

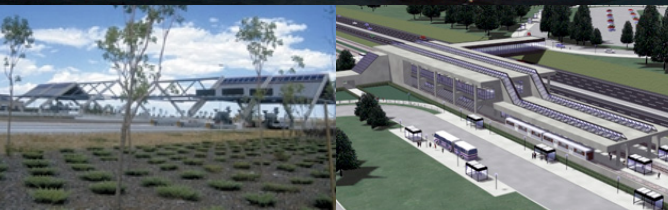


## Bond Buyer: Transportation P3 Conf.



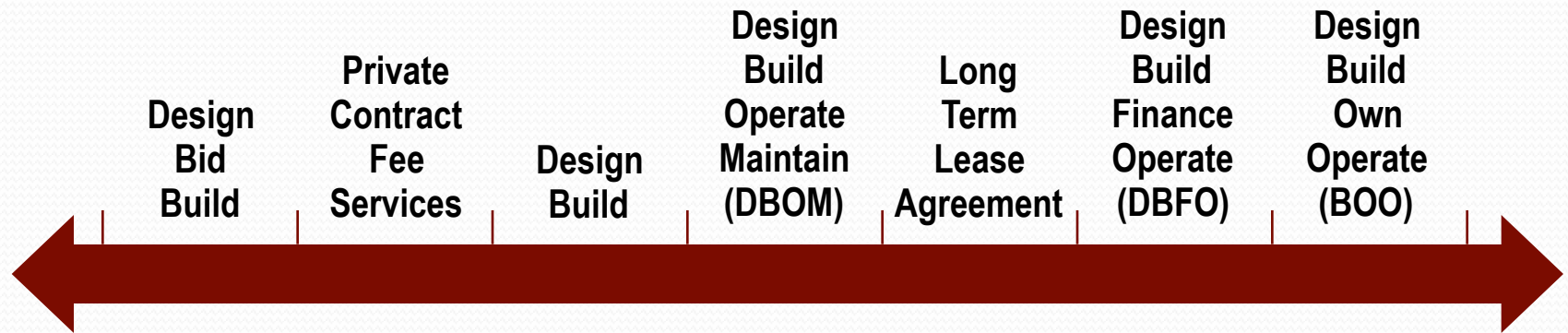
## Transit P3's - DBOM's, Facility Providers & Long Term Payments

Chris Kane, P.E., J.D.

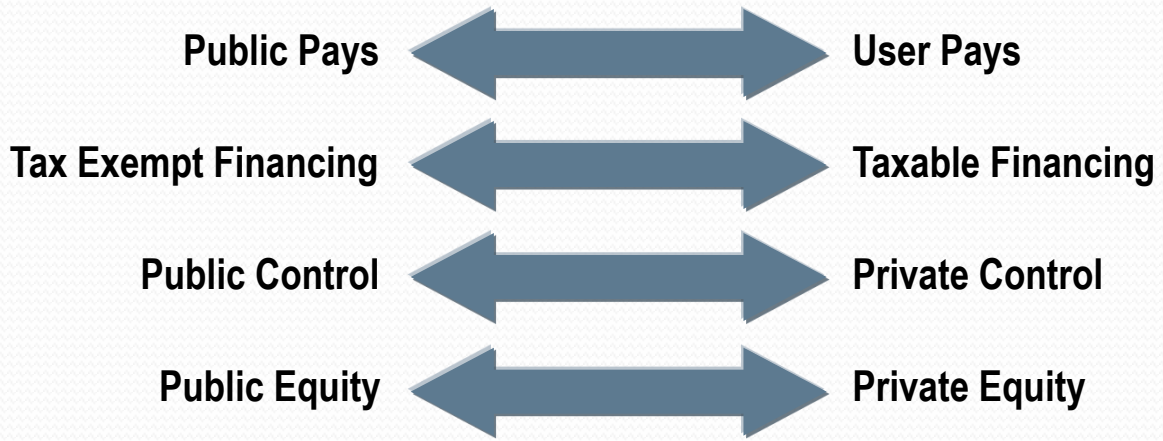


October 17, 2007

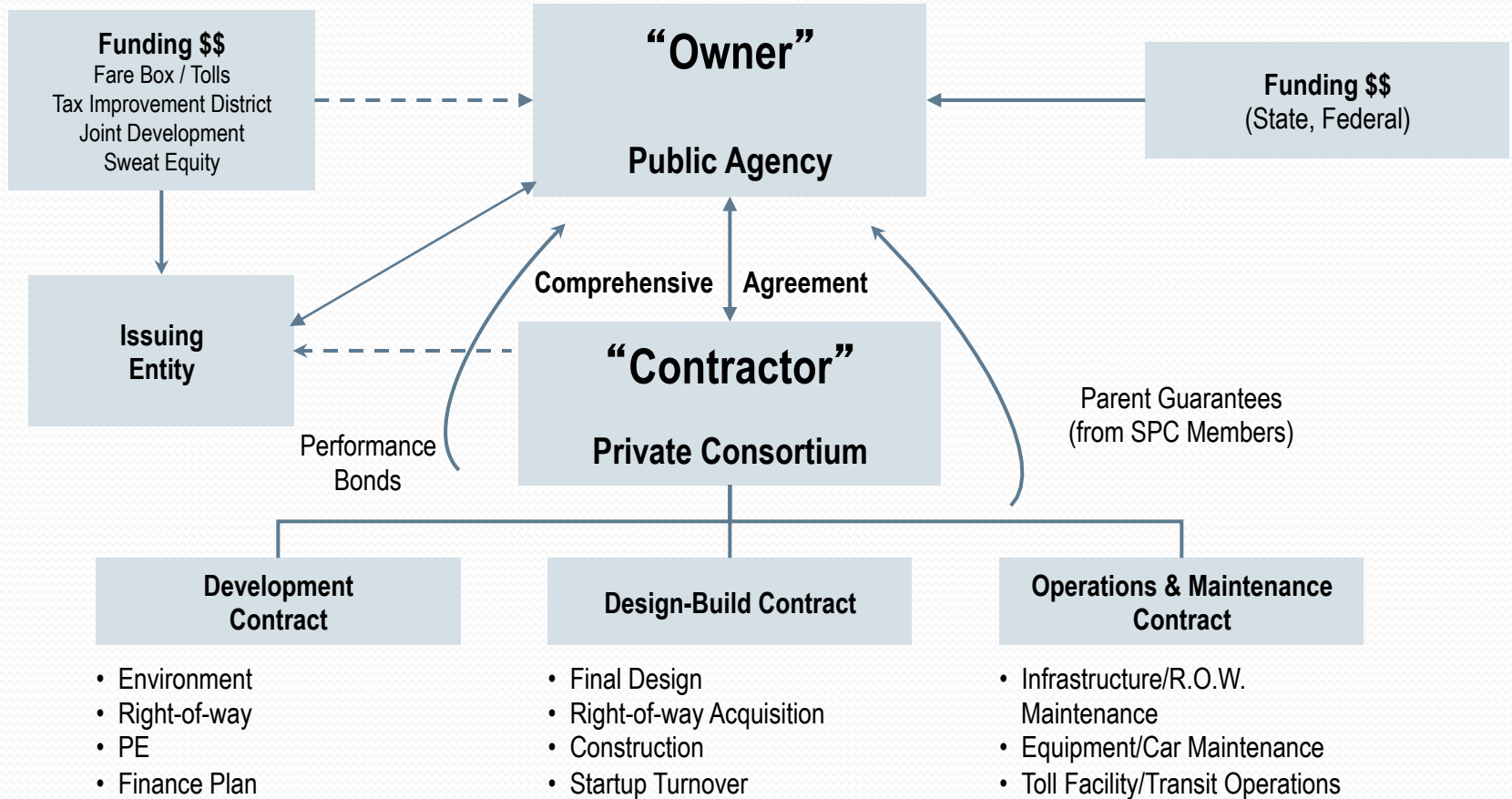
# Project Delivery Continuum



Public Projects      Public Private Partnerships      Concessions/Privatizations



# Typical PPP Structure



# Hudson-Bergen Light Rail



**Client:** New Jersey Transit  
**Location:** Hudson & Bergen Counties, NJ  
**Contract Value:** \$1.9 Billion  
**Contract Type:** PPP Design-Build-Operate-Maintain

**Performed as:** 21<sup>st</sup> Century Rail Corp.  
(Washington Group, Kinkisharyo/Itochu)

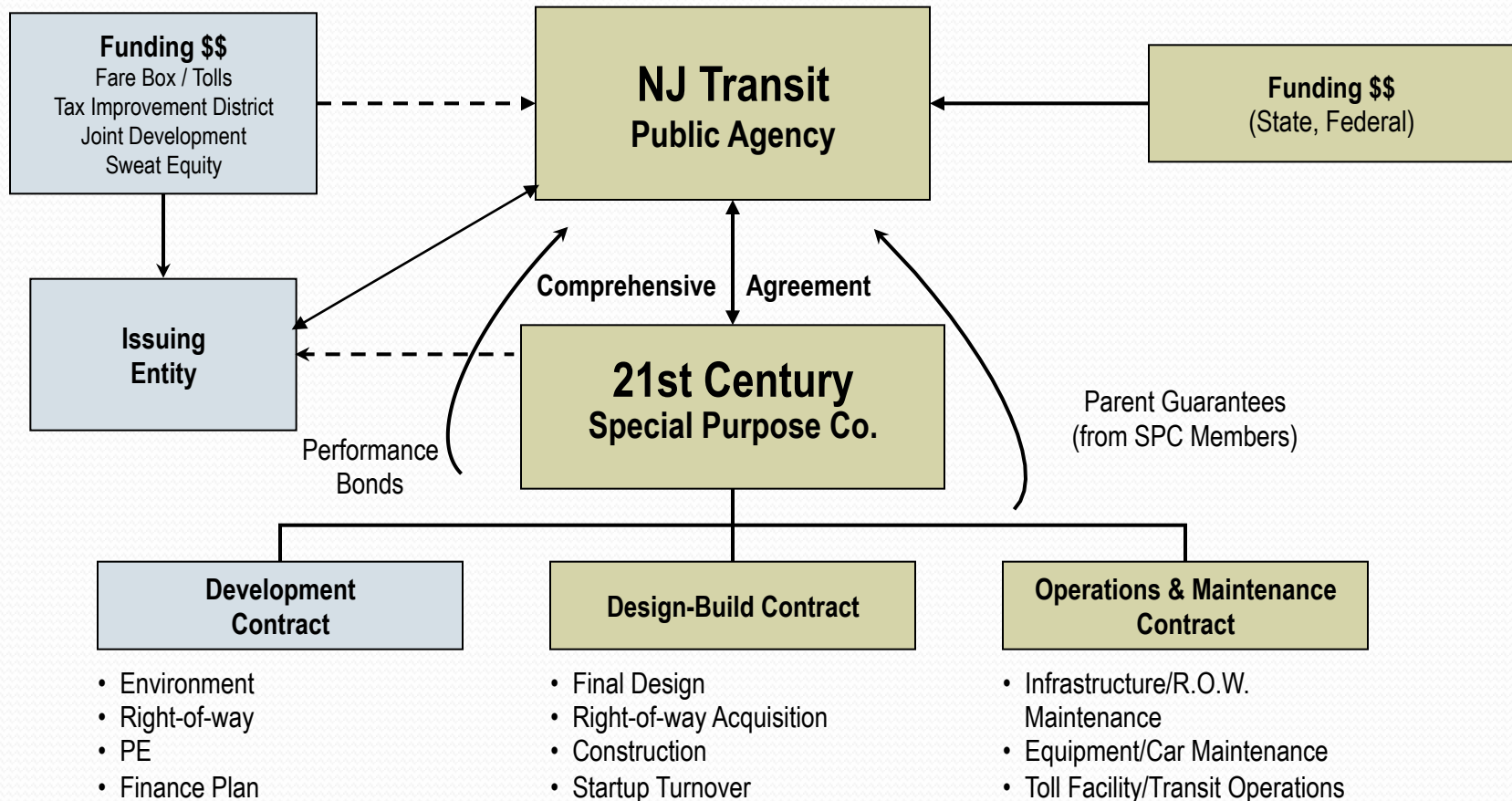
## Description:

- ◆ 20 miles double-track light rail transit with 23 stations
- ◆ Over \$1 billion in Design-Build Construction
- ◆ 15-yr Operations & Maintenance contract
- ◆ Includes manufacture of 43 light rail vehicles

## Achievements:

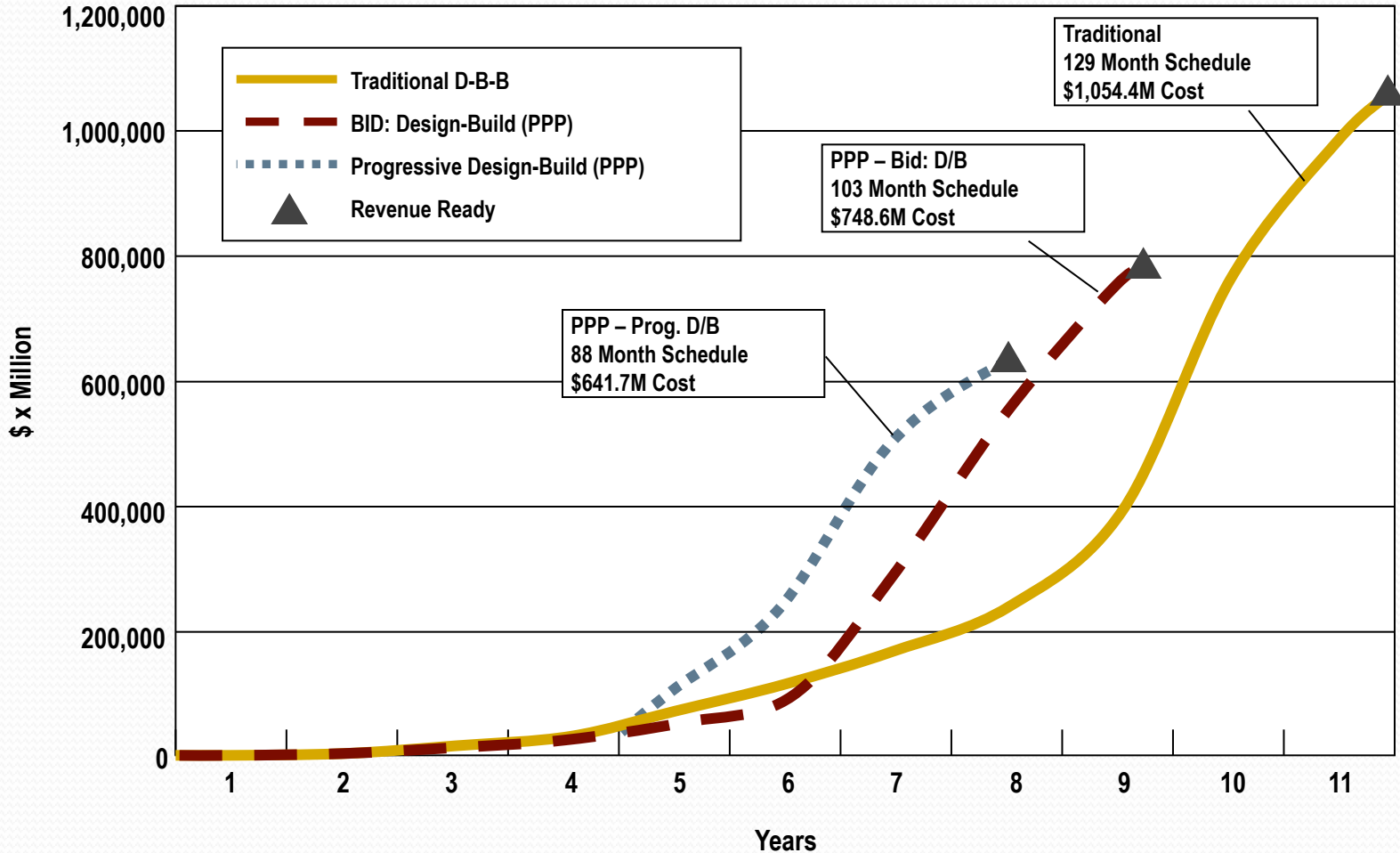
- ◆ Opened April 2000 for Phase 1 revenue service with 5 years of highly successful on time and safe operations
- ◆ First Phase Design Build Completion with no claims, on time and on budget

# Hudson-Bergen Light Rail (DBOM)



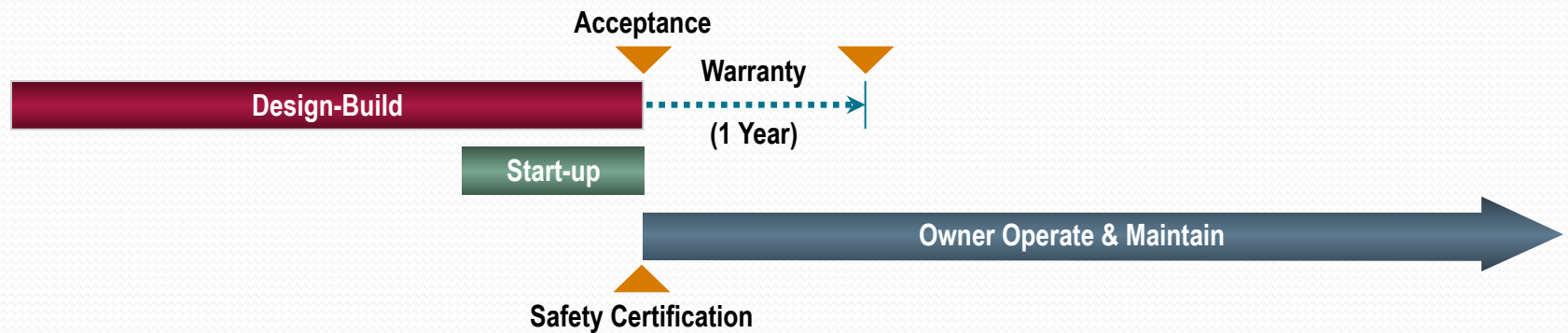
# Process Time Savings

## ....Equals Project Cost Savings

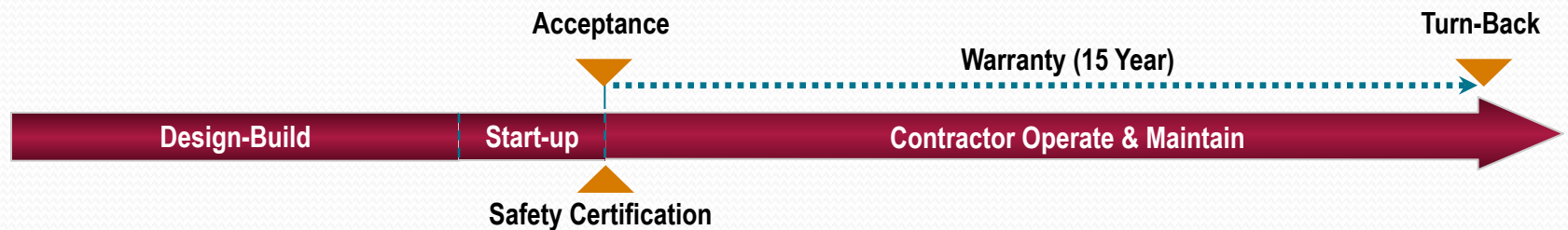


# Design-Build (DB) vs. DBOM

## Design-Build / Owner Operation (D/B)



## Design-Build-Operate-Maintain (DBOM)



# DB vs DBOM Comparison

## -Transition to Operations

### D/B w/ Owner Operation

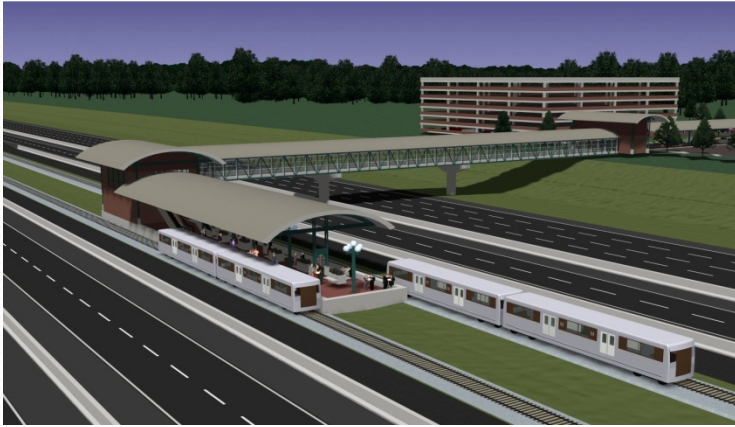
- 2-3 major participants
- Limited warranty period
- Little life cycle cost benefit
- Owner safety certification
- Fragmented responsibilities

### Design-Build and OPERATE

- ◆ Single-source responsibility
- ◆ Extended warranty period
- ◆ Integrated life-cycle costing
- ◆ Contractor safety certification
- ◆ Direct contract schedule & cost benefits



# Dulles Metrorail Project



**Client:** Virginia Dept. of Rail / Public Transport

**Location:** Fairfax & Loudoun Counties, VA

**Project Value:** \$4.5 Billion

**Contract Type:** Completed Development and PE; D/B Contract in process

**Performed as:** Dulles Transit Partners, LLC  
(Washington Group, Bechtel Infrastructure)

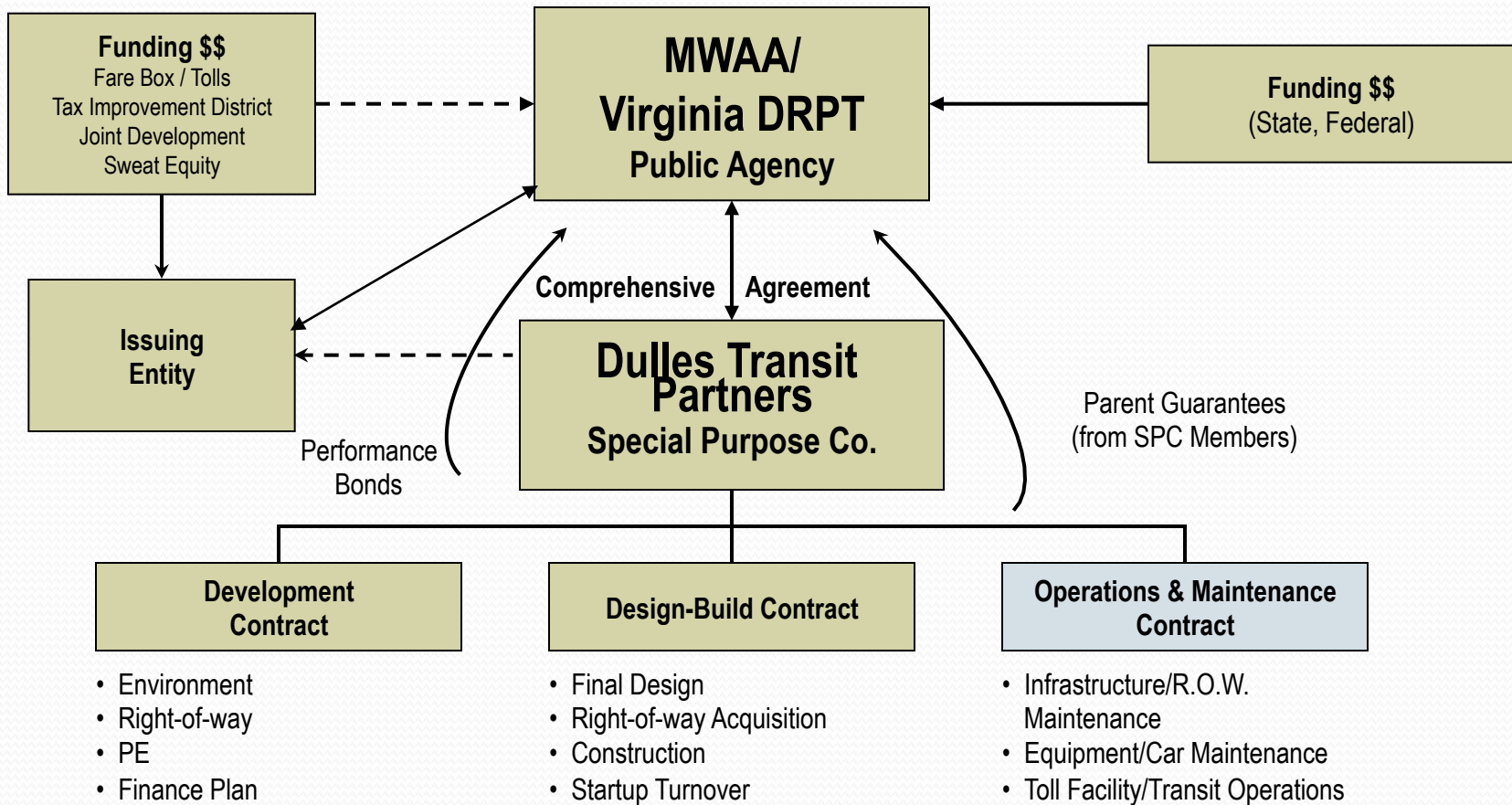
## Description:

- ◆ Heavy rail system extension
- ◆ 22 miles, 11 stations
- ◆ Largest US PPP ever undertaken

## Achievements:

- ◆ Private development investment
  - ◆ *Over \$10 million pre-contract investment*
  - ◆ *\$15 million cost sharing during development phase*
- ◆ Early Value Planning efforts identified nearly \$200 million in savings

# Dulles Metrorail (Develop & DB)

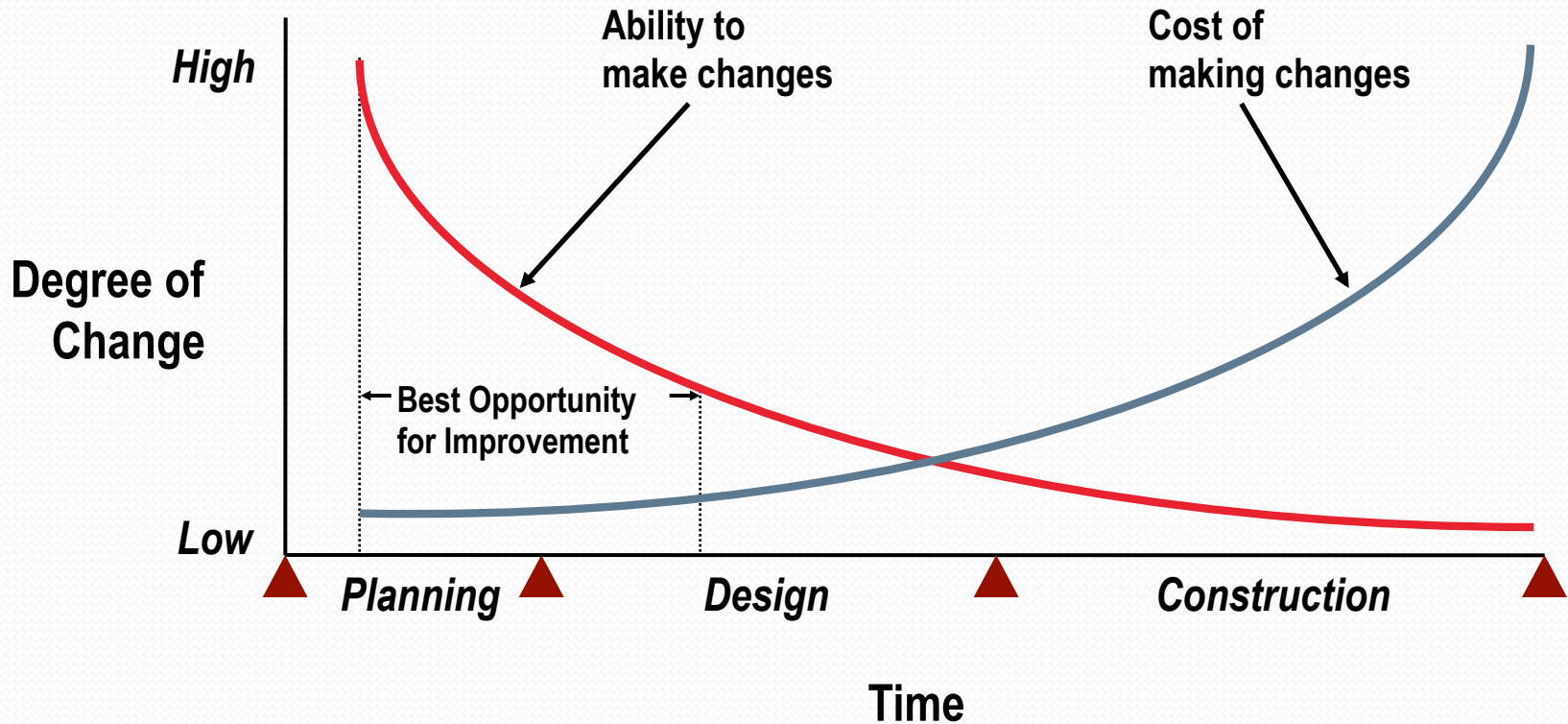


# Dulles Metrorail Innovative Finance Phase I

<b><u>Funding Source</u></b>	<b><u>Funding Share</u></b>
<b>Federal Sources—FTA New Starts</b>	<b>36%</b>
<b>Non-Federal Sources</b>	<b>64%</b>
◆ <b>Virginia Transportation Act of 2000</b>	<b>2.1%</b>
◆ <b>Dulles Toll Road Revenues</b>	<b>36.9%</b>
◆ <b>Fairfax County Dulles Tax Districts</b>	<b>16.1%</b>
◆ <b>Loudon County License Fees</b>	<b>4.8%</b>
◆ <b>MWAA Passenger Facility Charges</b>	<b>4.1%</b>
<b>Total</b>	<hr/> <b>100%</b>

# Value Planning

*Identifying Savings Early*

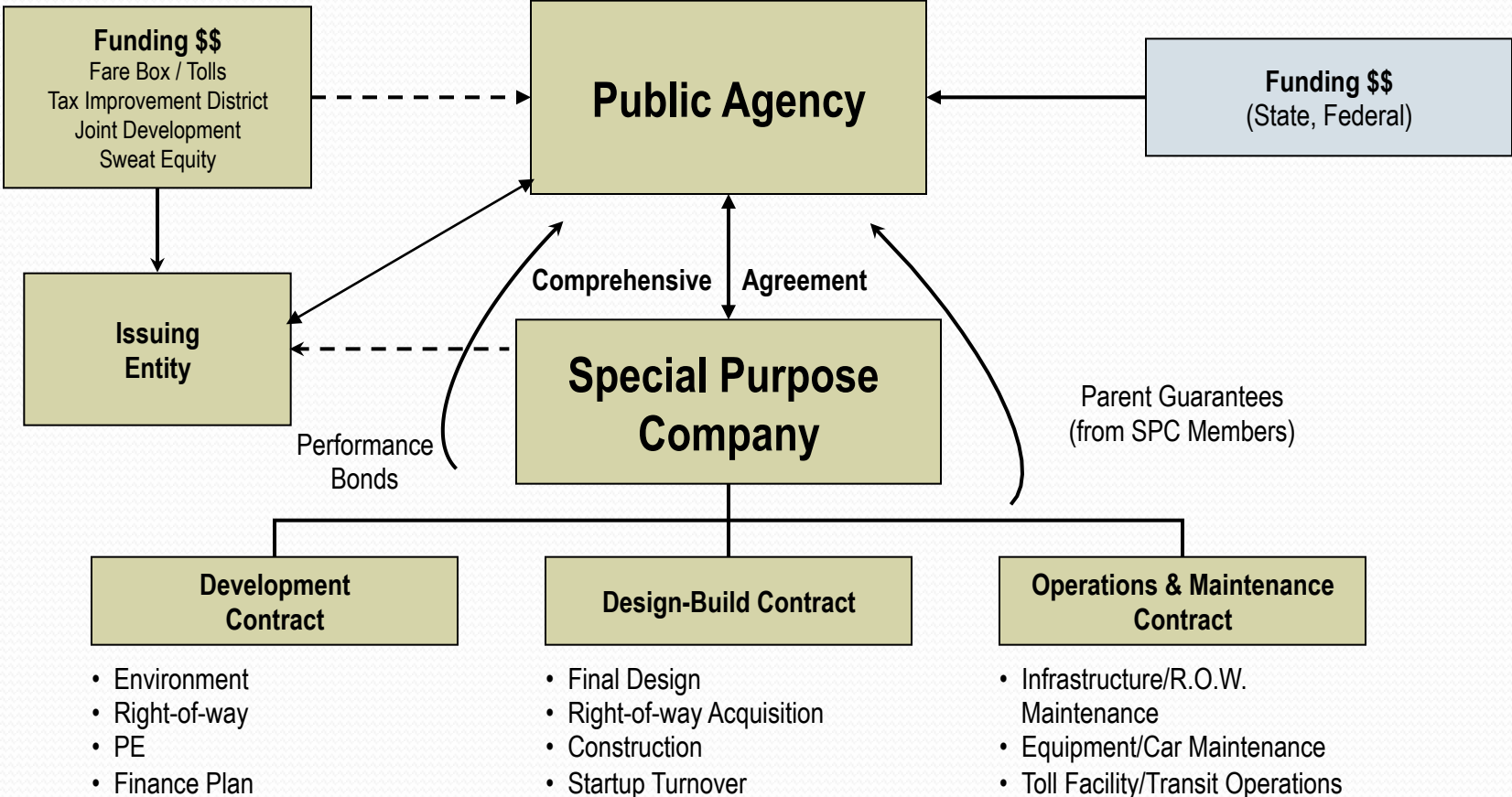


# Value Planning

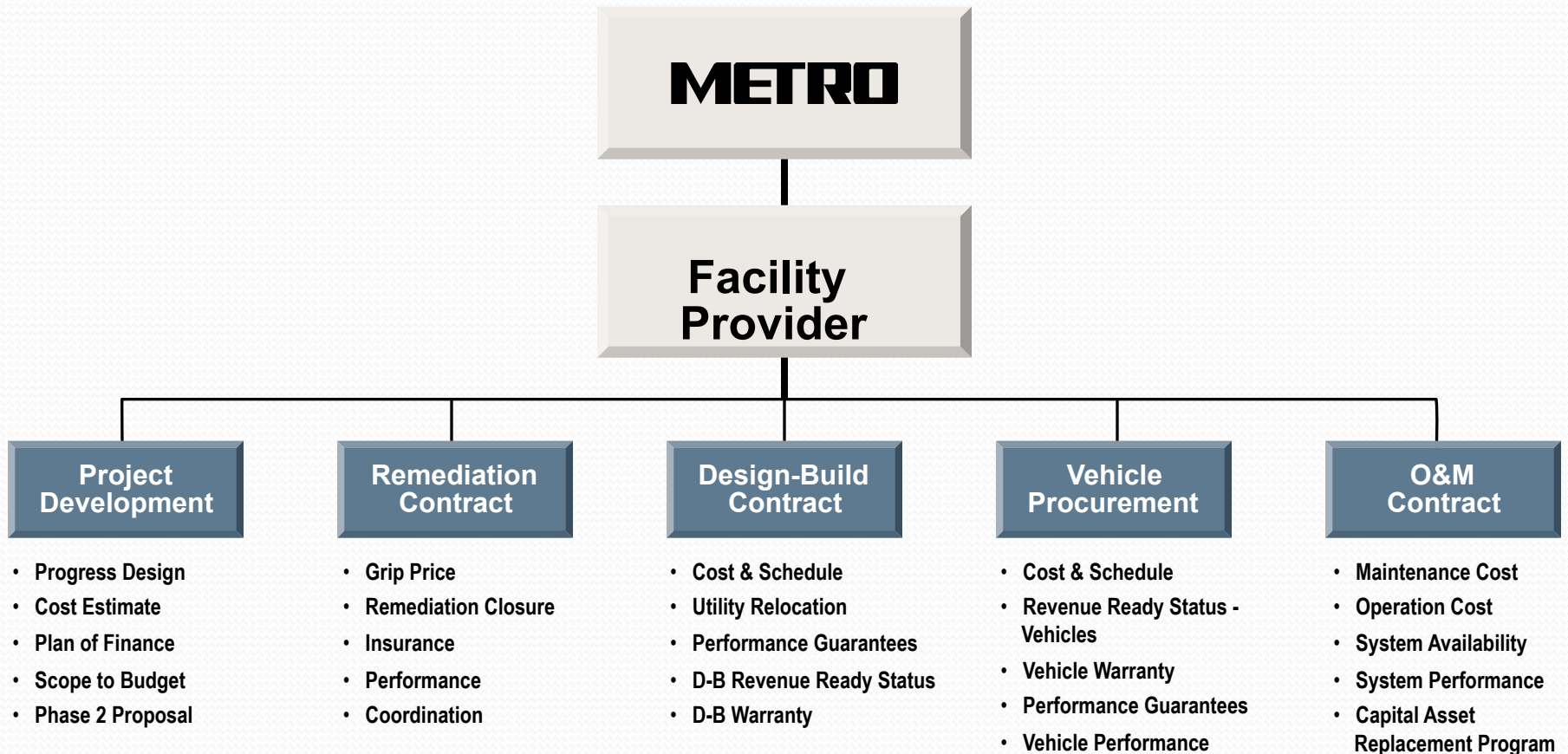
*(Dulles Metrorail)*

- First activity in development services
- Involved all project participants
- Took 4 months and cost \$400K
  - Developed 180 proposals
  - Recommended 35, of which 13 were chosen
- The 13 identified = \$190 million in savings
- Simple alignment change in tunneling area can save \$71 million alone

# Greenfield Transit / Toll Road (DBOMF)



# Houston METRO – Facility Provider

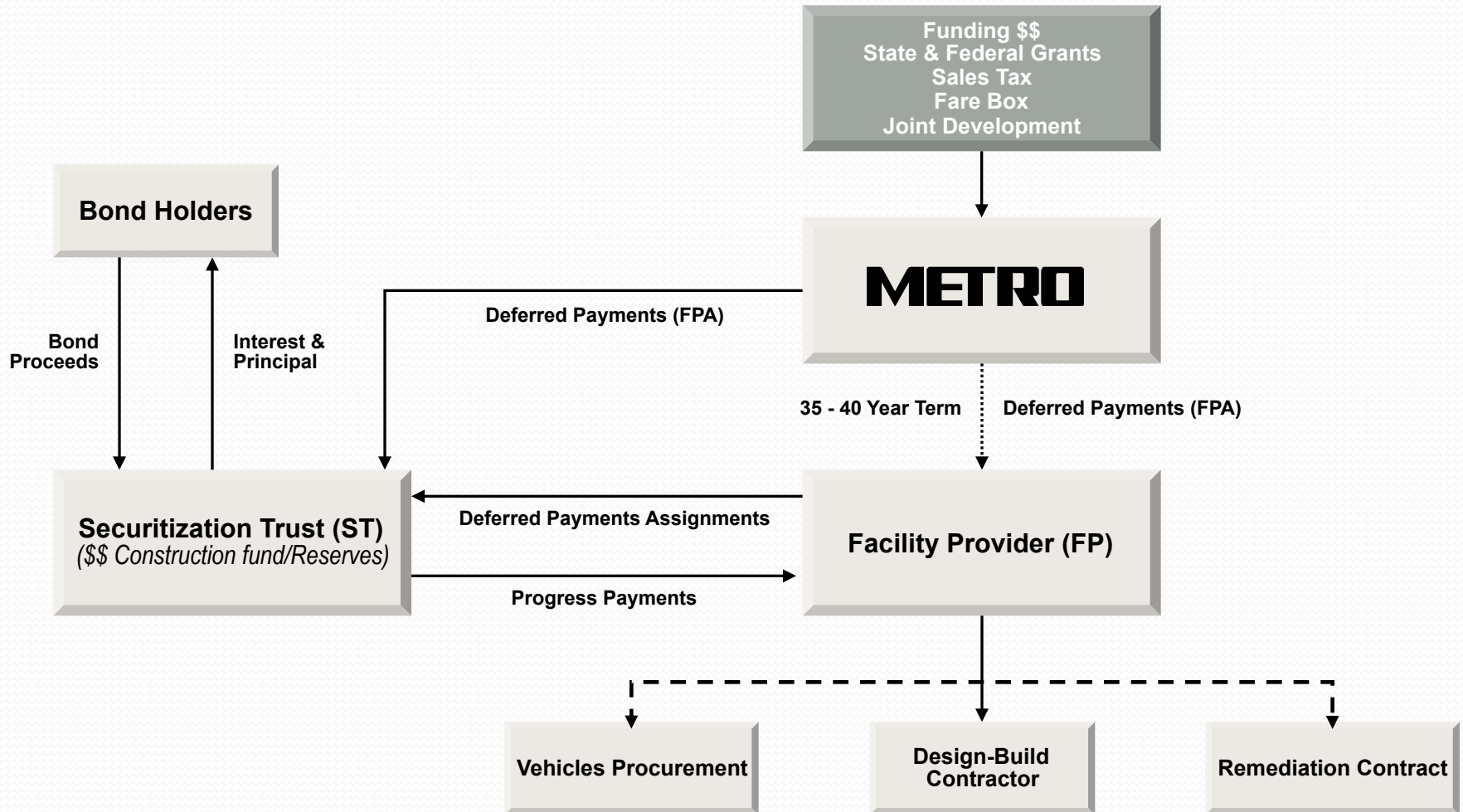


# Houston METRO - Value Added

- Houston METRO Funding Restraints:
  - Dedicated sales tax
  - FTA funding possible for 2 segments
  - Bonding limitation of \$640M
  - Would limit project to bus rapid transit
- Washington Group Proposal
  - Vehicles, property, terminal to separate funding
  - Use long term DB payments(40 year)
  - FP rights to DB receivables sold to a Securitization Trust (ST)
  - ST issues debt based on general credit of Houston METRO (estimated \$1.8 billion)



# Houston METRO Financing Structure



# Public-Private Transit Partnerships

