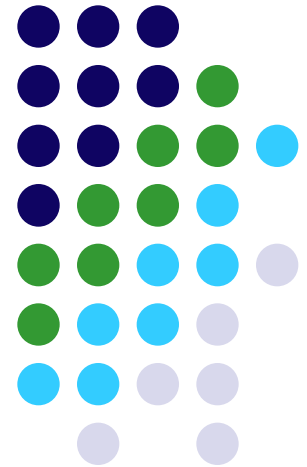


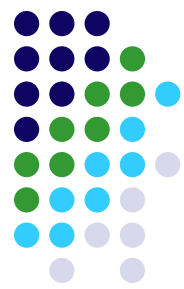
# Transit PPP Case Studies

Implementation of PPPs for Transit  
May 20, 2009

*Pamela Bailey-Campbell*  
*Parsons Brinckerhoff*



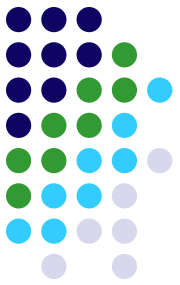
# PB – Transit & Innovation Together



120 years of transit and infrastructure experience



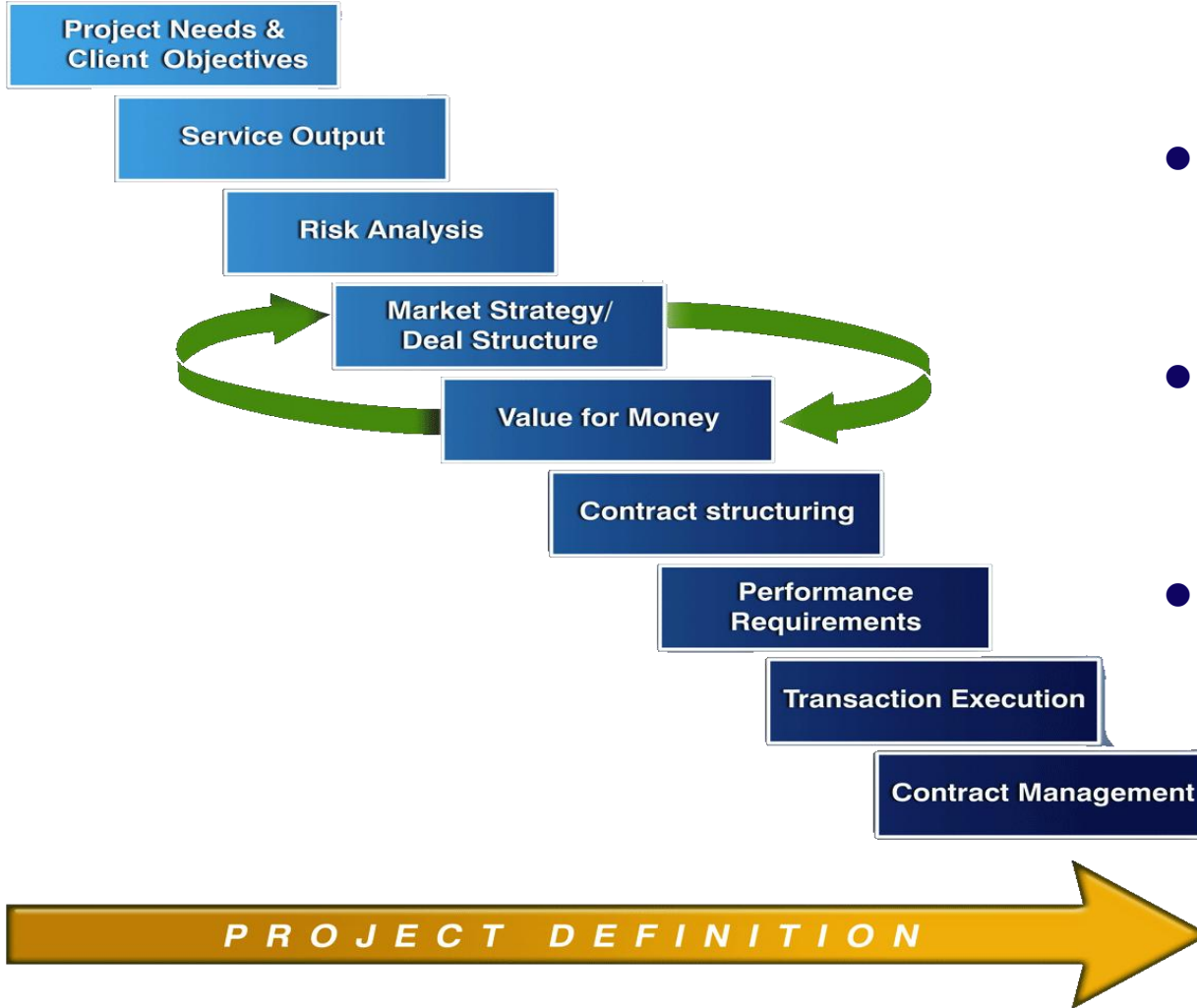
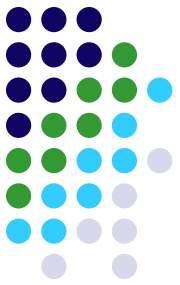
# PPP Variations



<i>Delivery</i>	<i>Development</i>	<i>Operations</i>	<i>Maintenance</i>	<i>Financing</i>	<i>Ownership</i>
Design-Bid-Build (DBB)	Public	Public	Public	Public	Public
Design-Build (DB)	Public	Public	Public	Public	Public
DB or DBB with Private Contract Fee Services	Public	Private	Public or Private	Public	Public
DB as Build-Operate-Transfer (DBOM)	Public	Private	Private	Public	Public
<b>D-B as Design-Build-Finance-Operate (DBFO) via Long Term Lease Agreement</b>	Public or Private	Private	Private	<b>Private</b>	Public
D-B as Build-Own-Operate	Private	Private	Private	Private	Private

} P3's

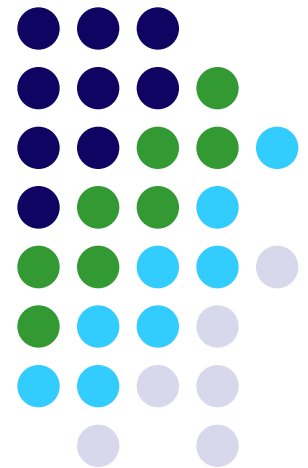
# PPPs: More Than Concessions

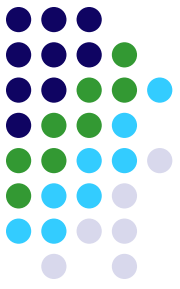


- **Innovative Tax-Exempt Financing Structures**
- **Blending Various Funding Sources incl Value Capture**
- **Creative Use of Design-Build, DBOM to Obtain Innovation, Cost Efficiency, Schedule & Cost Certainty**

# Leveraging Lessons On New Starts PPPs

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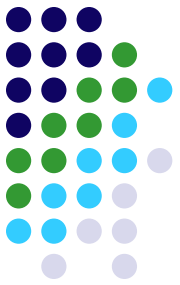




# U.S. Public Transit Agency PPPs

- **(7) Transit New Starts Using DB/DBOM**
  - Hiawatha LRT Line (Minneapolis)
  - BART Extension to SFO
  - Denver RTD Southeast Corridor LRT
  - WMATA Largo Metrorail Extension
  - South Florida Commuter Rail Upgrades
  - (2) NJ Transit Hudson-Bergen (MOS-1, MOS-2)
- **Federal Interest (Non-New Starts)**
  - Portland MAX Airport Extension
  - JFK Airtrain
- **FTA Penta-P Program**

# Hiawatha LRT: Design-Build



- **Sponsoring Agency: Metro Transit & MnDOT**
- **12 miles connect Minneapolis, Airport, Mall of America First LRT**
- **\$715 Million, Opened 2004, FFGA,**
  - **Funded by FTA, Federal STP & CMAQ, State, Hennepin County and Metropolitan Airports Commission**
- **Approach:**
  - **Design-Build necessary to meet schedule**
    - Best Value, Fixed-price, 2-step process
    - Two separate DB contracts: Rail vehicles (Bombardier) + Rail/Systems (Granite Construction)
  - **DBB for Airport Tunnels**
  - **Interface Challenges**





# Hiawatha LRT: Design-Build

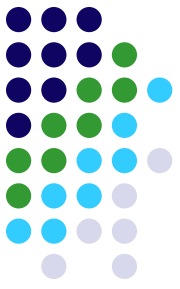
- **Results**

- **Shaved 20% off the schedule, delivered at least one year earlier**
- **Innovations in construction saved money**
  - Cast-in-place bridges, prefabricated substations
- **Trimmed OH costs of MnDOT and Metro Transit by \$25-38 million with early completion**
- **8 million passengers were able to use the line in first year**





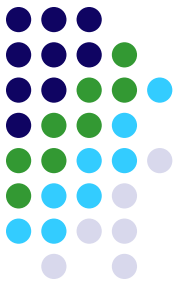
# JFK Airtrain DBOM



- **Sponsoring Agency: Port Authority NY & NJ**
- **People-mover Linking JFK Airport**
- **8 miles, 10 stations**
- **\$1.9 Billion, Opened 2003**
- **Not New Starts but Federal Interest**
  - **Funded by combination of PANYNJ & PFCs**
- **AirTrain Consortium: Slattery Skanska & Bombardier**
- **Fast-track Design-Build**
  - **100% Design for tunnels under taxiway**



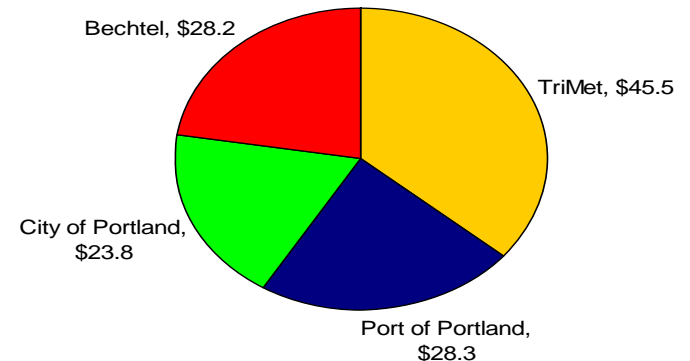
# Portland MAX Airport Extension



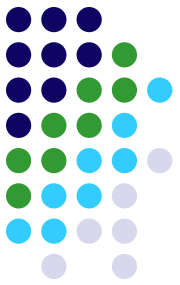
- **\$125 Million 5.5-mile LRT Extension to Airport**
- **Key Factor: Prime Real Estate Owned by Port (458 Acres Portland International Center)**
  - **Mitigated need for more parking at PDX**
- **PPP Effort Initiated and Led by Bechtel Enterprises**
  - **SPEED: 1997 Unsolicited Proposal to 2001 Opening**
  - **\$125M LRT Engineering & Construction**
  - **Partnered with Trammel Crow to develop 120-acres parcel Cascade Station (85 yrs)**



Airport Max Funding, in millions



# BART Oakland Connector

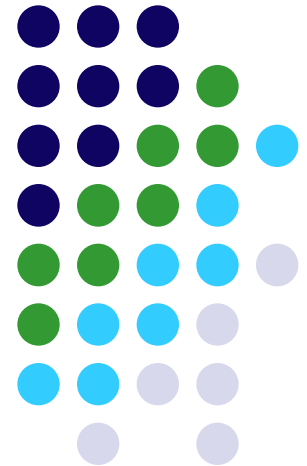


- **FTA Penta-P Project**
- **3.2 mile Automated People Mover connecting BART to Oakland Airport**
- **Public Funding: FTA, Bridge Tolls, Sales Tax, Port of Oakland**
- **Farebox Revenue Anticipated to Cover Financing and Operations**
- **Procurement to Restart**
- **Concessionaire: Risk of design, construction, testing, start-up, 35 years of O&M, 5-years useful life at handback**
- **BART Sets/Collects Fares**
  - **35 Year Performance Payment**
  - **10% of Concession Payment on Ridership**
  - **\$60 Million Ridership Reserve for Revenue Shortfalls**
  - **Revenue Surplus Shared but Capped**



# Developing Innovative US Transit & Rail PPPs

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# Fort Lauderdale

## Downtown Transit Circulator

- Sponsors
  - Downtown Development Authority
  - Broward County Transit
- Project Goals
  - Economic Development
  - Mobility (Free Hospital Link)

# Funding Plan



**Capital Funding: ~\$159 million (\$YOE)**

## Grant Funding Sources

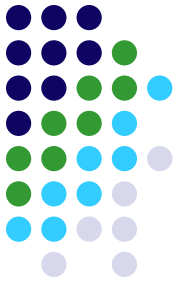
FTA New Starts/Small Starts	28%
FTA 5307 Formula Funds	2%
FDOT New Starts	33%
FDOT Annual Work Program (#421170-1)	1%
Fort Lauderdale City Commission Contribution	7%
DDA Contribution	3%

## Taxes & Fees (Bonded)

Special Assessment District (DDA)	27%
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- **Assessment Schedule**
  - 30 years: \$100/year residential condos
  - \$.05/sq ft: non-residential, residential land
  - \$.14/sq ft improvement assessment per building

# California High Speed Rail

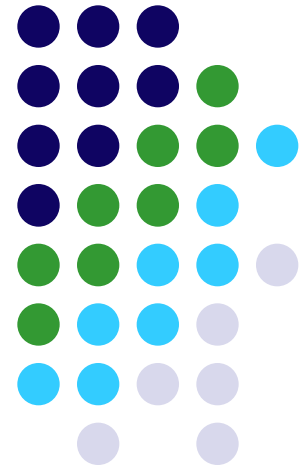


- **\$40 Billion 800-mile, 220 mph rail service from San Diego to San Francisco**
- **Annual revenue \$2.4 to \$4 billion, allowing train service to operate without public subsidy & generate private investment**
- **High Speed Train Bond Approved Nov 2008**
- **New Federal Emphasis on HSR**
- **\$Financing Plan\$**
  - **Federal – 25-33%**
  - **State & Local**
    - **\$9.95B Bond Issue**
  - **Private**



# What Makes PPPs Successful?

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# What is the Right Prescription?

- Carefully Determine the “Right” Approach based on
  - Goals/experience of public agency
  - Size/stage of project
  - Legislative framework
  - Public sector financing restrictions
- Rigorous Procurement Process
  - Risk Analysis
  - Value for Money
- Importance and Power of the Public Sector Comparator
- Proactive Public Outreach is Critical

