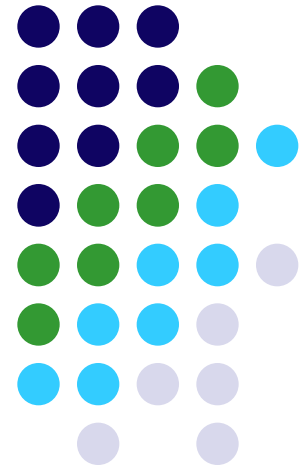


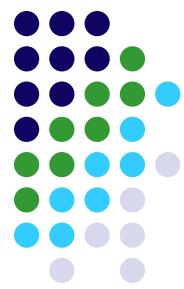
Transit PPP Case Studies

Implementation of PPPs for Transit
May 20, 2009

Pamela Bailey-Campbell
Parsons Brinckerhoff



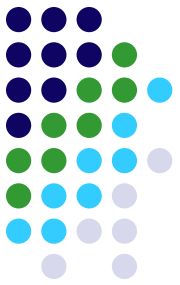
PB – Transit & Innovation Together



120 years of transit and infrastructure experience



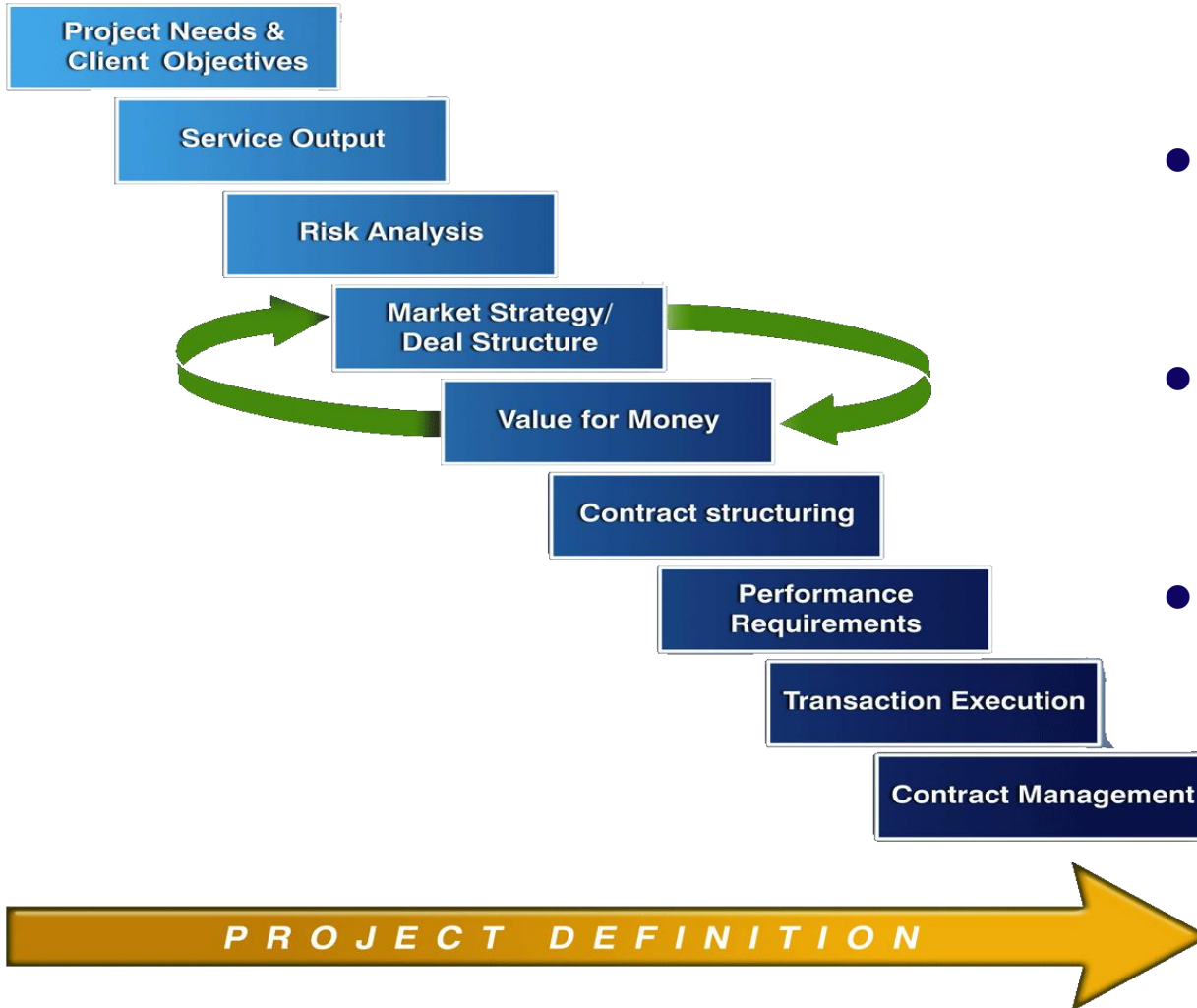
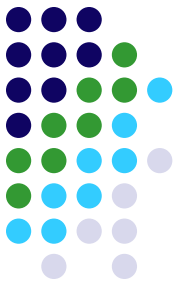
PPP Variations



<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
D-B as Design-Build-Finance-Operate (DBFO) via Long Term Lease Agreement	Public or Private	Private	Private	Private	Public
D-B as Build-Own-Operate	Private	Private	Private	Private	Private

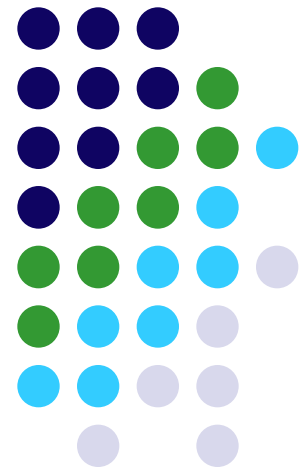
} P3's

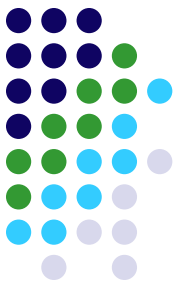
PPPs: More Than Concessions



- **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

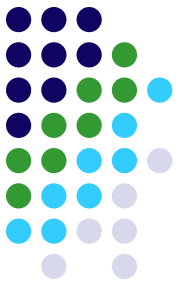




U.S. Public Transit Agency PPPs

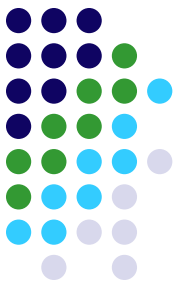
- **(7) Transit New Starts Using DB/DBOM**
 - Hiawatha LRT Line (Minneapolis)
 - BART Extension to SFO
 - Denver RTD Southeast Corridor LRT
 - WMATA Largo Metrorail Extension
 - South Florida Commuter Rail Upgrades
 - (2) NJ Transit Hudson-Bergen (MOS-1, MOS-2)
- **Federal Interest (Non-New Starts)**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





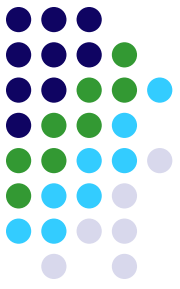
Hiawatha LRT: Design-Build

- **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**



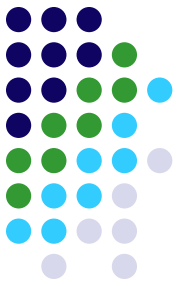
JFK Airtrain DBOM



- **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**



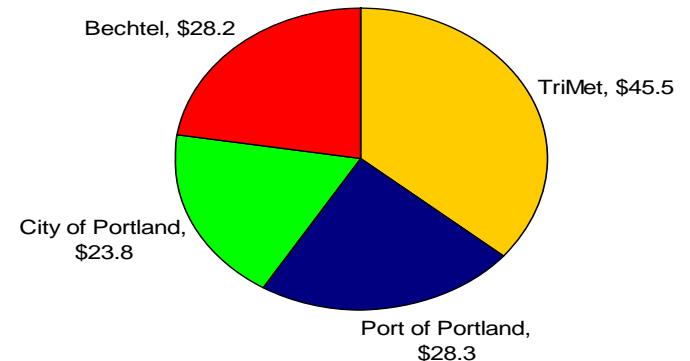
Portland MAX Airport Extension



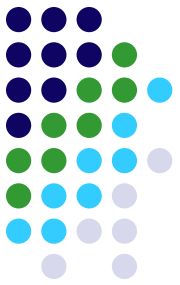
- **\$125 Million 5.5-mile LRT Extension to Airport**
- **Key Factor: Prime Real Estate Owned by Port (458 Acres Portland International Center)**
 - **Mitigated need for more parking at PDX**
- **PPP Effort Initiated and Led by Bechtel Enterprises**
 - **SPEED: 1997 Unsolicited Proposal to 2001 Opening**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



Airport Max Funding, in millions



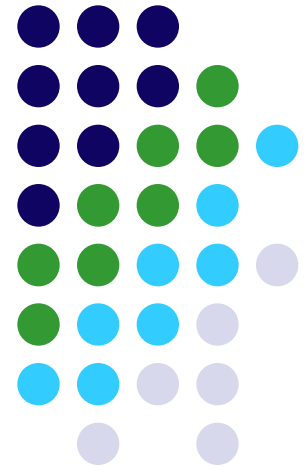
BART Oakland Connector



- **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





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

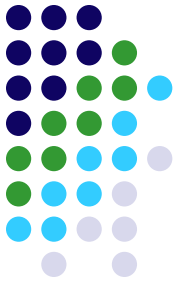
FTA New Starts/Small Starts	28%
FTA 5307 Formula Funds	2%
FDOT New Starts	33%
FDOT Annual Work Program (#421170-1)	1%
Fort Lauderdale City Commission Contribution	7%
DDA Contribution	3%

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

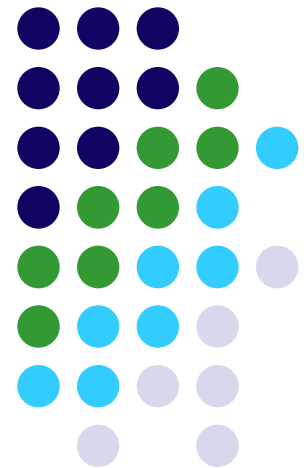
California High Speed Rail



- **\$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?



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

