

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), DISTRICT 4  
 BROWARD COUNTY, FLORIDA • FPID: 448942-1

Project Update for:  
 Harbordale Civic Association  
 Project Update  
 March 2, 2022





**MOBILITY** – More and enhanced Transit options can increase transit use, improve travel times and provide congestion relief on roadways



**ENHANCE QUALITY OF LIFE** - Enhances quality of life by increasing mobility, transportation choices, and access to jobs and services



**ECONOMIC & RESIDENTIAL GROWTH** - Economic development increases tax base, affordable/workforce housing incentives, and funding and use of overall transit facilities



**COMMUTER RAIL BENEFITS FOR EMPLOYERS** - Employer benefits include access to a wider talent pool and enhanced productivity



**ENVIRONMENTAL** - Environmental benefits include sustainability, reduced vehicle emissions, and cleaner air

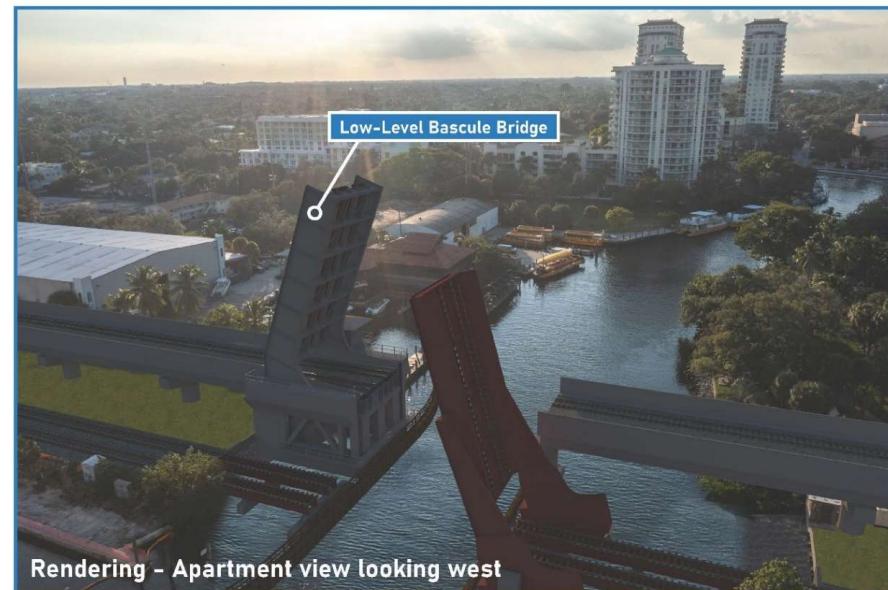
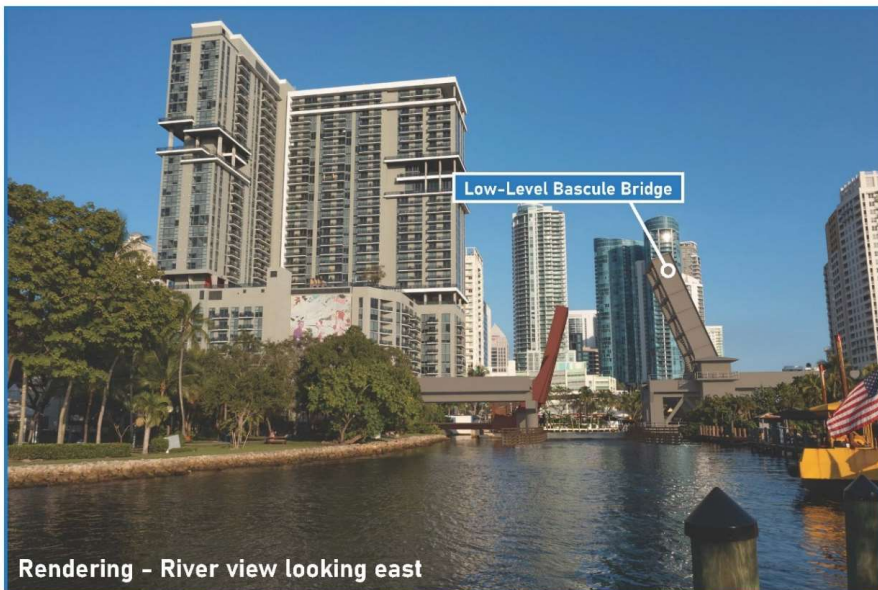
# Overview of Project

- ❑ Broward MPO endorsed Tri-Rail Coastal Link (TRCL) LPA in 2010 and is unfunded in needs plan (MTP)
- ❑ Miami-Dade has advanced the NE Corridor Project from Aventura to Downtown Miami with FTA
- ❑ Per Memorandum of Understanding (MOU)
  - FDOT will lead the environmental study and technical analysis
  - Broward County is responsible for the access fee, maintenance, operations, the Finance Plan and Consensus Building
- ❑ Aventura to Deerfield Beach (27 miles of the FEC corridor)
- ❑ Technical recommendations have been made for 6 station locations (general) in Broward
- ❑ Coordination with Brightline, FECR, USCG, FTA, MPO, municipalities, Broward and Miami-Dade Counties
- ❑ Stakeholder meetings and workshop focused on the New River Crossing

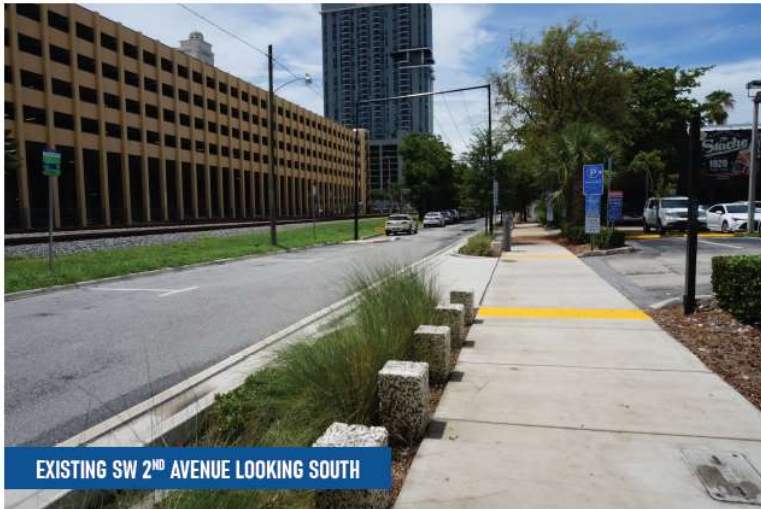


## Low-Level Alternative: Technical Take-aways

- ❑ Freight Trains remain on existing tracks and will continue to use existing bridge that will be shifted east
- ❑ \$240 M for Construction and no private Right-of-Way required
- ❑ No bridge throughout the downtown area
- ❑ Closes Grade Crossing at SW 5<sup>th</sup> Street
- ❑ Does not By-Pass the Broward Boulevard (a separate road project could be evaluated to place Broward Blvd under the tracks and potentially re-purpose some of the area above)
- ❑ Does accommodate 90% of Navigation and will most likely operate on a schedule that will reduce boat congestion at the crossing and provide for a known bridge operating schedule



# Artistic Rendering – Low-Level Alternative



EXISTING SW 2<sup>ND</sup> AVENUE LOOKING SOUTH

## DESIGN FEATURES CAN ACTIVATE SPACES AND PROTECT NEIGHBORHOOD CHARACTER AND CONTEXT:

- Pavers can help convert a one-way street into a shared street or temporary plaza
- Landscaping can soften structures by adding nature in contrast to hardscape
- Public art on a retaining wall helps create a sense of place and can correspond with neighborhoods and history as well as other local art
- Lighting can be multi-colored and provide enhanced night-time aesthetics

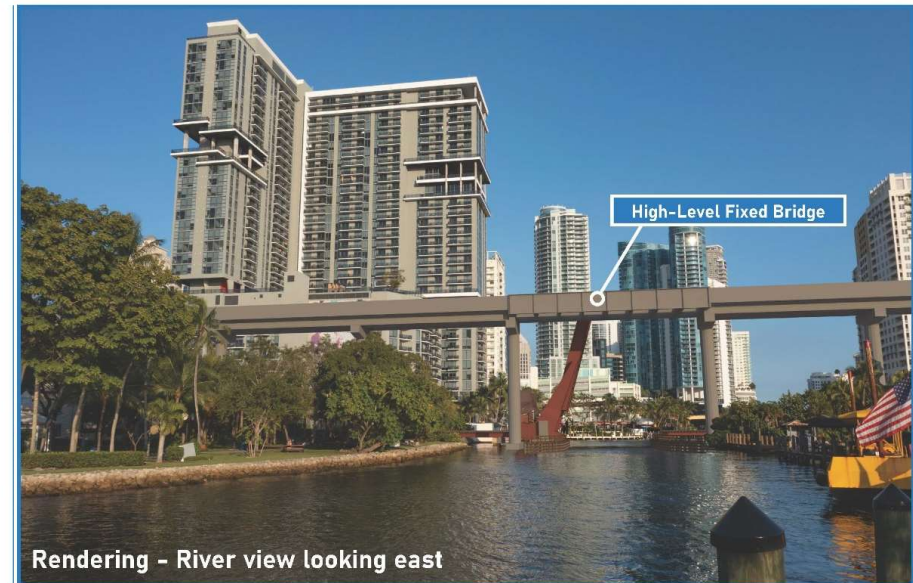
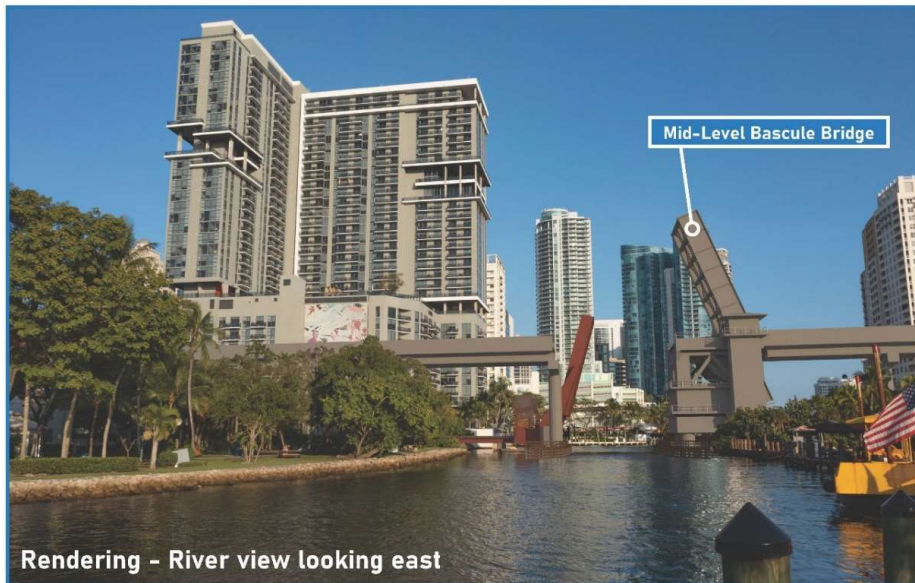


ARTISTIC RENDERING: SW 2<sup>ND</sup> AVENUE LOOKING SOUTH TOWARDS HIMMARSHEE

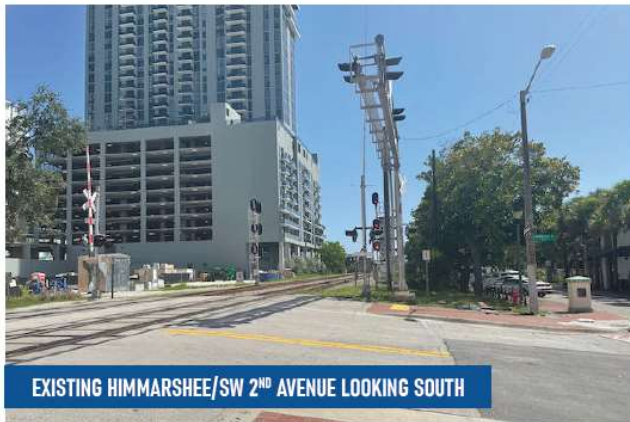
## Mid-Level and Fixed Alternative: Technical Take-aways



- ❑ Freight Trains remain on existing tracks and will continue to use existing bridge that will be shifted east Mid-Level and High-Level Bridges By-Pass Broward Boulevard
- ❑ Mid and High Level require bridge structure throughout the downtown area (charettes and aesthetic design of structures most likely will be required if these alternatives move forward)
- ❑ Mid and High Level do not close any grade crossings
- ❑ Mid Level will have a large bascule pier and requires additional maintenance and a full-time bridge tender
- ❑ Has full support of the Marina community with the Mid-Level accommodating 99% of boats when closed
- ❑ \$444M for construction of the Mid-Level and \$452M for the High-Level and both require \$98M in Right of Way



# Artistic Rendering – Mid-Level Alternative



Infrastructure introduced as design feature with additional streetscape to preserve openness and access:

- Aesthetic treatments for column and sound barrier designs
- Aesthetic closed-bottom box
- Pavers add color and texture and visual separation
- Crosswalks delineate safe area for crossing



# Artistic Rendering – Mid/High-Level Alternative



EXISTING SW 9<sup>TH</sup> STREET LOOKING WEST



ARTISTIC RENDERING AT SW 9<sup>TH</sup> STREET SOUTH OF RIVER LOOKING WEST

## DESIGN ENHANCES CONNECTIVITY AND IS CONSISTENT WITH NEIGHBORHOOD SCALE:

- Steel bridge and sample artistic columns
- Access to Laudertrail is easy to see, safe and attractive
- Landscaping and crosswalks help to define spaces for trail users



## Typical Street Crossing: Mid/High Level Alternative



SISTRUNK BOULEVARD LOOKING EAST

**Design preserves openness and accessibility and neighborhood character of Flagler Arts and Technology (FAT) Village:**

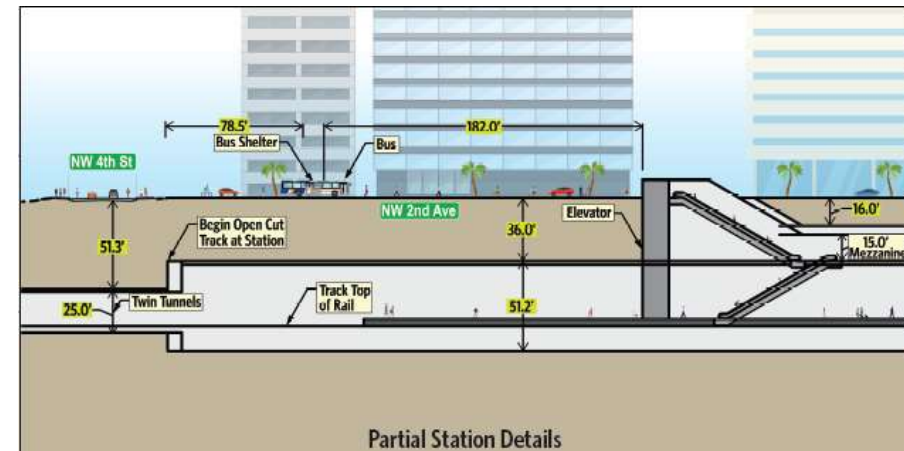
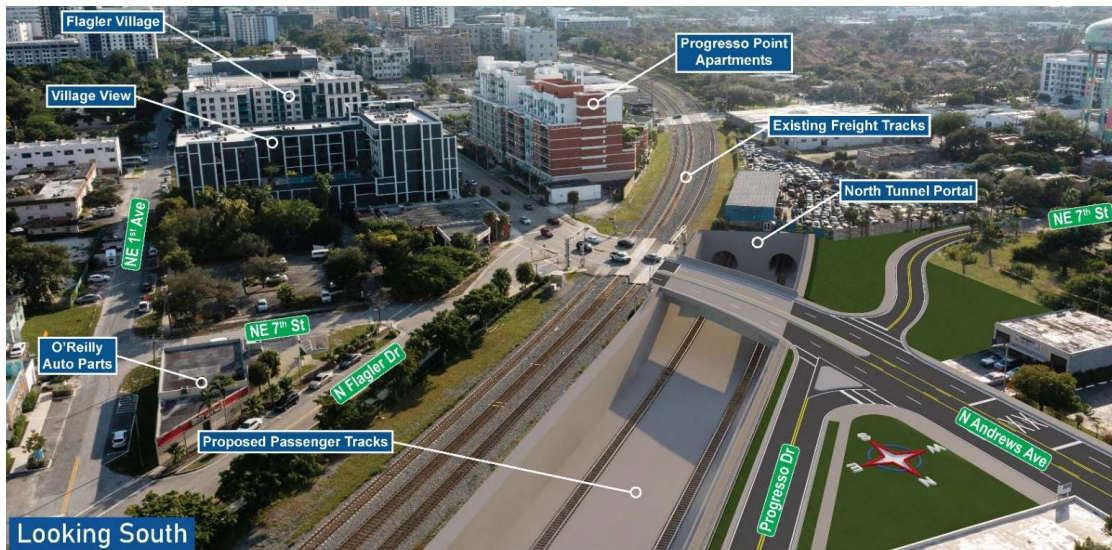
- Artistic columns and decorative railing
- Column design allows for narrower columns to maintain visibility
- Pavers and landscaping soften the edges of the street



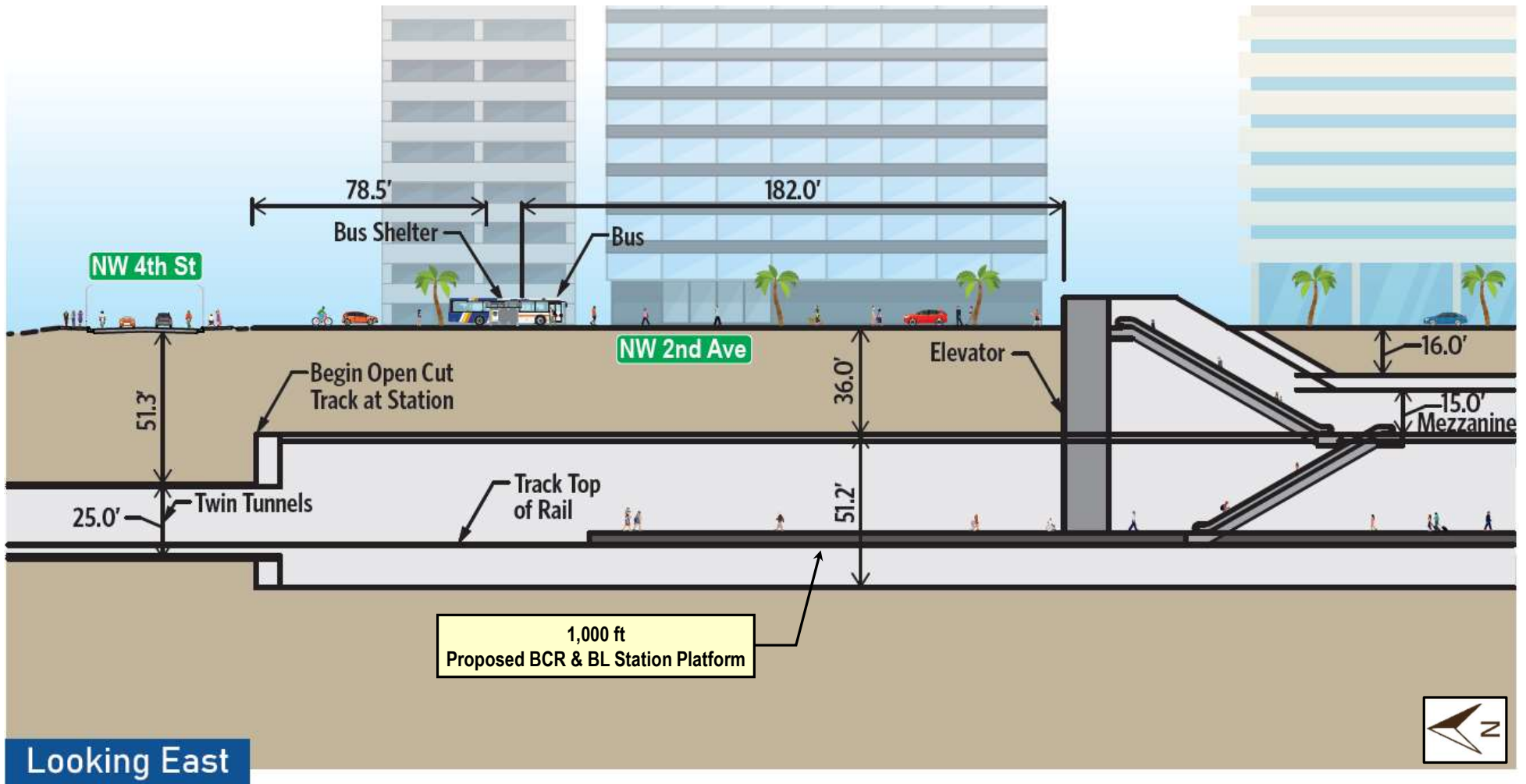
ARTISTIC RENDERING SISTRUNK BOULEVARD LOOKING EAST

# Tunnel Alternative: Overview

- ❑ Supported by many City of Fort Lauderdale stakeholders, including the city commission
- ❑ Will provide the best noise protection and least visual concerns in the areas between the portals
- ❑ Bypasses both Broward and Davie Boulevards with passenger rail
- ❑ \$1.8 Billion for construction and \$150M in Right of Way,
- ❑ Lengthy permitting and construction schedule
- ❑ Larger local disruptions for trucking of excavation and dewatering as well as concern for the protection of the existing structures in the area with the tunneling operations
- ❑ Higher risks for contamination, permitting, construction and resiliency than the other alternatives

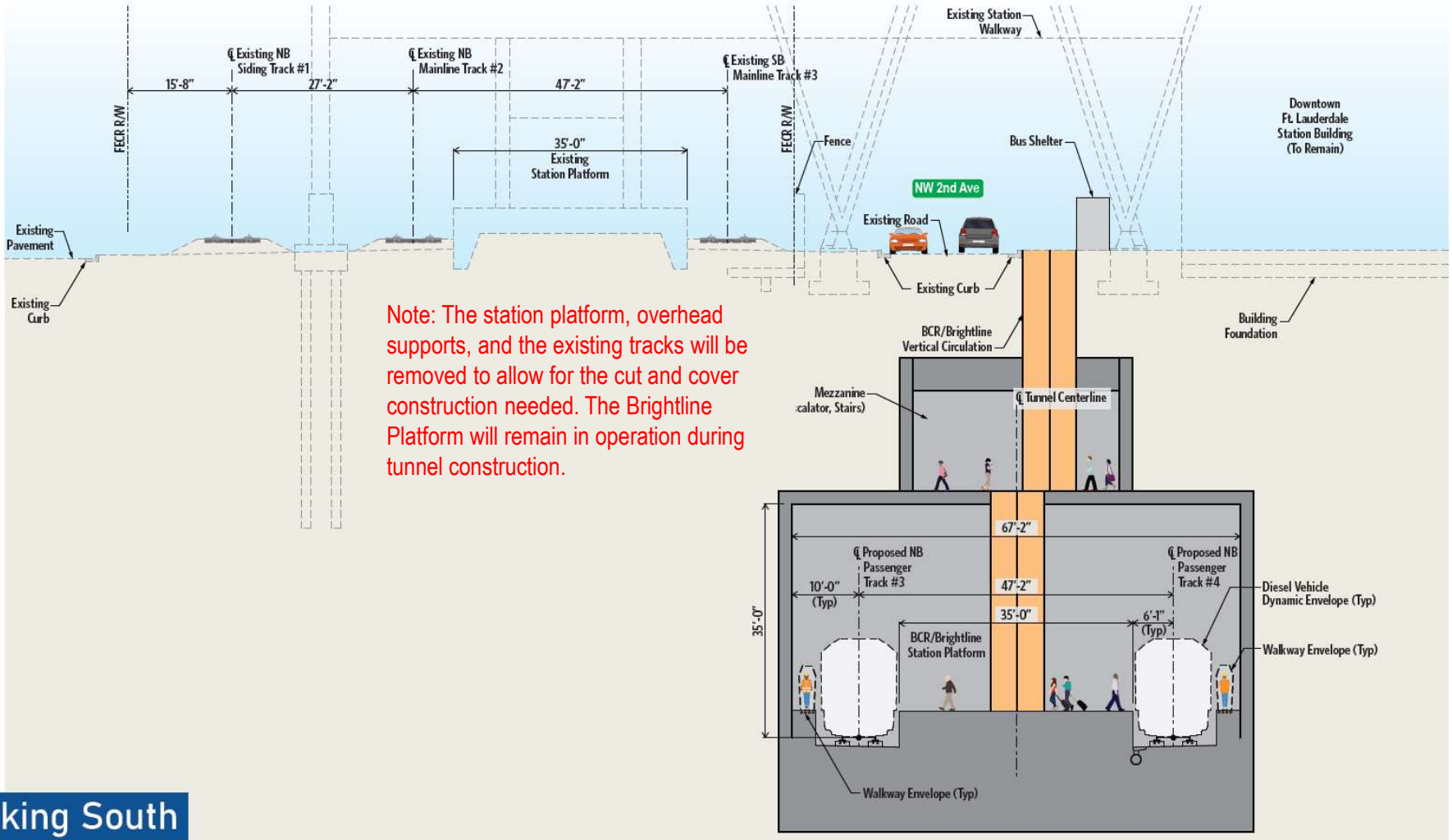


# Tunnel Alternative: Underground Station Elevation View



Looking East

# Tunnel Alternative: Underground Station Section View



Looking South

# Financial Analysis: Preliminary Cost Estimate



## New River Crossing Alternative Cost Table (\$2021)

Alternative	Low-Level Bascule	Mid-Level Bascule	High-Level Fixed	Tunnel
<b>New River Crossing</b>	\$240 M	\$444 M	\$452 M	\$1.82 B <sup>4</sup>
<b>Right-of-Way (Private)</b>	\$0	\$98 M	\$98 M	\$148 M
<b>Operations &amp; Maintenance<sup>1</sup></b>	- Bridge Tender - Mechanical Systems	- Bridge Tender - Mechanical Systems	- Regular Maintenance	- Underground Station - Ventilation Systems

## Corridor Cost Table (\$2021)

<b>Corridor Capital Cost<sup>2</sup></b>	\$495 M			
<b>Right-of-Way (Stations)</b>	Under Analysis will be the same for each alternative			
<b>Total Capital Cost</b>	\$735 M	\$1.04 B	\$1.05 B	\$2.46 B

## Other Project Cost Table (\$2021)

<b>Operations &amp; Maintenance<sup>1</sup></b>	\$18 - \$28 M	\$18 - \$28 M	\$17 - \$27 M	\$18 - \$28 M
<b>Access Fee and Agreements<sup>3</sup></b>	TBD			

<sup>1</sup> O&M costs are per year and are not calculated in the total cost. There are differences among the NRC alternatives, with the tunnel O&M costs expected to increase in the outer years.

<sup>2</sup> Capital Cost Includes Construction, Stations, Vehicles, Yards, Parking, etc. (Costs shown are in 2021 dollars and will need to be escalated for year of expenditure)

<sup>3</sup> Access Fee and Agreements - A negotiated fee to allow commuter trains to use the Brightline passenger easement on the FEC corridor, also may need to cover potential compensation for temporary and permanent operational impacts associated with the New River Crossing and station impacts

<sup>4</sup> Tunnel construction cost does not address potential need for resiliency infrastructure that may be necessary, such as portal covers, additional pumps, salt water intrusion protection

# NRC Alternatives Evaluation Matrix

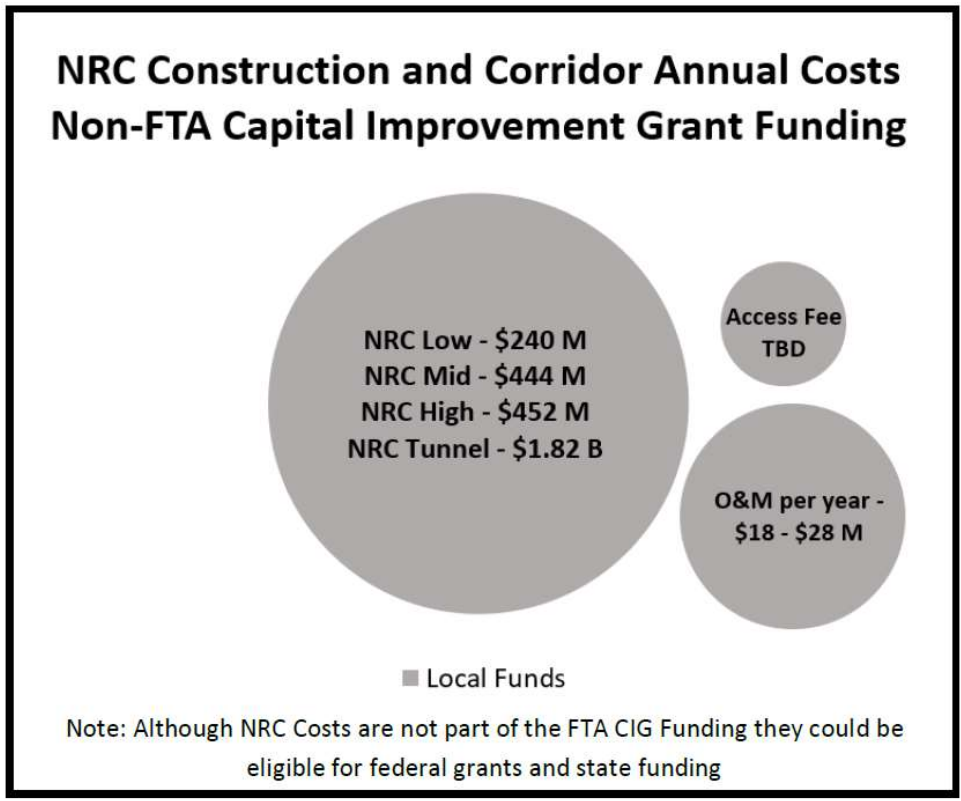
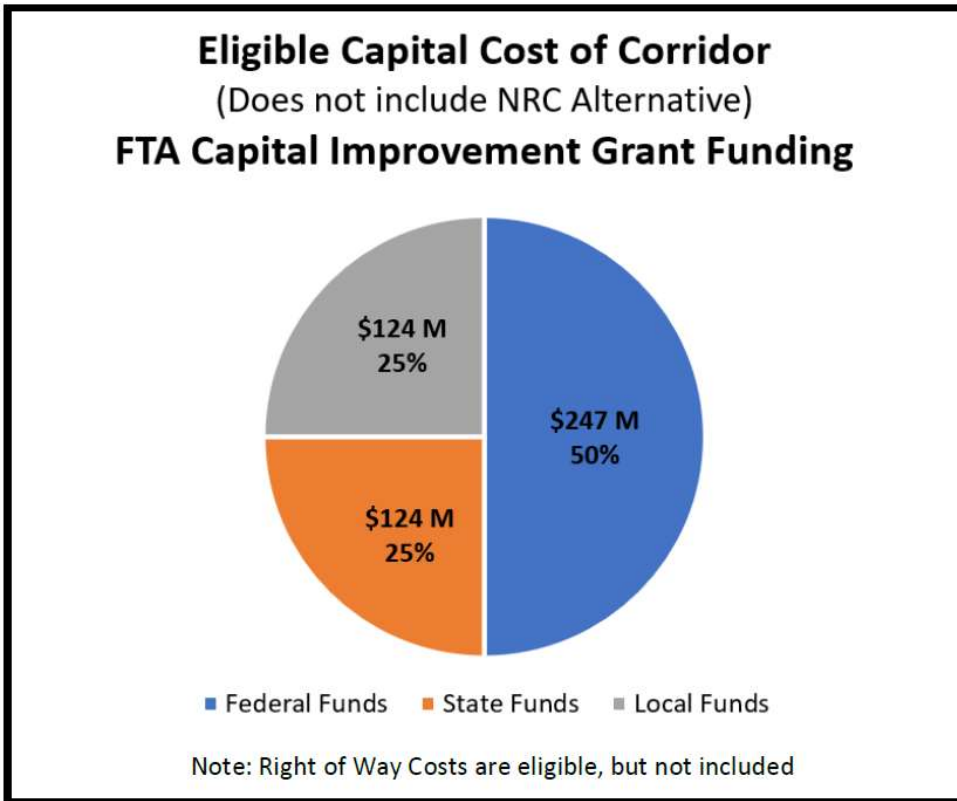
- ❑ The LPA will be refined and evaluated against the No-Build Alternative during the NEPA environmental process.
- ❑ Subject to change: All categories will require further analysis as the project continues.

Evaluation Category	Low-Level Bascule	Mid-Level Bascule	High-Level Fixed	Tunnel
Navigational Accommodations	Worst	Better	Best	Best
Vehicular Traffic Operations	Worst	Better	Better	Best
Socio-Cultural Resources (Historic)	Better	Better	Better	Best
Contamination Risk	Best	Better	Better	Worst
Resiliency	Better	Best	Best	Worst
Right-of-Way Impacts	Best	Better	Better	Worst
Noise	Better	Better	Better	Best
Neighborhood Connectivity - Bicycle/Pedestrian/ Vehicle Local Connections	Better	Best	Best	Worst
Operations and Maintenance Costs (O&M)	Better	Better	Best	Worst
Capital Costs	See Cost Table on Slide 14			

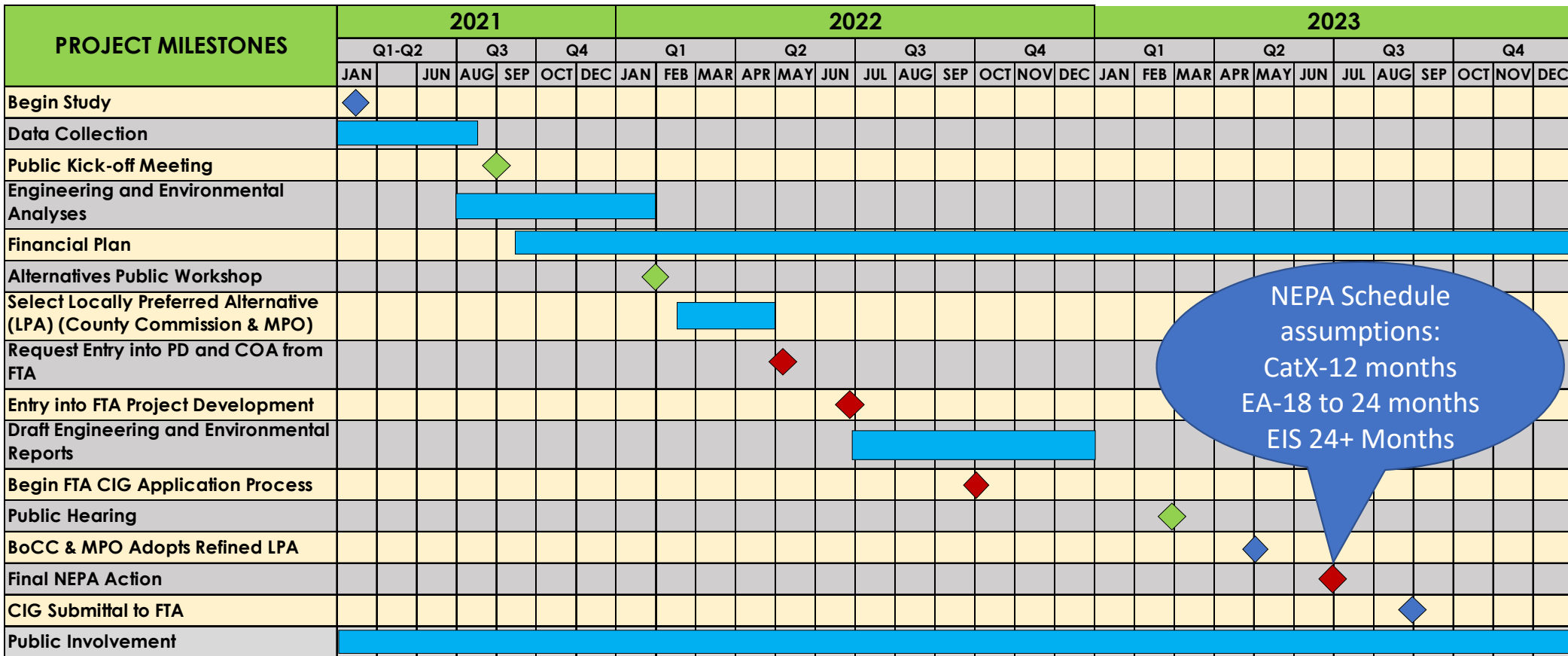
Worst	Better	Best
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# Preliminary Funding Process

- ❑ Capital Improvement Grant (CIG) funding is competitive, and the capital cost must meet FTA’s cost effectiveness requirements.
- ❑ Corridor cost is split funded (per the graphs below) and the NRC Capital Cost, Corridor Access Fee, and Operations and Maintenance are local responsibilities.



# PD&E Study Milestone Schedule



NEPA Schedule assumptions:  
 CatX-12 months  
 EA-18 to 24 months  
 EIS 24+ Months

NOTE: Design can begin in 2023, with R/W acquisition and construction could begin in 2025 with initial operations potentially starting in 2028, depending upon adoption of the Refined LPA and associated access agreement, funding and implementation plans and FTA approvals.

- General Project Tasks
- ◆ Public Meetings
- ◆ General Project Milestones
- ◆ Critical Project Milestones

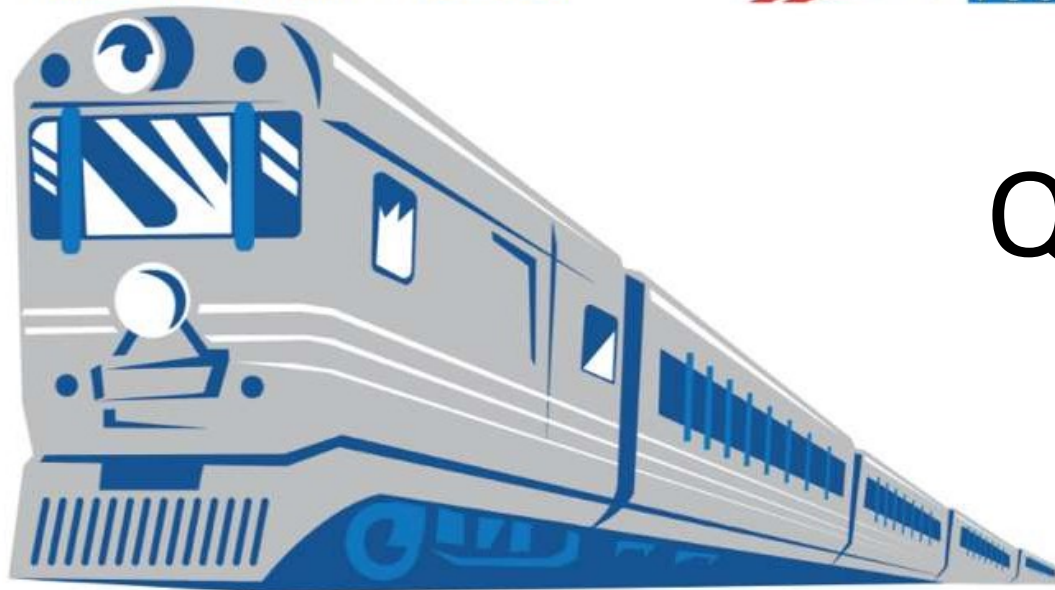




# BROWARD COMMUTER RAIL (BCR)

## PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), DISTRICT 4  
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Questions???