

PARTNERSHIPS IN CAPITAL PROJECTS

MIAMI ACCESS TUNNEL

November 2013

www.portofmiamitunnel.com

Local Importance of PortMiami

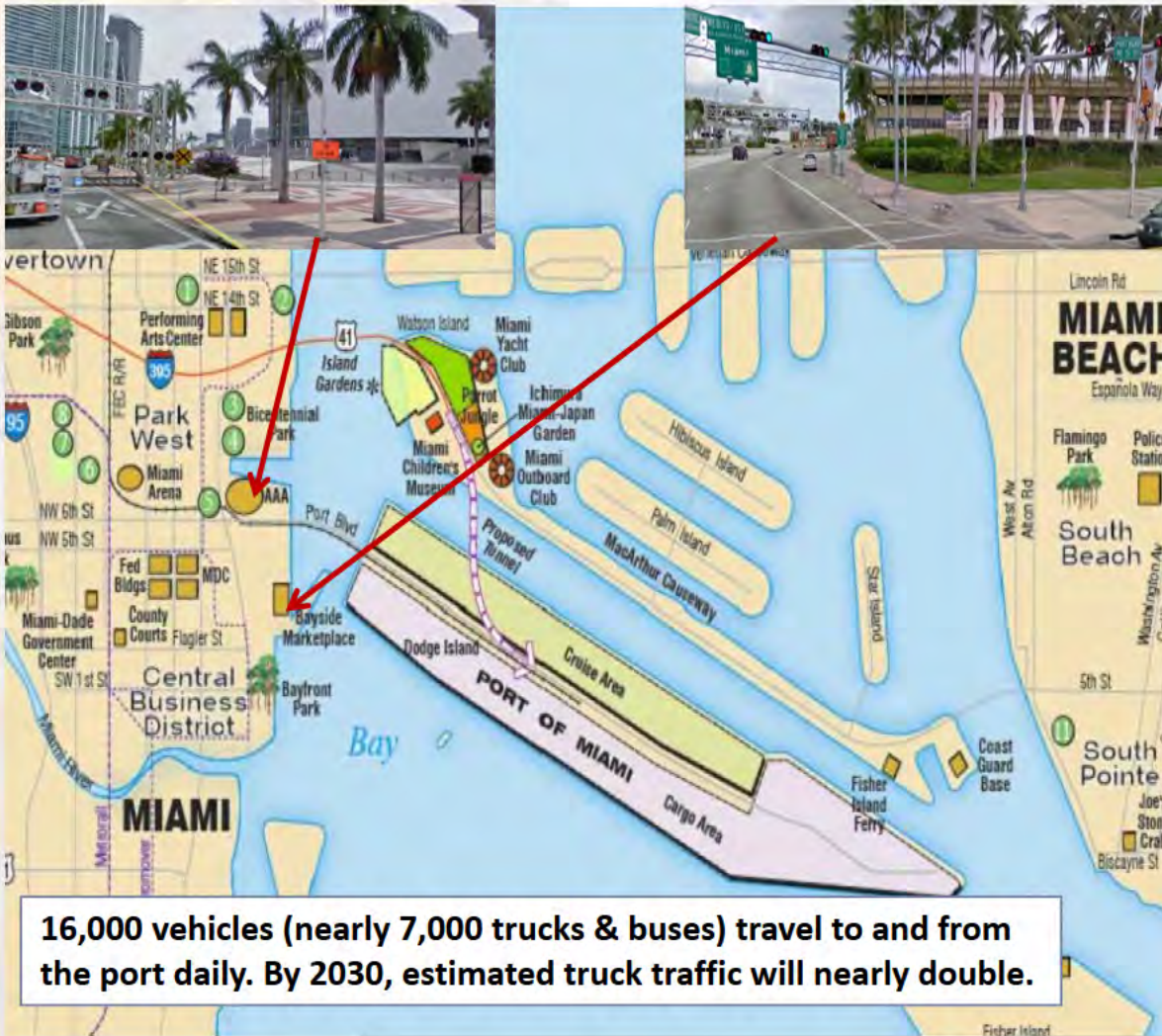


PortMiami is the cruise capital of the world, the 11th national cargo port and the top seaport in Florida based on containerized shipments

- **\$15 billion in imports/exports**
- **180,000 jobs**
- **\$6.4 million in wages**
- **\$18 billion in economic output**
- **More than a dozen shipping lines servicing 250 ports**
- **More than 4 million cruise passengers in FY 2011-2012**



Project Benefits

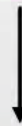


- Provide a direct connection between the Seaport, Airport and the Interstate Highway System
- Maintain PortMiami as the county's second leading economic generator
- Relieve congested downtown Miami streets of Port passenger and cargo traffic, improving safety as trucks also traverse areas of pedestrian activity.
- Facilitate ongoing and future development plans in and around downtown Miami

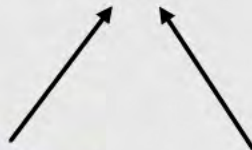
Project Partners



Public Partners



MAT Concessionaire LLC
Concessionaire



Senior Lenders
Pool of 11 Investment
Banks

Financing



90% Equity Partner



10% Equity Partner



Construction Contractor



Transfield Services
Infrastructure, Inc.

O&M Contractor

Public-Private Partnership



- **Project structured as a PPP**
- **Concessionaire will design, build, finance, operate and maintain tunnel for 35 years**
 - **Design & Construction - first 55 months**
 - **Operate & Maintain - remaining 30 years and 5 months through facility hand-back**
- **No tolls allowed in the Concession Agreement**
- **Concessionaire compensated through**
 - **Milestone payments during construction period**
 - **Availability payments during operating period**

Finance Deal of the Year



The Successes of the POMT Deal

- Removed traffic risk out of the equation
- TIFIA Loan funding
- 10 Banks provided additional funding
- Geology contingency fund

Deals of the Year 2009 Americas

North American PPP Deal of the Year 2009

Port of Miami Tunnel: Dramatic presence

The \$1.062 billion Port of Miami Tunnel financing would be noteworthy and influential even without the most gripping backstory of any project to close in 2009. No deal came as close to death and survived, its deal dealt with such a complex set of risks, and as a deal - in the end - had so few detractors in the bank market.

The tunnel financing was meant to be the first availability payment-based deal in the US, and the first PPP deal in Florida. The demise of Babcock & Brown just paid to that, allowing ACS' T-195 financing to squeak in and take both titles. But if T-195 looked like a less arduous process through it richly deserves its first, it dealt with a less complex fear of engineering.

The Florida Department of Transportation started work on the tunnel first, learned to navigate the demands of the bank market with both deals, and thanks to both has arguably the best engaged PPP programme in the US. With the tunnel it took along Miami-Dade County and the City of Miami for the ride. Both of these partners were key to enjoining the deal.

The tunnel will run for 1.2km under Biscayne Bay between Watson and Dodge Islands. It is designed to carry heavy goods and cruise traffic from the interstate highway system to the port of Miami, on Dodge Island without a detour through Miami's downtown. Like many ambitious US engineering projects, it has been under study for decades.

Bill Thompson, then the chief financial officer of Florida's Turnpike Enterprise, and subsequently the acting CEO of FDOT, though now retired, first came to Project Finance's US infrastructure forum in 2006, soliciting sponsors and lender feedback about the state's first PPP deal. Several market participants were sceptical that it could transfer the risk of such an undertaking to the private sector.

The first and smartest move that FDOT made was to move traffic risk out of the equation. If the department wanted to move traffic out of downtown, it could not let a private operator set tolls in the tunnel. The record of financings for tolled urban tunnels has suggested it was right to do so.

The department wanted - needed - a contractor capable of and willing to build a tunnel under the buy on time and on budget. It got three responses to its request for proposals, from Babcock & Brown/Bouygues, Morgan Stanley/FCC and Dragados/Odebrecht. Babcock & Brown, which had replaced ADN AMCO after the shortlist stage, and Bouygues came in with the lowest bid, and their consortium, Miami Access Tunnel, was named preferred bidder in February 2009.

The department wanted to use a monoline-wrapped private capacity bond to finance the tunnel, hoping to free up TIFIA loan capacity for other projects. The sponsors engaged Lehman Brothers to underwrite the bond. As the roadblocks weakened, the deal had to be reconfigured to account for a bank option, and progress on this front was slow into the middle of 2008.

The implosion of Babcock & Brown was a near-fatal blow. Whether mindful of the earlier switch of bidders or despairing at closing anything in the debt market of late 2008, FDOT cancelled the deal.

It was revised thanks to a combination of sustained pressure from state, county and city politicians, the ability of the department to line up a TIFIA loan at short notice, and the attractiveness of the Bouygues design-build contract. Bouygues stuck coolly by the PPP deal, probably realising that a conventional procurement was not an alternative.

In May 2009, the department attended to Meridian taking over from Babcock & Brown, and a month later the Meridian/Bouygues consortium reached commercial close. After blowing only slightly a 30 September 2009 deadline, banks, sponsors and government reached financial close on 15 October.

The \$341 million 35-year TIFIA loan, which has an interest rate of 4.31%, performs the same function as a bond tranche on PPP deals elsewhere, as the primary financing for the operational part of the concession. A club of ten commercial banks, which provided subscriptions sufficient to cover the debt three times, is mostly exposed to construction risk.

The bank pool breaks down into a \$314 million 5-year loan that will be repaid at completion with acceptance payments from the grantor, and a small \$28 million 6-year loan to be repaid with the first of the availability payments. The debt is priced at 300bp over Libor, and swapped to a fixed rate of 6.63%. The ten banks are BVA (documentation agent), BNP Paribas (administrative agent), Calyon, Citicredit Local, ING, RBS, Santander, Societe Generale, UniCredit and WestLB.

Banks' biggest concerns were appropriations risk and construction risk. The T-195 reassured them about Florida's willingness to back its obligations to PPP deals, although FDOT still spent considerable amounts of time making sure that city and county obligations to it were strong enough, because FDOT was sole counterparty to the 35-year concession.

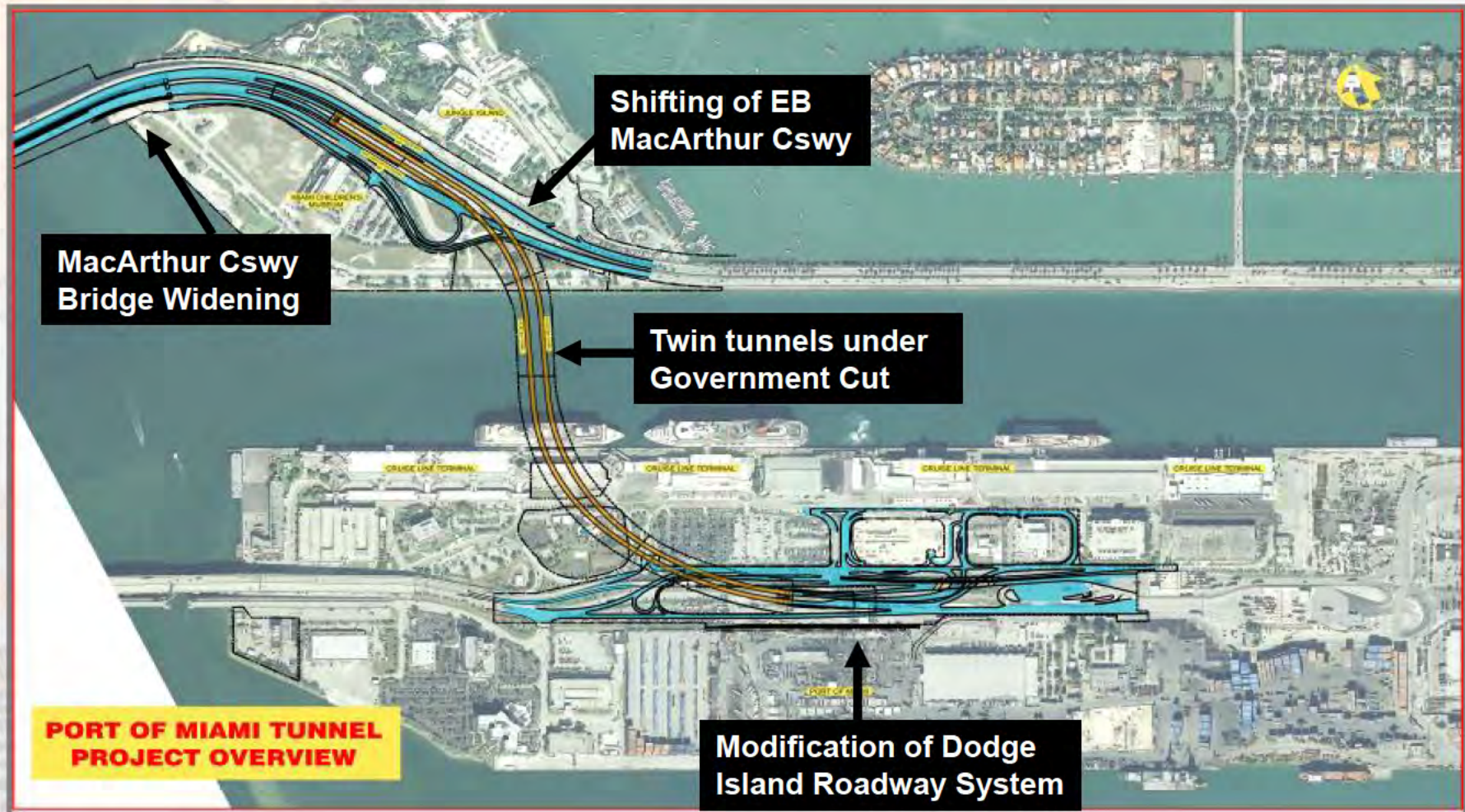
The construction risk took a little more time to resolve, because it was unique to the tunnel. State and contractor have come up with a contingency for cost overruns resulting from unexpected geological conditions that place an initial small burden on Bouygues, then a larger chunk on the state and then a final smaller amount on Bouygues. Banks' ability to work creatively around these two issues would have made the Port of Miami Tunnel a landmark deal regardless of the context.

There will be no second act in the Port of Miami Tunnel financing - the TIFIA debt will stay until the end of the concession, and thanks to the acceptance payments there will be no slack left to refinance post-completion. But the deal demonstrated the value of banks in understanding complex construction risks, and the two Florida deals demonstrated the centrality of TIFIA to the US PPP market. If TIFIA financing becomes less plentiful, and sponsors have to work out how to coordinate bank and bond tranches, these two deals will serve as a good starting point. ■

Miami Access Tunnel

Status: Closed 15 October
Size: \$1,062 billion
Location: Miami, Florida
Description: 35-year DBFO concession to build a 1.2km tunnel and associated access roads
Sponsors: Meridian (90%), Bouygues (10%)
Equity: \$80 million
Debt: \$322 million in five-year commercial bank debt, \$22 million five-year bond and \$341 million 35-year TIFIA loan, \$40 million in capitalised TIFIA interest
Lead arrangers: BVA (documentation agent), BNP Paribas (administrative agent), Calyon, Citicredit Local, ING, RBS, Santander, Societe Generale, UniCredit and WestLB
EPC contractor: Bouygues
O&M contractor: Transfield
Sponsor advisors: Davies Ward Phillips & Vineberg (legal - transaction), Greenberg Traurig (legal - Florida), Macquarie (financial), Barclays Capital (financial)
Lenders' advisors: Arip (regulator), Willis (insurance)
Banks' legal advisors: Milbank Tweed, Rogers Towers
TIFIA advisors: Howkins, DeWolfe & Wood (legal), Sealy Capital (financial)
FDOT advisors: Jeffrey Packer & Associates (financial) Novasaris (legal), Parsons Brinckerhoff and TY Lin (technical) and Marsh (insurance)

Scope of Work



MacArthur Causeway Bridge Widening & Watson Island



- 18 Piers and 28 beams are being added



Dodge Island Roadway Improvements



- Construction of Eastbound & Westbound Port Blvd.
- South Cruise Boulevard
- Internal Roadways

Harriet – Tunnel Boring Machine



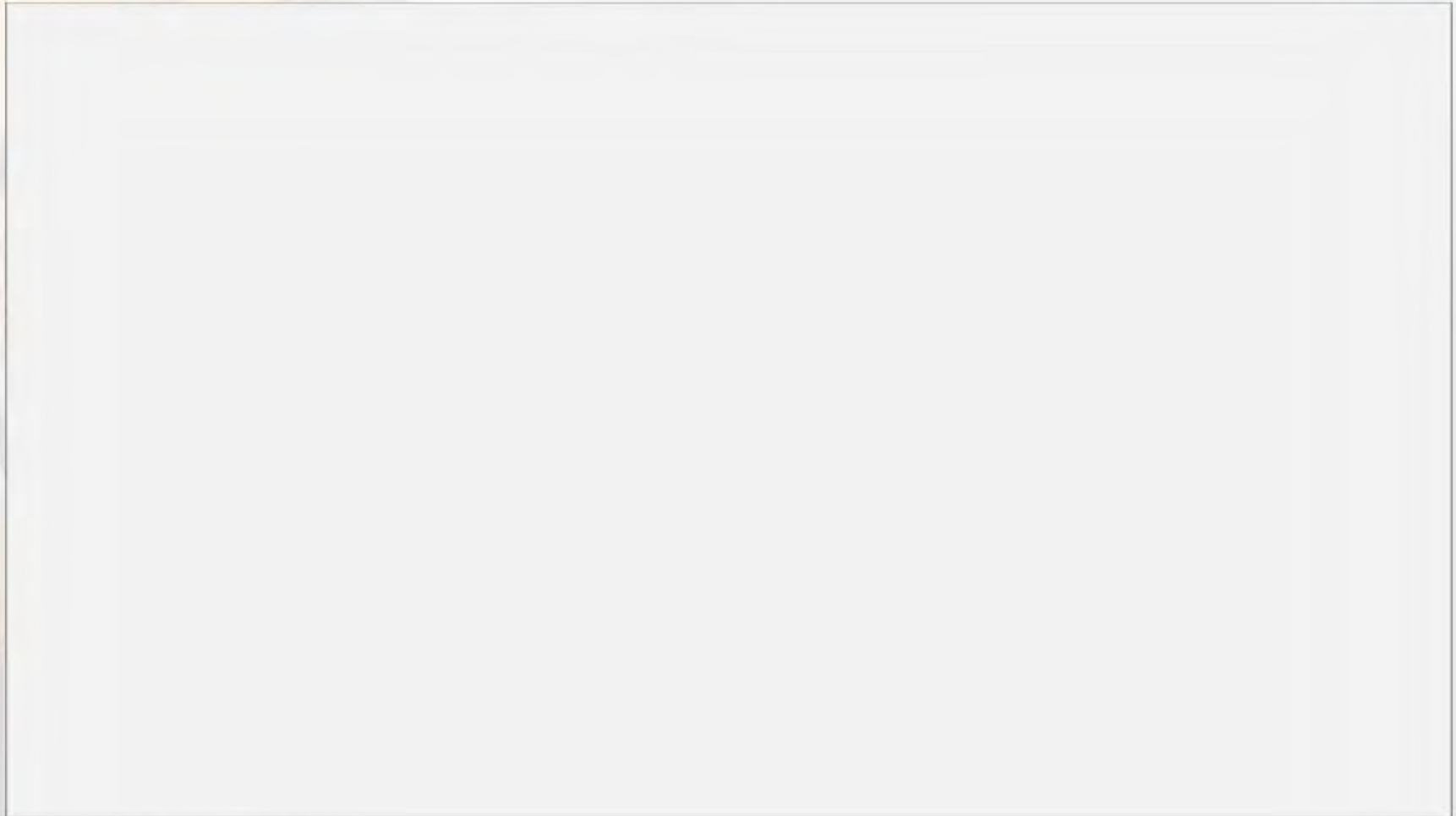
- TBM weighs **3,000 tons**
- TBM cutter head with an outside diameter of **42.3 feet (as high as a 4 story building)**
- **361 foot long trailing support gear made up of 6 gantries**
- Total length of the TBM is **428.5 feet long (more than a football field).**

Eastbound Tunnel Interior



Boring Started: November 11, 2011
Breakout on Dodge: July 31, 2012
Rings Installed: 745 Rings
Length of Bored Tunnel: 4,186 LF

TBM Breakout & Turnaround Video



Westbound Tunnel Interior



Boring Started: October 30, 2011
Rings Installed: 745
4152 of 4152 LF = 100 %

Cross Passages



- The tunnel has five cross passages, or emergency exits.
- The first, fourth and fifth cross passages are not underneath the channel.
- The other two cross passages, which go underneath Biscayne Bay, are being treated with a brine to freeze the ground.



Dodge Island Tunnel Portal



Watson Island Tunnel Portal



MacArthur Causeway view



Tunnel Interior

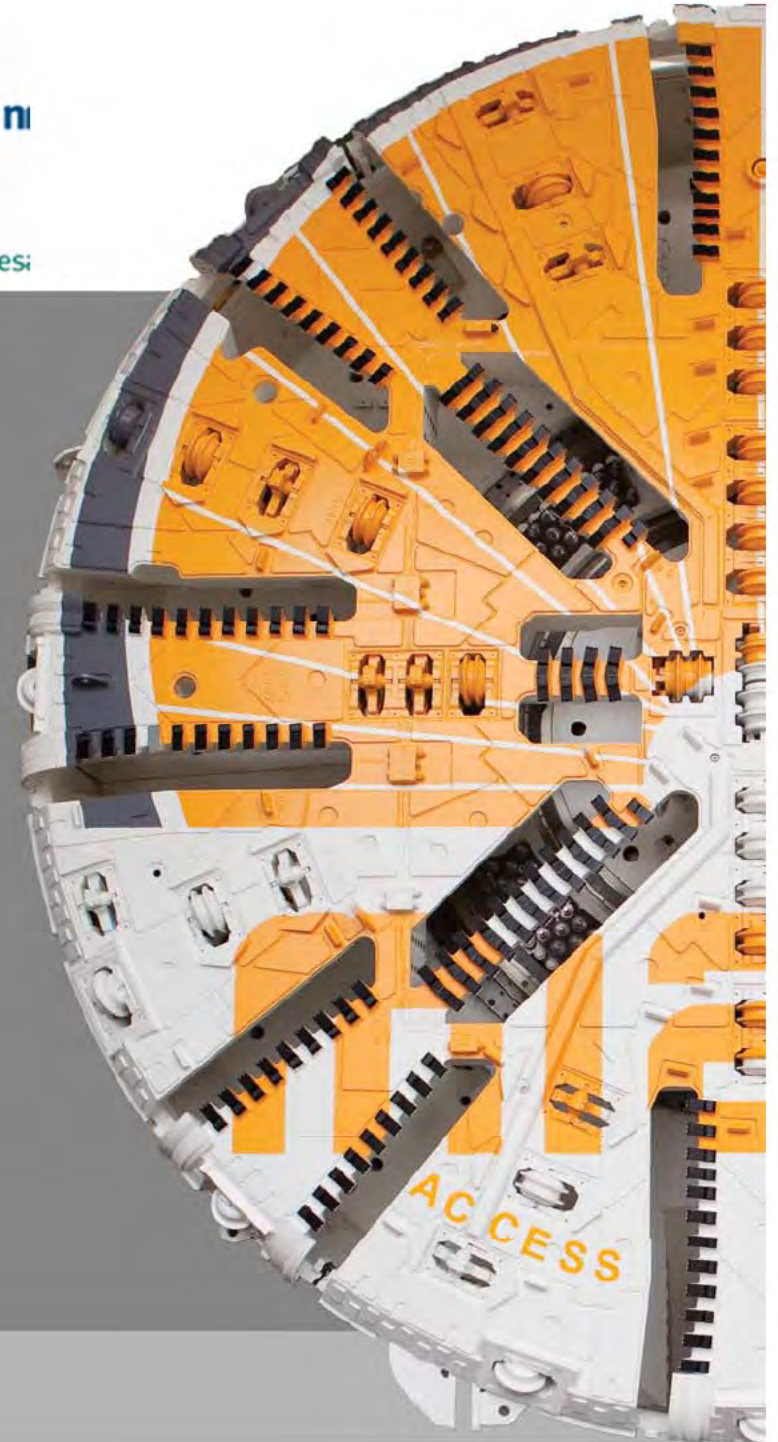


May 15, 2014 – Substantial Completion



Alliance of the Ports of Canada, the Caribbean, Latin America and the United States:

PUBLIC OUTREACH





Proactive Strategy

In Miami's hyper-active media and political environment every public infrastructure project has the potential to become a local "hot-button" issue—and mastering community relations and public outreach tactics is now as important as engineering and construction aptitude.

Hot Issues & Stakeholder Meetings

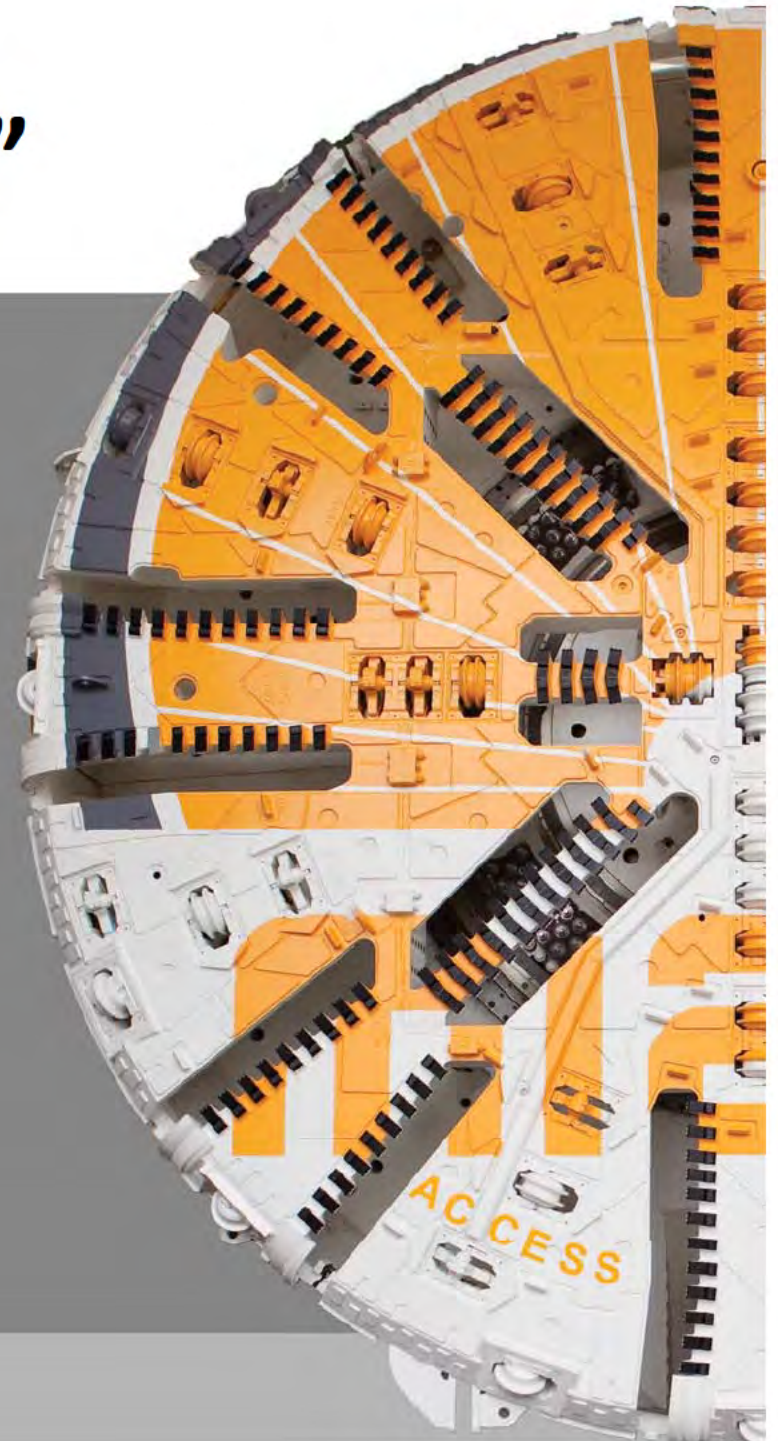


- **Traffic (MOT)**
- **Noise**
- **Air**
- **Job creation**
- **Financing**
- **Tolls**
- **Schedule**
- **Tourism impacts**
- **Supporters' validation**



Operation “305”

- Job Fairs and Community Events
 - City of Miami CRA Overtown Folklife Job Fair
 - Minority Enterprise Development Week
 - M-D County Office of Economic Development
 - Operation 305 Expo
 - Haitian American Chamber of Commerce
 - New Birth Enterprises
 - Southern Florida Minority Development Council Conference
 - Senator Frederica Wilson’s Local Job Fair
- Organized Labor
 - IBEW
 - LiUna – www.build305.com



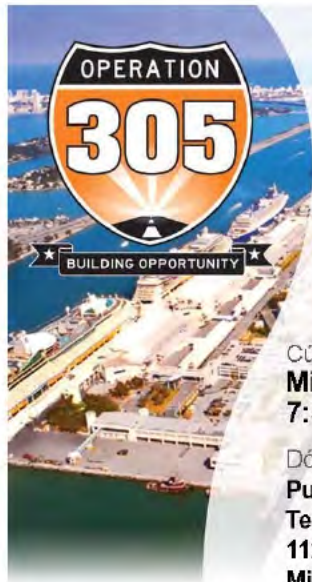


Local Hiring Efforts





Vendor & Supplier Expo



DBE, WBE y todas las empresas pequeñas y medianas! Unanse al equipo de Miami Access Tunnel para la

Exposición de Contratistas & Proveedores

Cuando:
Miércoles, 1 de diciembre, 2010
7:30 – 10 a.m.

Dónde:
Puerto de Miami
Terminal J
1120 Caribbean Way
Miami, FL 33132

Operación 305, es una iniciativa nueva la cual estimulará contratos locales para el proyecto de construcción del Túnel al Puerto de Miami. ¡Veniga y aprenda más!

La inscripción está abierta a todos los empresarios de pequeñas y medianas empresas y/o a sus representantes. Parte de las ganancias recaudadas de la Exposición es a beneficio del Miami Children's Museum.

La fecha de pre-inscripción es el **26 de noviembre, 2010**.

Pre-Inscripción es \$25 (\$35 el día del evento)

Inscribase en linea en el: TunnelOperation305.com

Para más información, favor llamar a **Carlos Terán** al **(305) 948-8063, ext. 206**

Por favor traiga identificación con foto para presentar en la entrada del puerto



National Engineering Week



For Immediate Release
February 15, 2011

Contact: Denise Pojomovsky
786-262-0856

Tunnel Team Seeks to Inspire Engineering Students

MIAMI — To promote National Engineer's Week and inspire students in Miami-Dade County, the Port of Miami Tunnel project team will visit three high schools offering specialized engineering classes. Project engineers will explain the unique and innovative tunnel being built in South Florida, and then will speak about their careers and previous experience before joining the tunnel team. The team is providing teachers an introductory video on tunnels around the world which will be shown to classes before the visits.

"This project is receiving global attention, so it's a perfect opportunity to reach out to our engineering high schools," said Gus Pego, Secretary of Florida Department of Transportation (FDOT) District Six. "We want to make sure future engineers are motivated by the Port of Miami Tunnel project and about the local, national and international opportunities available in the engineering profession."

The project team will visit two nationally certified engineering academies, North Miami Senior High School and Hialeah Gardens Senior High School, and Booker T. Washington Senior High School, which is currently applying for national certification. These schools are among the few in Miami-Dade County that offer any engineering classes to students in grades nine through 12.

The initiative is being coordinated by School Choice and Parental Options program of Miami-Dade County Public Schools and Miami Access Tunnel (MAT), the private consortium building the tunnel in partnership with the FDOT District Six. This is the outreach program's first year and the project team hopes to expand it in coming years, since the tunnels won't be completed until 2014.

"We want to emphasize to high school students the importance of continuing on to higher education," said Chris Hodgkins, vice president of MAT.

For more information, please contact Denise Pojomovsky at 786-262-0856 or dpojomovskv@communiqatz.com.

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Girl Scouts Program & TBM Naming Contest



MAT held the following activities with the Girl Scouts STEM (Science, Technology, Engineering & Math) program:

- **TBM Naming Contest Kick-off and Educational Program**
- **TBM Naming Contest Award Ceremony, where Harriet was announced**
- **Customized MAT Badge (for their sashes) for participation in our educational program.**

Harriet Ad

Girl Scouts connect Port of Miami Tunnel to the ultimate trailblazer . . .



Harriet Tubman, passionate abolitionist and women's suffrage advocate, embodied the bold spirit of this community. Her Underground Railroad escape missions not only guided slaves to freedom, but launched her life-long push for equal rights. This legacy is why the **Council of Tropical Florida Girl Scouts** named the 3,300-ton **Tunnel Boring Machine "Harriet"** – a strong symbol to connect with our powerful TBM.



We're building more than a tunnel; we are creating hope in young lives. Together, let's show future engineers, technologists and geologists what South Florida's imagination and can-do attitude will accomplish.
Visit PortofMiamiTunnel.com to learn more.





Miami Children's Museum

- Bob the Builder Exhibit
- Annual Halloween Event
- Charter School Presentations
- Tunnel Club
- Kiosks and Kids' Zone



**Bob
the
Builder**

**PROJECT:
BUILD IT**

**June 4, 2011
through
September 11, 2011**

 **miami children's museum**
play • learn • imagine • create

960 MacArthur Causeway
Miami, FL 33132
T: 305.373.kids (5437)
www.miamichildrensmuseum.org

 **DELTA**
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 **CHILDREN'S
MUSEUM**
INDIANAPOLIS

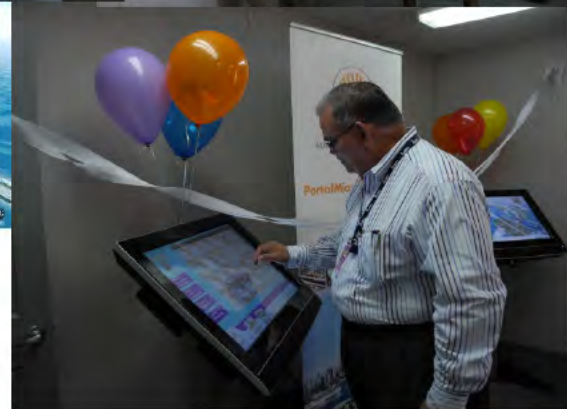
 **miami**
CHILDREN'S MUSEUM

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Informational Kiosks



MAT would like to invite you to the unveiling of our Kiosks! Please join us for lunch on Wednesday, September 7, between 11:30 a.m. and 1:30 p.m., at the MAT Conference Room. We will have our kiosks on-site so the project team can get a sneak preview. Please RSVP to denise.palomares@mat-tunnel.com.



Coral Gables Museum Exhibit



Booker T. Washington High School Summer Internship



TBM Breakout



July 31, 2012

- **More than 500 attendees**
- **Every local news organization**
- **National media coverage**
- **Live Breakout with TBM crew describing what was happening as machine broke out**

Obama's Tunnel Visit



Media Relations



Media Events

- Groundbreaking
- TBM ship arrival
- TBM cutter -head lowering
- Site tours
- TBM Launch
- TBM Breakout

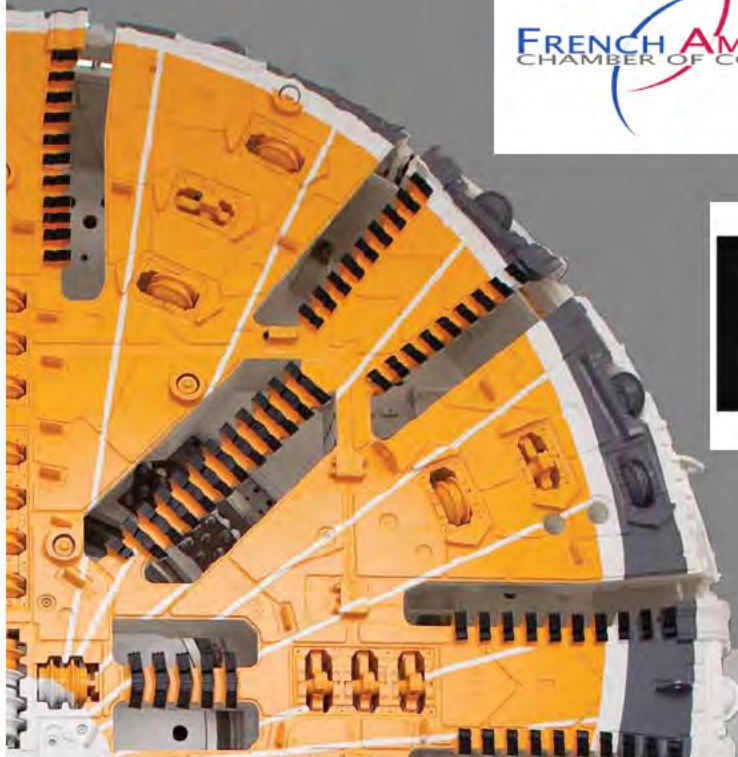
Community Partnerships



Laborers' International Union of North America

LIUNA!

Feel the Power





Questions?

*For additional project information,
please visit our website at:*

www.portofmiamitunnel.com

Project Videos & Gallery