Port of Miami Tunnel
Advisor’s Perspective

AAPA Oakland
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for discussion purposes only
Project Overview

- Provides direct highway connection for vehicles going to/from Port
  - Tunnel between Watson Island and the Port of Miami
  - Adds four new lanes to MacArthur Causeway Bridge
  - New connections to and among Port roadways

- 35-year design-build-finance-operate-maintain (DBFOM) availability payment based contract – no tolls and no Port activity risk

- www.portofmiamitunnel.com
Location
Project Rationale

► Improve Port access, enhance competitiveness and accommodate future growth
  ▪ POM is 2nd largest economic generator in Miami-Dade County
  ▪ 81,800 jobs, $5 billion in wages, $12 billion in economic output at time of project

► Remove Port-related trucks and buses from downtown street network and neighborhoods

► Facilitate downtown Miami redevelopment plans
Tunnel Details

- Two, 42-foot diameter tunnels, approximately 3,900 feet long
- Bottom of tunnels approximately 100 feet below the surface at deepest point
  - Difficult geometry
  - Buoyancy issues
- Soft ground, mixed face conditions with vuggy limestone and sands
Key Challenges

- Project complexity - environmental and Port operating concerns dictate bored tunnel

- Tunnel construction and operation atypical for FDOT
  - Need to share risks with contractors experienced in managing
  - Need for private sector innovation
  - Encouraging lifecycle efficiencies requires long-term contract

- Funding constraints and multiple funding partners – State, Cty, City
  - Difficult to agree unknown costs (construction or O&M)
  - Big Dig news raises concerns
  - US contractors were suggesting cost-plus arrangements

- Considered DB, DBOM and DBFOM project delivery
Availability Payment DBFOM Structure Transfers Risk and Aligns Interests

Florida DOT

- Must be earned
- Capped at amount bid

Availability Payments

Equity Investors ↔ SPV ↔ Lenders

EPC Contractor ↔ Operator

Availability payments akin to paying for each hour of unobstructed tunnel lane service which meets performance criteria, with default for persistent failures
Deal Structure Summary

► 35-year agreement between FDOT and concessionaire including construction and O&M for tunnel (bridge turned over to FDOT for maintenance)

► FDOT begins availability payments once tunnel opens

► Payment subject to reduction if tunnel not operational during required hours or meeting performance standards

► Bespoke allocation of risk around unknown geotech

► Handback reserve to ensure first-class condition at end of contract

► FDOT is also “buying down” availability payments by using available funds to make $100M in milestone payments and $350M payment upon the tunnel opening for traffic (local funding)
Open and in service