Who is the Project Sponsor?

• Florida Department of Transportation w/ partners including:
  – Port of Miami (POM) – and the overall County (MDC)

• Future Partners
  – City of Miami
  – Miami Dade County Expressway Authority (MDX)

• FDOT will be the contracting entity and will have jurisdiction over the facility which will be part of state highway system

• FDOT’s Central Office, District 6, and Florida’s Turnpike Enterprise (FTE) are coordinating FDOT’s efforts
Port of Miami
Port Operations

- Access to the Port from existing bridge through downtown streets
- One of the largest economic engines in Miami-Dade County
- 3.5 million cruise passengers in 2004
- One of the largest container ports in Florida
- 9.2 million tons of cargo shipped in 2004
History of Project

- 1981 – MPO established POM Access Task Force
- 1983 – POM Tunnel Feasibility Study
- 1984 – Three Phase POM TIP
- 1989 – POM Tunnel PD&E Study begins
- 2000 – FHWA Location Design Concept approval
- 2003 – TPK takes lead - selects Owner’s Representative Consultant to evaluate tunnel and perform reevaluation
- 2005 – Further geotechnical and public involvement – project transferred to D6
- 2005-2006 – Financial partners being formed and contracting method being evaluated
- Dec. 5, 2005 – Industry Forum
Project Alignment
Description of Project

- Provide additional access to Port of Miami
- Link Port of Miami (Dodge Island) to MacArthur Causeway and I-395
- Tunnel under main channel of Miami Harbor
- Roadway work on Dodge and Watson Islands
- MacArthur Cswy. Bridge widening:
  - Foundations and envelope already in place
Port of Miami Tunnel Video

“The Vision”
Immersed Tube Typical Section
Immersed Tube Tunnel

• Advantages
  – Less Risk Construction Method
  – Use Conventional Construction Equipment

• Constraints
  – Environmental Impacts/Permits
  – Major Interruptions to Port Operations
  – Requires Dredging/Blasting
  – Spoils Disposal
  – Requires Extensive Deep Cut-and-Cover Sections
  – Groundwater Control is Difficult & Expensive
Bored Tunnel & Underground Work

Typical Section
Bored Tunnel

- **Advantages**
  - No Dredging thus Reduced Environmental Impact
  - EPB TBM State of the Art for Subaquatic Conditions
  - Lower Impact on Port Operations
  - Tunnels can be Extended to Reduce Amount of C&C Sections

- **Constraints**
  - Increased Risk from Unforeseen Ground Conditions
  - Still has Potential High-Water Inflow Quantities
  - Buoyancy Issues
  - Muck Disposal
Engineering Issues

- Geotechnical conditions
- Shallow cover
- Potential for water inflow
- Deep cut and cover
- Buoyancy
- Material disposal
- Limited construction work area
- Permitting
Geotechnical Basics
Miami & Ft. Thompson Limestone
Primary Geologic Strata
Shallow Cover
Tunnel Profile
Watson Island Developments

- Future Park
- Parrot Jungle
- Parking
- Miami Children's Museum
- Proposed Island Gardens
Project Delivery Options: DBOM and Concession

• Possible proposal options being considered:
  – 15-year DBOM (owner financing)
  – 35-50-year concession
  – Proposers submit either or both
Why Public-Private Approach?

- **Project complexity**
  - Tunnel construction and operation are atypical for FDOT
  - Need for private sector innovation and efficiencies
  - Share risks with experienced partners

- **Significant but finite local / state funding available for project**

- **Innovative project delivery**

- **Financial leveraging power of PPP’s**

- **Shared Risk**
Why Public-Private Approach?

• Merging strengths of public and private partners

Public Sector Strengths

1. Legal Authority
2. Ability to balance competing goals to meet public needs
3. Very dedicated personnel

Private Sector Strengths

1. Workplace efficiency
2. Cash Flow Management
3. Newer Technologies
4. Finance

⭐ By merging strengths we should be able to create a better value for money for the taxpayer.
Costs and Funding

• **Currently Estimated Costs:**
  – Exceed $1Billion

• **Available Funding:**
  – $100M-Miami-Dade General Obligation Bond
  – $75M-SIS/Growth Management Funds – FY 2010
  – $75M-SIS/Growth Management Funds – FY 2011
  – $250M
### Procurement Procedure (TBD)

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Early 2006</td>
<td>Request for Statements of Qualifications (SOQs)</td>
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<tr>
<td>Spring 2006</td>
<td>SOQs due</td>
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<tr>
<td>Spring 2006</td>
<td>Short-listing of Qualified Proposers</td>
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<tr>
<td>Early Summer 2006</td>
<td>Request for Proposals (RFP)</td>
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<tr>
<td>Fall 2006</td>
<td>Proposals due</td>
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<tr>
<td>Late 2006</td>
<td>Selection and Award of DBOM or Concession</td>
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Industry Forum (Dec 5) - Feedback

- Teams for DBOM vs. Concession will be dramatically different.
- Teams for Immersed Tube vs. Bored tunnel will be dramatically different.
- Industry prefers simple/limited bidding options
- Industry not receptive to taking on geotechnical or permitting risks.
For Additional Information & Updates:

www.dot.state.fl.us/turnpikepio/porttunnel
Port of Miami Tunnel

Thank You