KHA thanks and recognizes:

- MPO
- Miami-Dade County
- City of Miami
- Miami Urban Watch
- University of Miami
- Metric Engineering
- FDOT
Study Objective

- To review three alternatives previously developed to replace I-395
  - Elevated FDOT (E-2)
  - At grade roadway section
  - Depressed (tunnel) roadway section

- Develop up to two new alternatives based on the previous alternatives
I-395 Overview

- Built as a regional transportation link between I-95, SR 836, and the Macarthur Causeway Bridge
- Provides direct access to and from Miami Beach (South)
- Connector for truck traffic to and from the future Port of Miami tunnel
I-395 Overview

- FDOT Initiated a PD&E study in the early 90's.
  - Study findings:
    - Structural Deficiencies
    - Poor horizontal & vertical geometry
    - Operational deficiencies
    - Safety deficiencies
I-395 Overview

- PD&E Study (17 alternatives)
  - Depressed - open cut
  - At grade
  - Tunnel
  - Midtown Roundabout
  - Elevated with new ramps
Alternatives Reviewed

- FDOT’s preferred elevated alternative (E-2) [Alternative 1]
- Miami Urban Watch (MUW) “Boulevard Underpass” [Alternative 2]
- “Revised University of Miami (MUW) Boulevard Underpass” [Alternative 3]
Alternatives Reviewed

- (E-2) FDOT’s preferred elevated alternative

[Alternative 1]
Alternatives Reviewed

[Alternative 1] (E-2 FDOT)

**Pros**
- Satisfies FDOT concerns to improve operations
- Cost $71 M FDOT estimated [$105 M (Up-dated)]
- Good engineering solution

**Cons**
- Remains an obstacle for redevelopment
- Not acceptable solution to the City of Miami
- Does not enhance the PAC
- Does not address blighted condition under I-395
Miami Urban Watch (MUW)

- Developed an alternative: Relocate I-395 to the north using an open cut with a cap to develop a wide boulevard on top to promote:
  - Urban Renewal
  - Expansion of Downtown Miami
  - Improvements to Overtown area
Alternatives Reviewed

- University of Miami Retained to complete an assessment of the MUW Alternative known as “Boulevard/Underpass”
  - Three options were developed:
    - Alternative 2A: Replace FEC with Light Rail over I-395
    - Alternative 2B: An at grade crossing of FEC
    - Alternative 2C: Underground I-395 east of the FEC tracks
  - Similar horizontal alignment for all alternatives

- FDOT/MPO raised concerns:
  - High cost
  - Does not address current deficiencies
  - Right of way impacts
  - FEC at grade railroad crossing issue
  - Safety concerns
  - Not compatible with area enhancement
Alternatives Reviewed

[Alternative 2]

University of Miami (MUW) Boulevard/Underpass

Horizontal alignment
Alternatives Reviewed

University of Miami (MUW) Boulevard/Underpass

Alternative 2A: Replace FEC with Light Rail over I-395
- Not a viable alternative at this time due to the need to keep the FEC track at grade
- Cost of depressing FEC
- FEC as potential commuter use
- FEC potential light rail system
- MOT problems

Alternative 2B: At grade crossing
- Creates a new railroad crossing - Fatal Flaw
- I-395 (safety issues)
- MOT problems
- Not acceptable to FDOT
Alternatives Reviewed

University of Miami (MUW) Boulevard/Underpass

Alternative 2C: Taking down I-395 east of the FEC tracks

- DOES not address operational deficiencies identified by FDOT
- MOT problems
Alternatives Reviewed

[Alternative 3]

- FDOT / University of Miami (MUW) Boulevard/Underpass - “Revised Boulevard Underpass”
FDOT / University of Miami (MUW) Boulevard/Underpass - “Revised Boulevard Underpass”

[Alternative 3]
FDOT / University of Miami (MUW) Boulevard/Underpass - “Revised Boulevard Underpass” [with depressed FEC railroad]

[Alternative 3]

- Revised by FDOT
- FEC railroad beneath relocated I-395
- Same MOT problem as Alternative 2
Maintenance of Traffic

Alternatives 2 & 3

The problem (MOT)
Maintenance of Traffic

Alternatives 2 & 3

The problem (MOT)
Maintenance of Traffic Alternatives 2 & 3

Temporary 6 lane bridge will be required
Maintenance of Traffic
Alternatives 2 & 3

Maintain traffic on new temporary and old section of I-395

Construct relocated I-395

Expected construction time: 4 years
Expected construction time: 1.5 years

Phase 3 - Construction

Make final connections between existing I-395 and relocated I-395
Maintenance of Traffic Alternatives 2 & 3

Total construction time: 9 years

Expected construction time: 1 year

Phase 4 - Construction
- Open relocated I-395 to traffic
- Demolish remainder of I-395 and temporary bridge

Expected construction time: 1 year
Alternatives Reviewed Cost Estimate

University of Miami (MUW) Boulevard/Underpass

Costs Analysis

• Alternative 1 - FDOT E-2: $105,000,000

• Alternative 2 - University of Miami Cost Estimate: $272,910,800.00 (construction cost)
  KHA revised Cost Estimate: $383,413,800 (construction Cost)

• Alternative 3 - “Revised Boulevard Underpass” $933,000,000
In search of a new alternative

New alternative criteria:
- All transportation objectives are met
- No adverse impact to the proposed Port of Miami Tunnel
- Helps promote urban revitalization
- Acceptable cost
In search of a new alternative

Alternative 4 - Open Cut (Option A)

- Developed from Alternative 3 - Revised MUW Boulevard/Underpass alternative
In search of a new alternative

Alternative 4 - Open Cut (Option A)
In search of a new alternative

Alternative 4 - Open Cut (Option A)

- Vertical geometry revised to allow I-395 to pass beneath the FEC Railroad
In search of a new alternative

Alternative 4 - Open Cut (Option A)

- Similar MOT problems to Alternative 3
- Alternative 4 - Open Cut Option B was developed
Open Cut Option B

TYPICAL SECTION
ALTERNATIVE 4 - OPEN CUT OPTION A & B
**Open Cut Option B**

- Provides local direct access to northbound I-95
- Maintains future access improvement at N 14th Street and enhanced local access
Open Cut Option B

Southbound

PAC

NE 1st Ave.

NE 2nd Ave.
Open Cut Option B

Westbound / to I-95

NE 1st Ave.

PAC

NE 2nd Ave.
In search of a new alternative

Open Cut Option B

- Meets the FDOT’s regional transportation requirements
- Meets the urban revitalization objectives of the City of Miami
- Enhanced access to and from the PAC
- Detailed Signing Plan will need to be developed as part of the Alternative
- Estimated Cost: $525 M
- Provides acceptable Level of Service for year 2025
In search of a new alternative

Open Cut Option B

SYNCHRO MODEL
Conclusions and Recommendations

- Request that FDOT evaluate Alternative 4 Open Cut Option B for acceptance as the preferred alternative
- Complete the PD&E study
- Conduct a community outreach program to bring the community into the planning process
- Develop comprehensive signing master plan
Conclusions and Recommendations

- Implementation cost could be financed through a variety of sources including:
  - FDOT
  - Bonds using (TIF)
  - Special Assessment
  - Other Creative Financing
  - Grants

- Conduct a comprehensive financial analysis
Open Cut Rendering

41 acres Downtown Park

Enhanced landscaping and aesthetic opportunities
Thank you