Tri-Rail Coastal Link

Miami-Dade
Broward
Palm Beach

Broward Metropolitan Planning Organization
Florida Department of Transportation
Miami-Dade Metropolitan Planning Organization
Palm Beach Metropolitan Planning Organization
Southeast Florida Transportation Council
South Florida Regional Planning Council
South Florida Regional Transportation Authority
Treasure Coast Regional Planning Council

TRCL Project Update

Presented to:

SFRTA Board

June 27, 2014

Getting Southeast Florida to Work

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

Agenda

Capital Costs

Station Planning Process

Project Development Status Update

Next Steps

Capital Costs

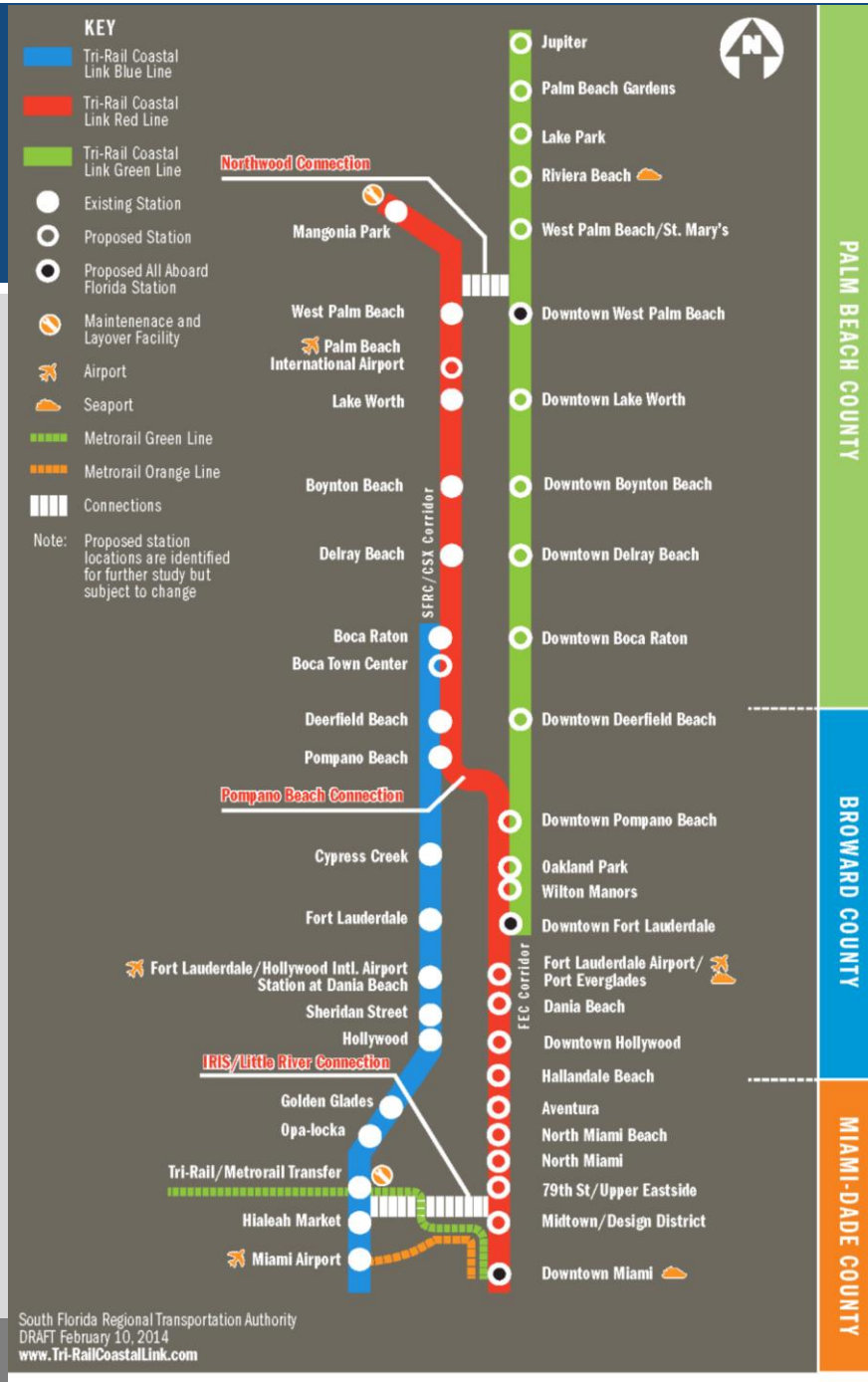
Tri-Rail Coastal Link

Getting Southeast Florida To Work

Miami-Dade · Broward · Palm Beach

Project Description

- New 85-mile commuter rail corridor from Downtown Miami to Jupiter
- TRCL will serve as an integrated extension of the Tri-Rail system
- 25 stations for Project Development evaluation
- Forecast ridership of 25,000 per day
- Shared tracks with FEC freight and AAF
- Three co-located stations with AAF
- Mobility and economic development benefits will accrue in dense urban corridor



Tri-Rail Coastal Link
Getting Southeast Florida To Work

Capital Cost Methodology

Analyze Rail Operations

Existing infrastructure, Tri-Rail, freight rail operations	Proposed AAF infrastructure, AAF and TRCL operations, freight rail

Determine Required Infrastructure & Equipment

Additional infrastructure (beyond proposed AAF infrastructure)	Additional equipment (beyond existing Tri-Rail equipment)

Compute Order of Magnitude Costs

Unit costs from projects bid recently	30% contingency for construction elements

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

Capital Cost Assumptions

- Capital cost of $770-$850 million (2013$) for Build Alternative
  - Assumes AAF is in place before TRCL
  - Includes stations, parking (except in CBDs), vehicle allowance
  - Excludes pedestrian bridges and new maintenance facilities
  - Anticipated capital cost split: 50% federal, 25% state, 25% local

- Issues likely to impact capital cost as project develops:
  - AAF
  - Changes to TRCL operating plan
  - Additional stations
  - Access fee (if capitalized)
  - Right-of-Way needs
  - Environmental mitigation
  - Inflation

Tri-Rail Coastal Link
Getting Southeast Florida To Work

Miami-Dade
Broward
Palm Beach

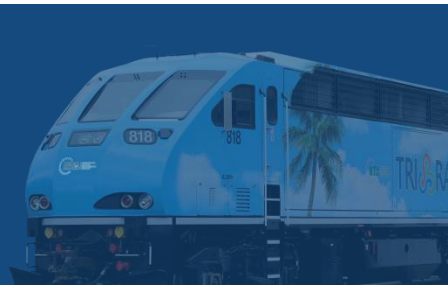
Capital Cost Breakdown

Category	Range (2013$ million)
Trackwork, Sitework, Systems	$210-225
Stations	$65-75
Engineering & Professional Services	$85-95
Vehicles	$60-70
Contingency	$70-85
Right-of-Way	$280-300
Total	**$770-850**

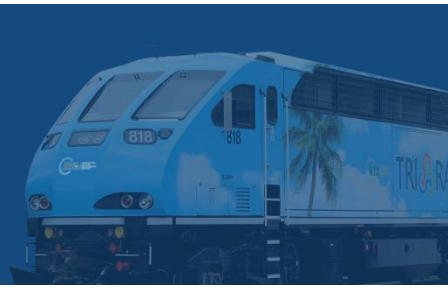
Costs to be refined as environmental assessment and engineering design tasks are completed in Project Development Phase

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

Capital Cost Refinement



- During PD and beyond per standard industry practice
  - Independent cost review in summer 2014
  - FDOT R/W cost analysis
  - Develop Risk Register during PD
  - FDOT Value Engineering review during PD
  - FTA Risk Assessment during Engineering Phase
  - Quantities, unit costs, risk factors and contingencies will be refined throughout PD, Engineering, ROW acquisition and Construction phases



Station Planning Process

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

GOAL:
A Balance of Access and Travel Time

Purpose of this Phase of the Project:

Develop a "cost-effective" system
for the 85-mile corridor
that can be approved by FTA
to move into the next phase
of the project (Project Development)

Station Refinement Process to Date

PHASE 3 REFINEMENT PROCESS

Phase 1 + 2 Station Evaluation >>52 Stations

Fatal Flaw Screening

Local coordination

Initial ridership modeling and operations simulations

Early Phase 3 Station Evaluation >> 36 Stations

Initial Evaluation Criteria Screening

Local coordination

More detailed ridership modeling and operations simulations

20 Recommended Stations

Key Refinement Factors:

- High **preliminary ridership** to support implementation, cost feasibility, and mobility benefits
- Provides **optimal station spacing** for service operations (2.5 – 5 mi)
- Minimize proximity to **existing Tri-Rail Stations**
- Direct **access to regional or sub-regional transportation** network (car, bus, other rail)
- Supportive surrounding **land use** and future land use designations

Future Infill Stations

Potential infill implementation

Extensive System (Local + Express)

Future System (Startup + Future Infill)

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

Station Evaluation Criteria

STATION EVALUATION CRITERIA

STATION CHARACTERISTICS
- Typology
- Distance to adjacent stations

PURPOSE AND NEED
- Projected weekday ridership
- Transit dependent households
- Population density within ½ mile
- Employment density within ½ mile
- Area within 10-minute driveshed
- Intermodal connectivity

SUPPORTIVE LAND USE + TOD POTENTIAL
- Acres within 10-minute walkshed
- Future Land Use compatibility
- FLU/Acres of potential TOD change
- SF of potential TOD change
- Market trends ranking
- CRA
- Recent/approved development
- Comp plan / zoning support

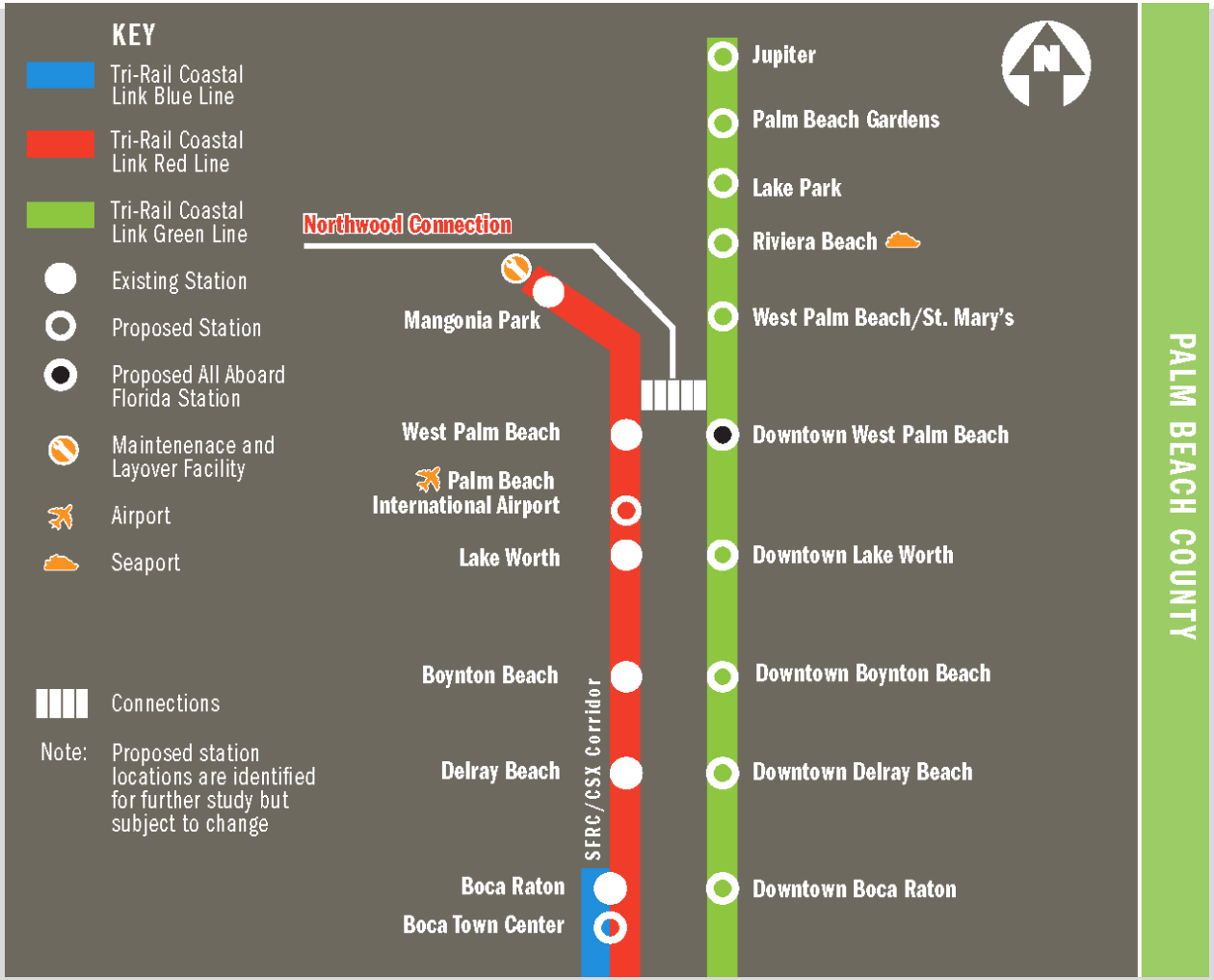
STATION COST AND FEASIBILITY
- Existing grade crossing
- Station access constraints
- Grade separation for station anticipated
- FEC owned/local jurisdiction property
- Impaces FEC exist/plan freight ops
- Available ROW for station/parking
- Substantial environmental impact
- Estimated station cost
- Local funding commitments
- Other considerations

Consistently and Fairly Applied to All Stations Throughout Evaluation

Tri-Rail Coastal Link
Getting Southeast Florida To Work

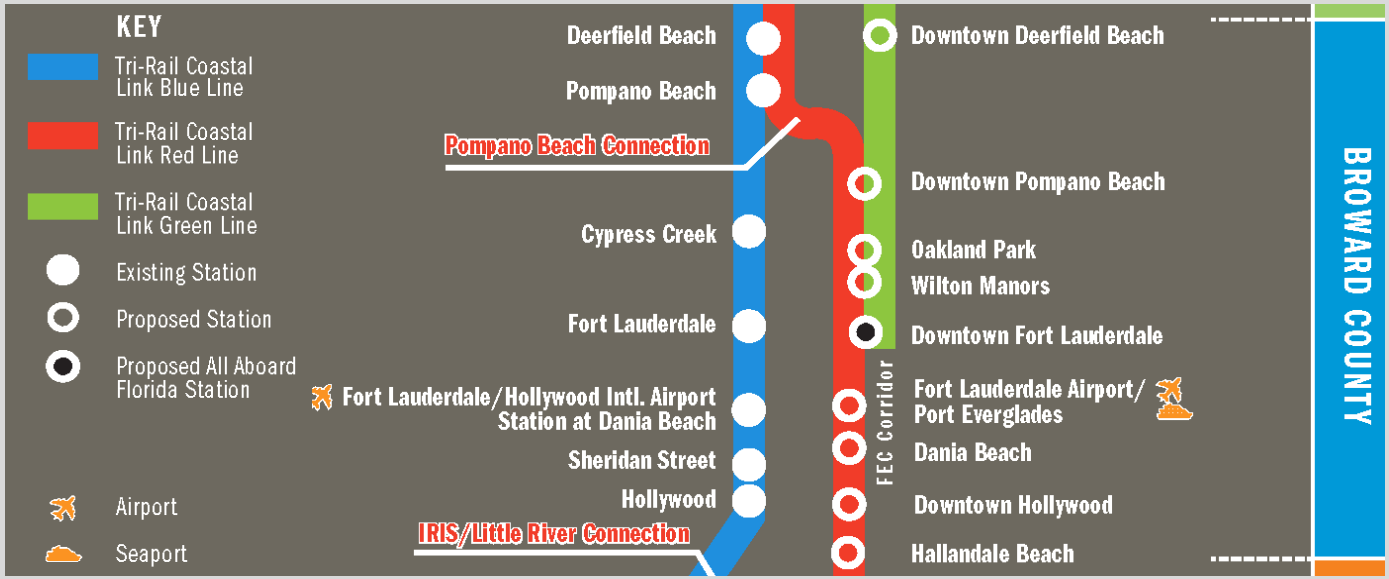
Miami-Dade
Broward
Palm Beach

Station Recommendations: Palm Beach County



Tri-Rail Coastal Link
Getting Southeast Florida To Work

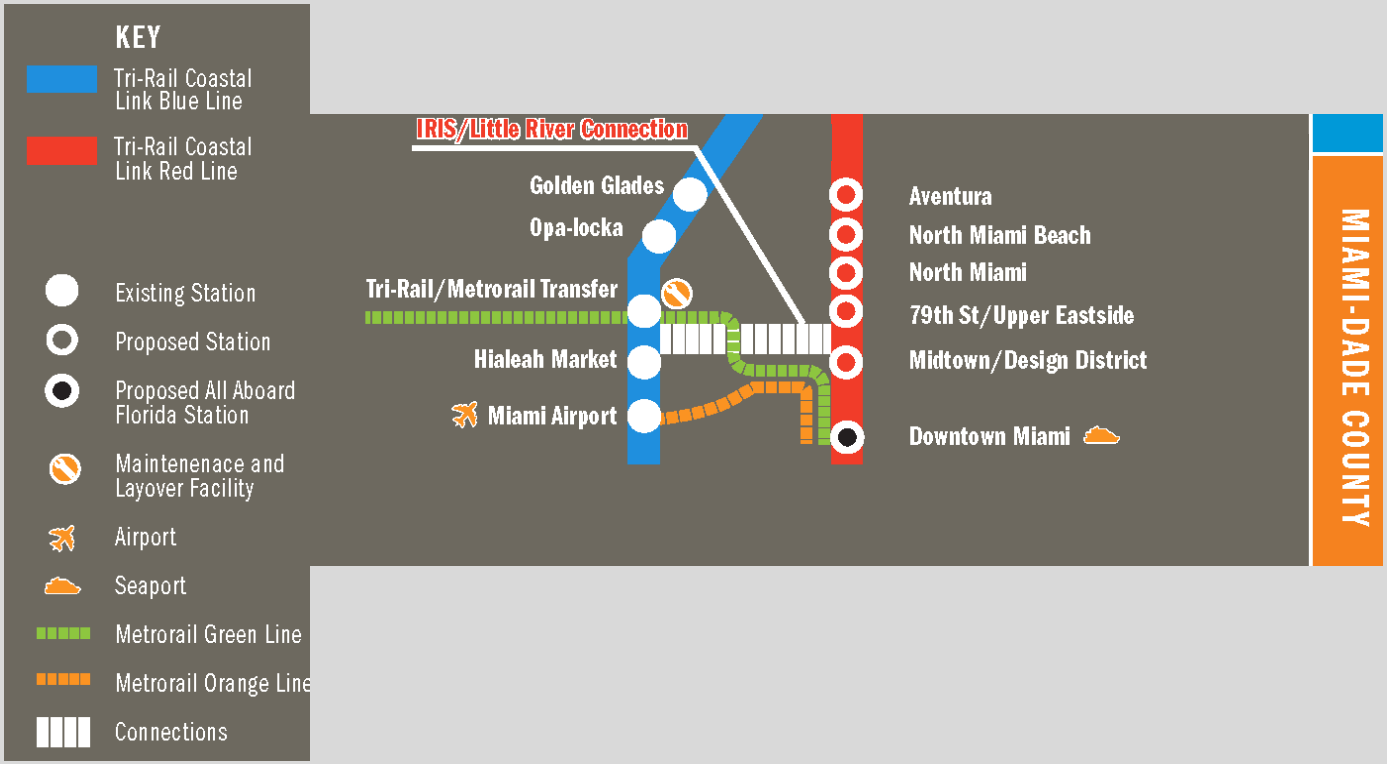
Station Recommendations: Broward County



Tri-Rail Coastal Link
Getting Southeast Florida To Work

Miami-Dade
Broward
Palm Beach

Station Recommendations: Miami-Dade County



Station Evaluation During PD & NEPA

Criteria for Station Refinement during PD

- Ridership & Employment
- Population
- Rail Operations
- Vehicular, Pedestrian and Transit Access
- Land Needs and Availability
- Land Use and Economic Development Support + Impacts

Refinement during the initial months of PD

Tri-Rail Coastal Link
Getting Southeast Florida To Work

Miami-Dade
Broward
Palm Beach

Alternate Locations: North Miami Beach Example

Tri-Rail Coastal Link
Getting Southeast Florida To Work

Alternate Locations: Evaluation Process

1. City requests FDOT + SFRTA to evaluate Alternate Location
2. Request from City the details and change in situation since Phase 3 Evaluation
3. Coordination and Technical Review by CMOC and NEPA Team [includes review with City and Developer (if applicable)]
4. Recommendation by CMOC to City, FDOT, and SFRTA
5. Incorporation of new site into NEPA review process [if necessary]

Project Development Status Update

Tri-Rail Coastal Link
Getting Southeast Florida To Work

Project Development – Entry into PD

- Non-compete agreement executed with FECI in April
  - Continuing technical coordination with AAF to access and share tracks
- Resolutions of Support requested by Miami-Dade MPO
  - Approved by Miami, North Miami, North Miami Beach and Aventura
  - Acknowledge that local financial participation will be needed to fund TRCL
  - Commitment by the cities to participate in development of financial plan

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

Project Development – Entry into PD

- FTA concurred with Environmental Assessment (EA) Class of Action

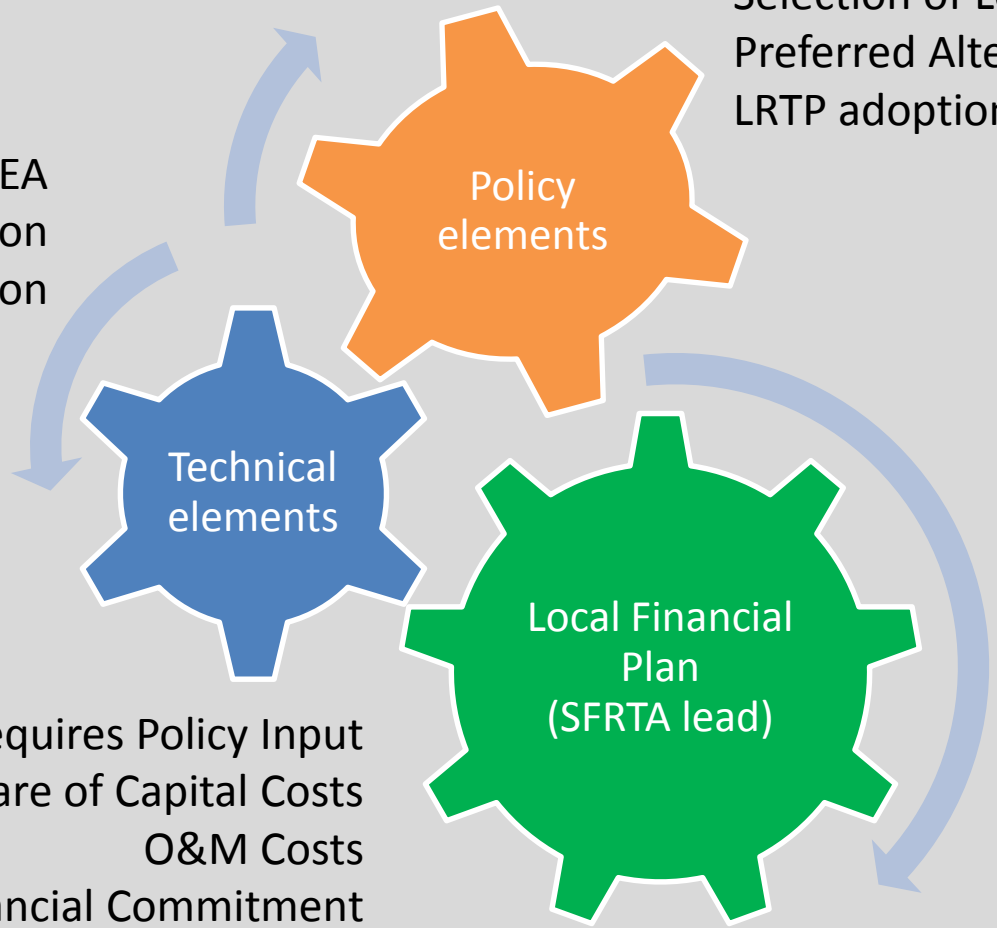
- Project Development (PD) Phase
  - Two-year federal environmental study phase (2014 – 2016)
  - Select Locally Preferred Alternative and develop Financial Plan
  - Submitted joint FDOT & SFRTA letter to FTA requesting entry into PD
  - FTA reviewing the PD request

Tri-Rail Coastal Link
Getting Southeast Florida To Work

Key Activities in Project Development Phase

Selection of Locally Preferred Alternative and LRTP adoption

NEPA analysis: EA
Federal Environmental Action
New Starts: Project Justification



Requires Policy Input
25% local share of Capital Costs
O&M Costs
New Starts: Local Financial Commitment

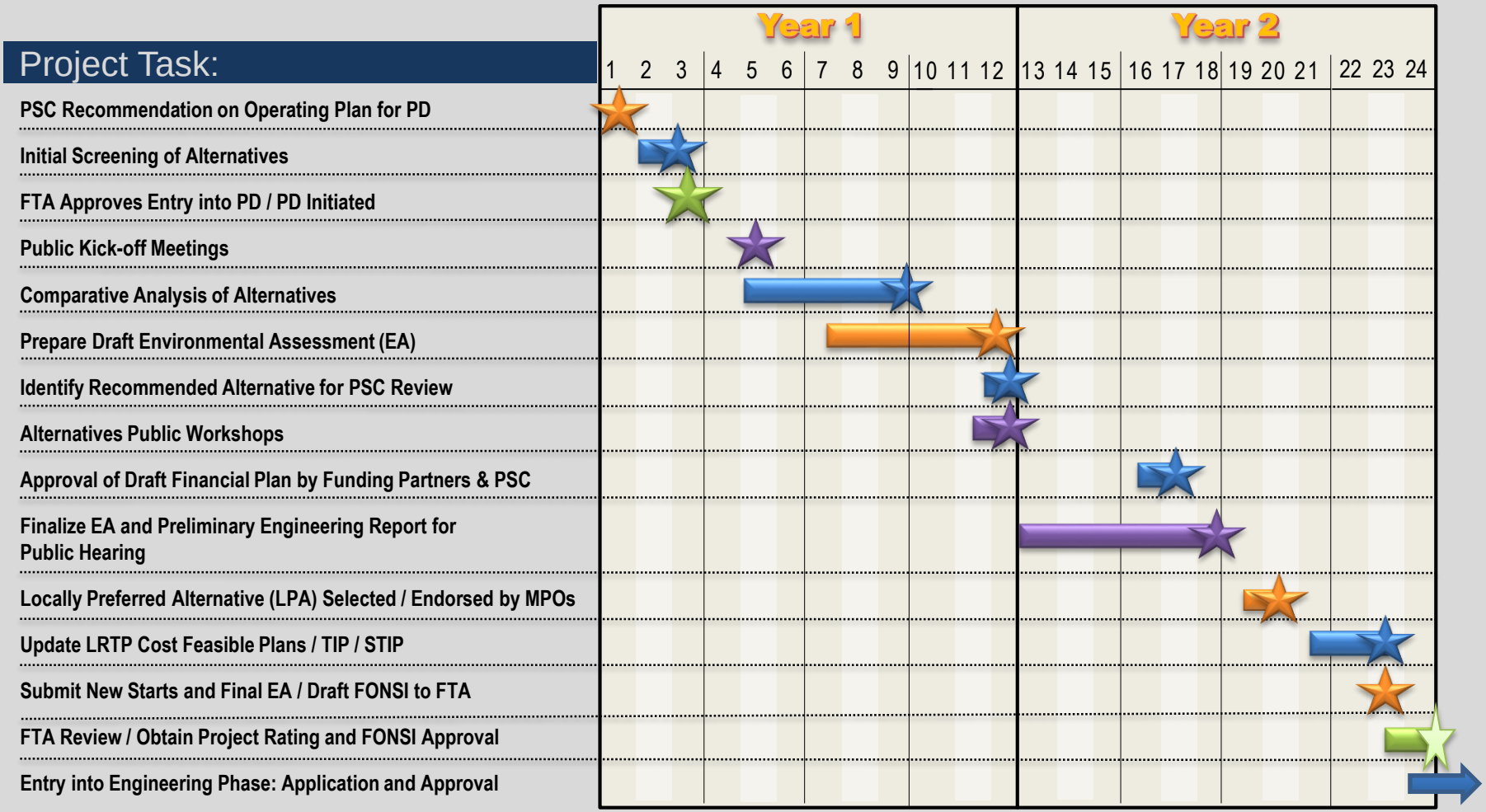
Tri-Rail Coastal Link
Getting Southeast Florida To Work

Environmental Analysis (NEPA) during Project Development

- Meet NEPA requirements
  - Evaluation of Build Alternative (Commuter Rail) and No-Build
  - Focus on station sites and environmental impacts in the corridor
- Pre-NEPA activities underway: work plan, scheduling, data collection, methodologies
- NEPA activities upcoming:
  - Advance Notification (AN) and FDOT Environmental Technical Advisory Team
  - Public Kickoff Workshops after AAF Public Hearings
  - Technical analysis of alternatives

Tri-Rail Coastal Link
Getting Southeast Florida To Work
Miami-Dade
Broward
Palm Beach

PD Milestone Schedule (2 years)



**** Note: Schedule is intended to provide key milestones. Dates are subject to change.***

Next Steps

Tri-Rail Coastal Link
Getting Southeast Florida To Work

Next Steps

- Start Project Development Phase / NEPA
- Continue technical coordination with AAF
- Obtain regional policy guidance to inform Financial Plan
  - Which new regional funding sources should be pursued?
  - How should costs be shared within the region?
- Develop draft Financial Plan
  - In coordination with local policymakers to demonstrate clear local support for this vital regional mobility and economic development project
  - Position the region to secure federal and state funds for commuter rail service

Project Development and Financial Plan activities will involve extensive local and regional coordination

Questions?

FDOT

RTA SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY

MIAMI-DADE MPO Metropolitan Planning Organization

broward MPO metropolitan planning organization

metropolitan planning organization PALM BEACH MPO

SFRPC South Florida Regional Planning Council

SEFTC Southeast Florida Transportation Council

TREASURE COAST TCRPC REGIONAL PLANNING COUNCIL "Bringing Communities Together" • Est. 1976