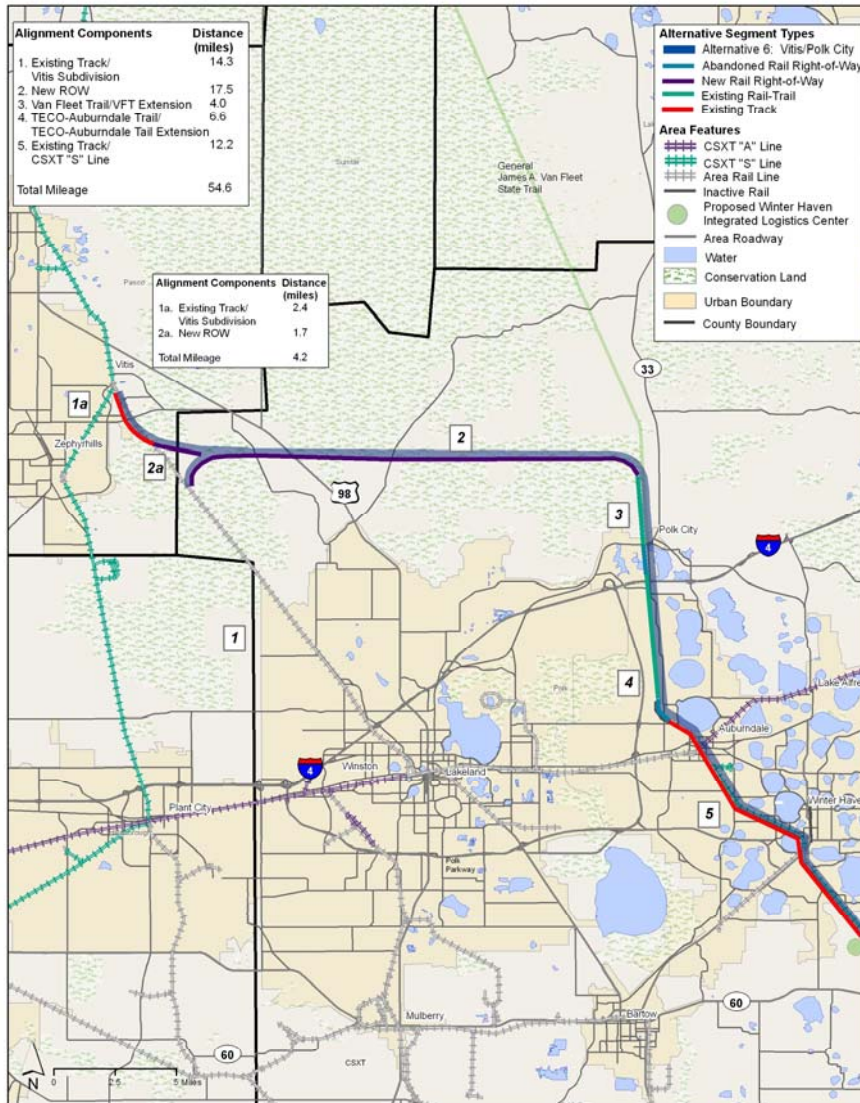
- Some Future Trains Rerouted from downtown Lakeland
- Moderate ROW Acquisition

## Disadvantages

- Longer Travel Distances
- Higher Operating Costs
- CSX Operational Concerns
- High Infrastructure Needs
- Grade Separations
- More Grade Crossings
- Complex Operating Environment
  - Winston Yard / Bone Valley



# Alternative 6: Vitas / Polk City



Alternative 6: Vitas/Polk City  
FDOT District One  
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Source: Bureau of Transportation Statistics National Transportation Atlas Database; FDOT, FDEP, ESRI Data

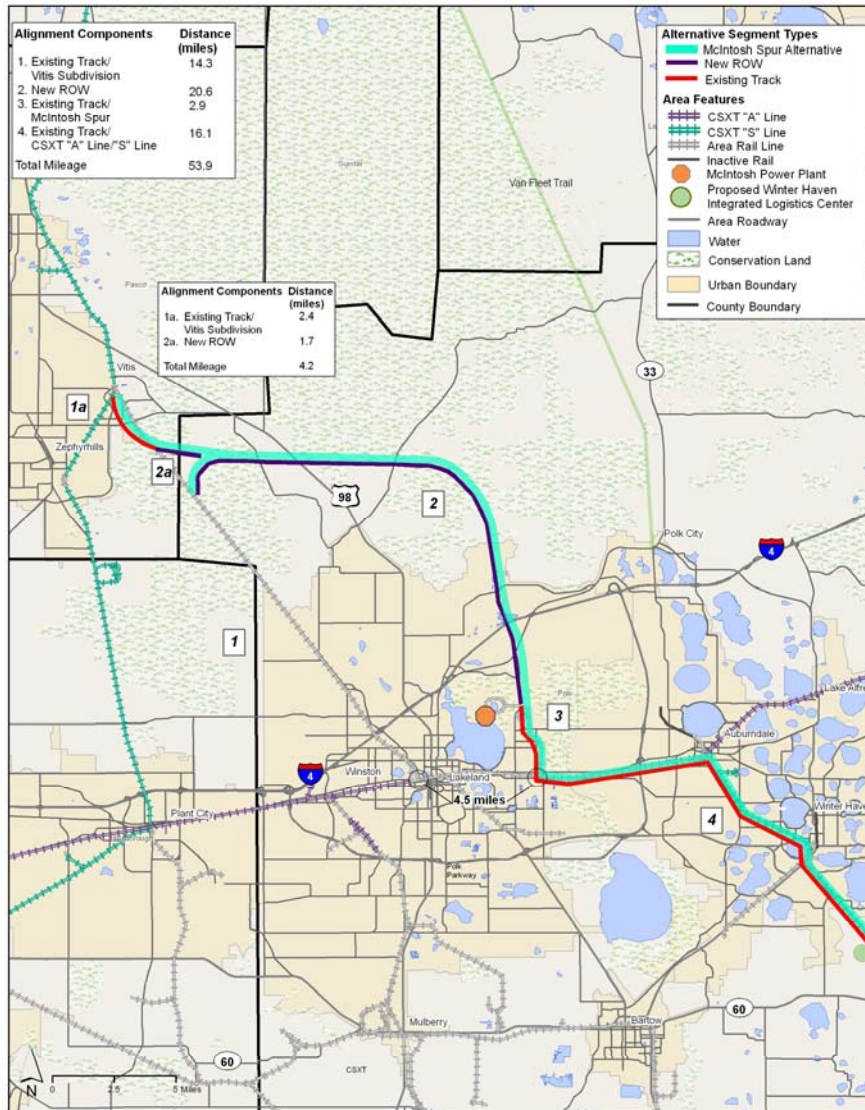
## Advantages

- Some Future Trains Rerouted from downtown Lakeland

## Disadvantages

- CSX Operational Concerns
- High Infrastructure Needs
- Environmental Challenges
- Parkland Impacts
  - TECO Trail
  - Lake Myrtle Park / Sports Complex

# Alternative 7: McIntosh Spur



## Advantages

- Some Future Trains Rerouted from downtown Lakeland

## Disadvantages

- CSX Operational Concerns
- High Infrastructure Needs
- Environmental Challenges

Alternative 7: McIntosh Spur  
FDOT District One  
Rail Traffic Evaluation Study

Source: Bureau of Transportation Statistics National Transportation Atlas Database; FDOT; FDEP; ESRI Data



# Common Issues - All Relocation Alternatives

- Freight Continues to Operate Through Downtown Lakeland
  - Local trains continue to operate on the “A” and “S” Lines
  - Through trains would divert to an alternate route
- Infrastructure Improvements Still Required on “S” Line
- Shifts Community Impacts
- Significant Infrastructure Costs
- Property Acquisition Required



# Passenger Rail Feasibility



# Passenger Rail Service

- Identify Passenger Rail Needs within Polk County
- Opportunities and Constraints
  - Orlando Metropolitan Area Plans
  - TBARTA Planning
  - Regional Plans
- Macro Level Analysis
  - Demand Forecasting (Ridership Analysis)
  - Operations Planning
  - Costing
  - Socioeconomic / Environmental Considerations

# Passenger Rail Alternatives Tested (2030)



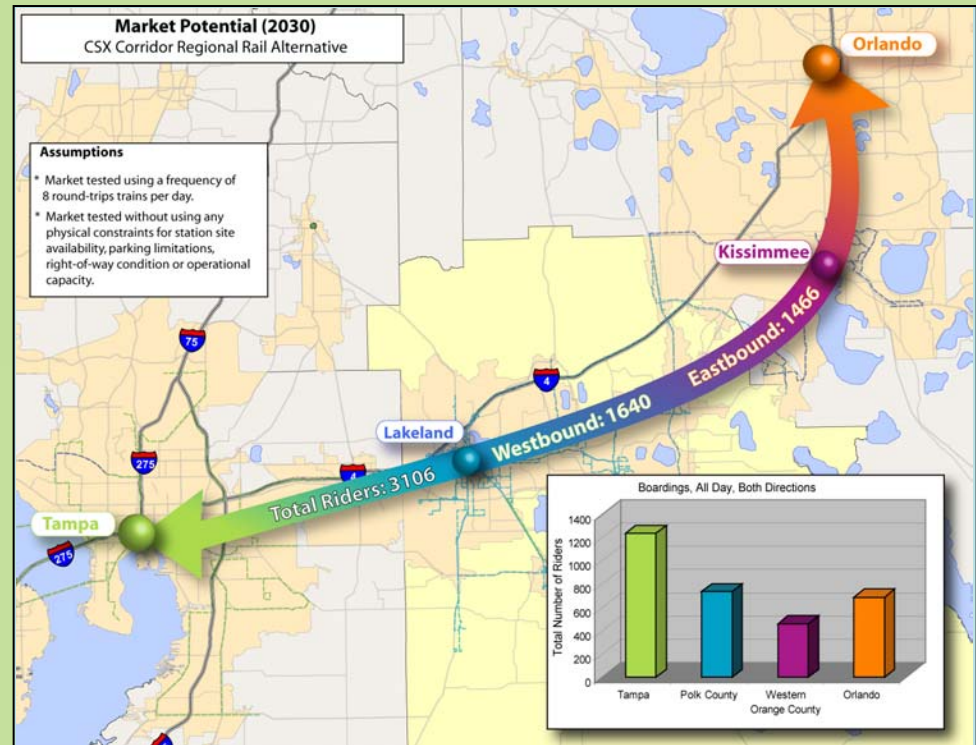
# CSX Corridor Regional Rail Alternative

## Opportunities

- Existing rail right-of-way
- Existing rail stations
- Serves established town centers

## Challenges

- Coordination of freight and passenger service
- Coordination with SunRail service



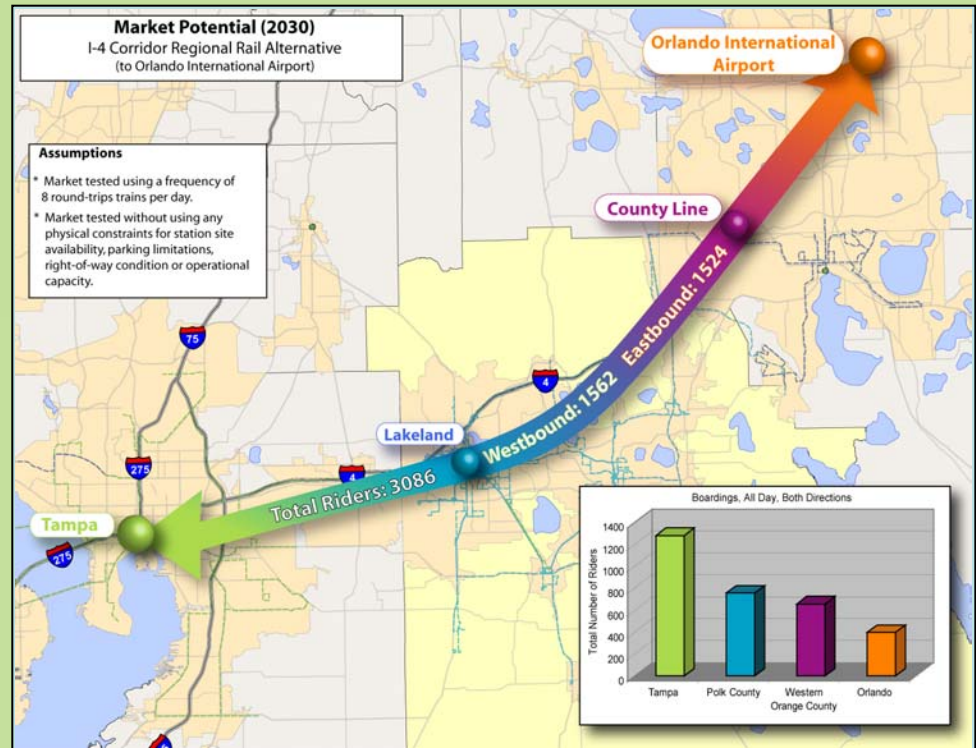
# I-4 Airport Regional Rail Alternative (to Orlando Central Business District via CSX)

## Opportunities

- Median of I-4 has been reserved for high-capacity transit service
- Potential for regional park & ride
- Existing rail right-of-ways to Tampa and Orlando downtowns

## Challenges

- Sections along I-4 could be isolated from established communities
- Connect I-4 median into downtown Orlando and Tampa
- Coordination with freight and passenger service
- Extensive capital investment required





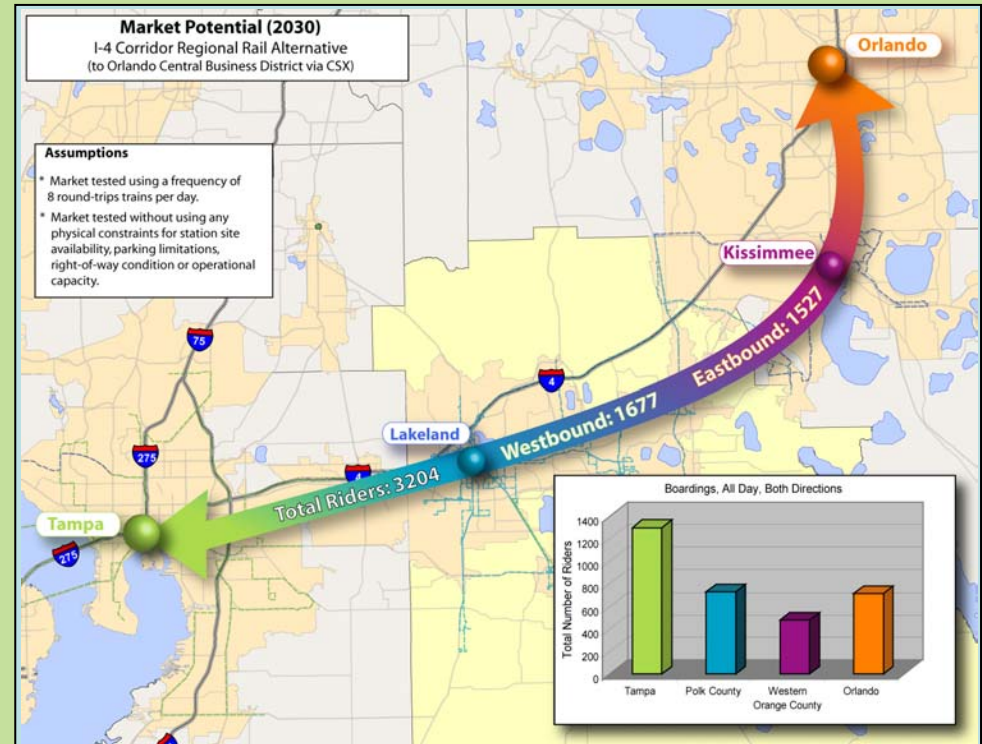
# I-4 Corridor Regional Rail Alternative (to Orlando Airport)

## Opportunities

- Median of I-4 has been reserved for high-capacity transit service
- Potential for regional park & ride

## Challenges

- Sections along I-4 could be isolated from established communities
- Right-of-way acquisition between I-4 and the airport
- Coordination with passenger and freight rail



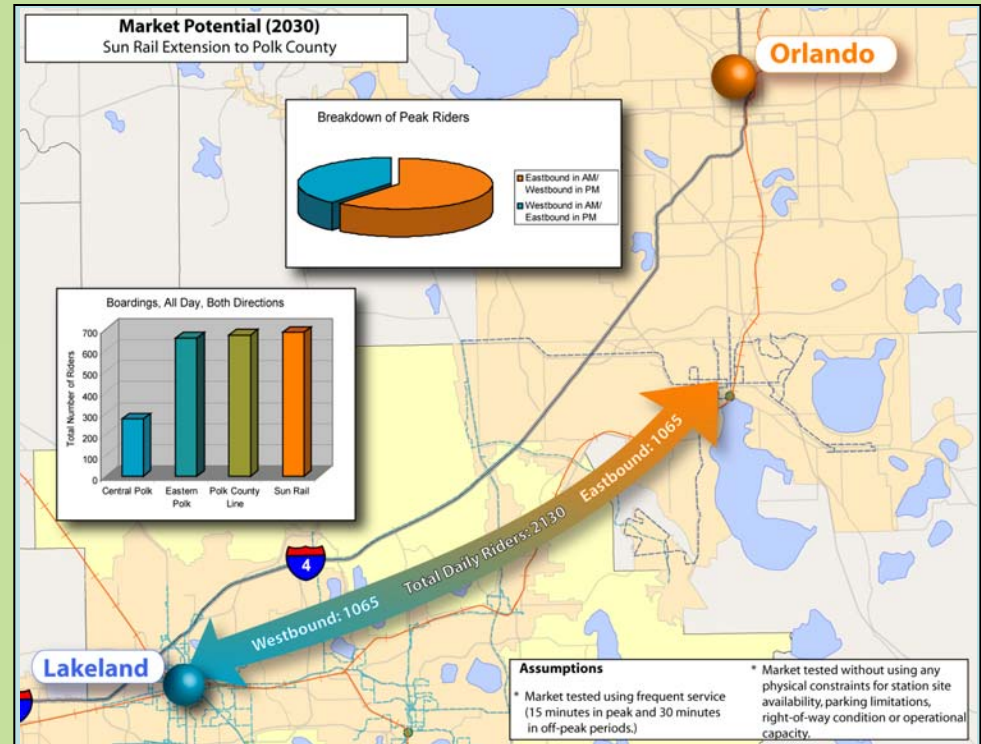
# SunRail Extension to Polk County

## Opportunities

- Existing rail right-of-way
- Builds off investment in SunRail systems, expanding regional benefits

## Challenges

- Coordination with freight and passenger service
- Coordination with proposed SunRail operations
- Grade crossings





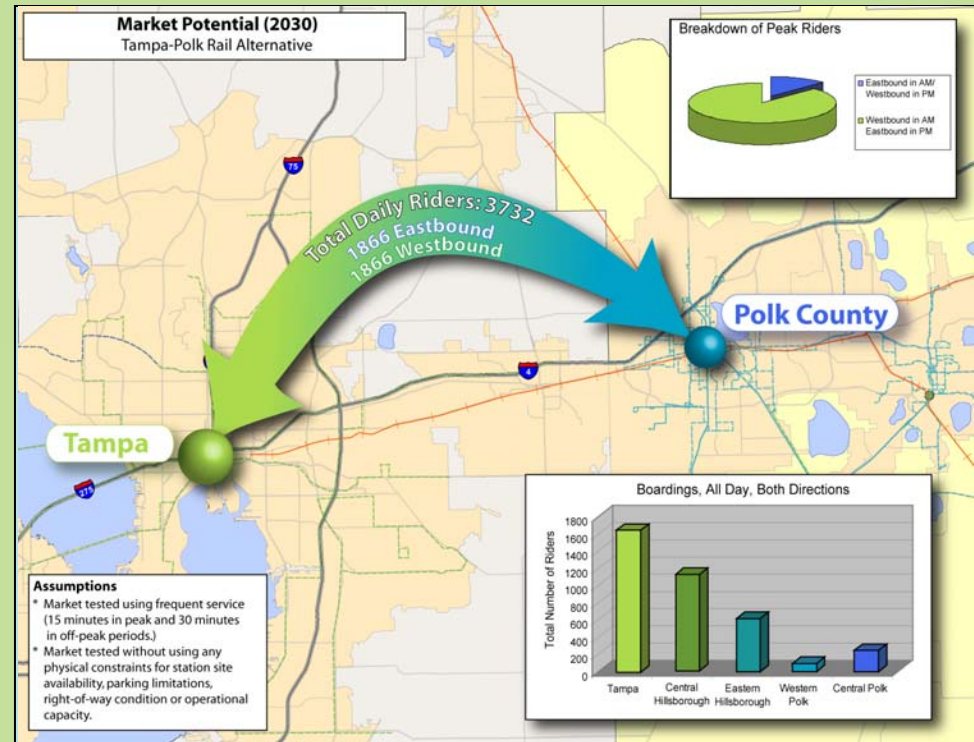
# Tampa-Polk Alternative

## Opportunities

- Existing rail right-of-way
- Existing rail stations

## Challenges

- Coordination with freight and passenger service
- Coordination with ongoing TBARTA studies
- Grade crossings



# Schedule & Outreach



# Schedule & Outreach

- Schedule

- February 25, 2009 – Final Workshop-Winter Haven
- March 2009 – Study Complete

- Website [www.fdotrailtrafficevaluation.com](http://www.fdotrailtrafficevaluation.com) for Updates

# Contact The Team

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