Innovative Transportation Finance Workshop



Private Sector Perspective – Innovative Finance in Action

Presented by: Katie Nees, P.E.
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Agenda

- Factors Driving New Sources of Financing
- Closing the Financing Gap Private Sector Capital
- Market for Transportation Infrastructure
- Innovative Financing Delivery Mechanisms
- Innovative Financing Considerations

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Factors Driving New Sources of Financing

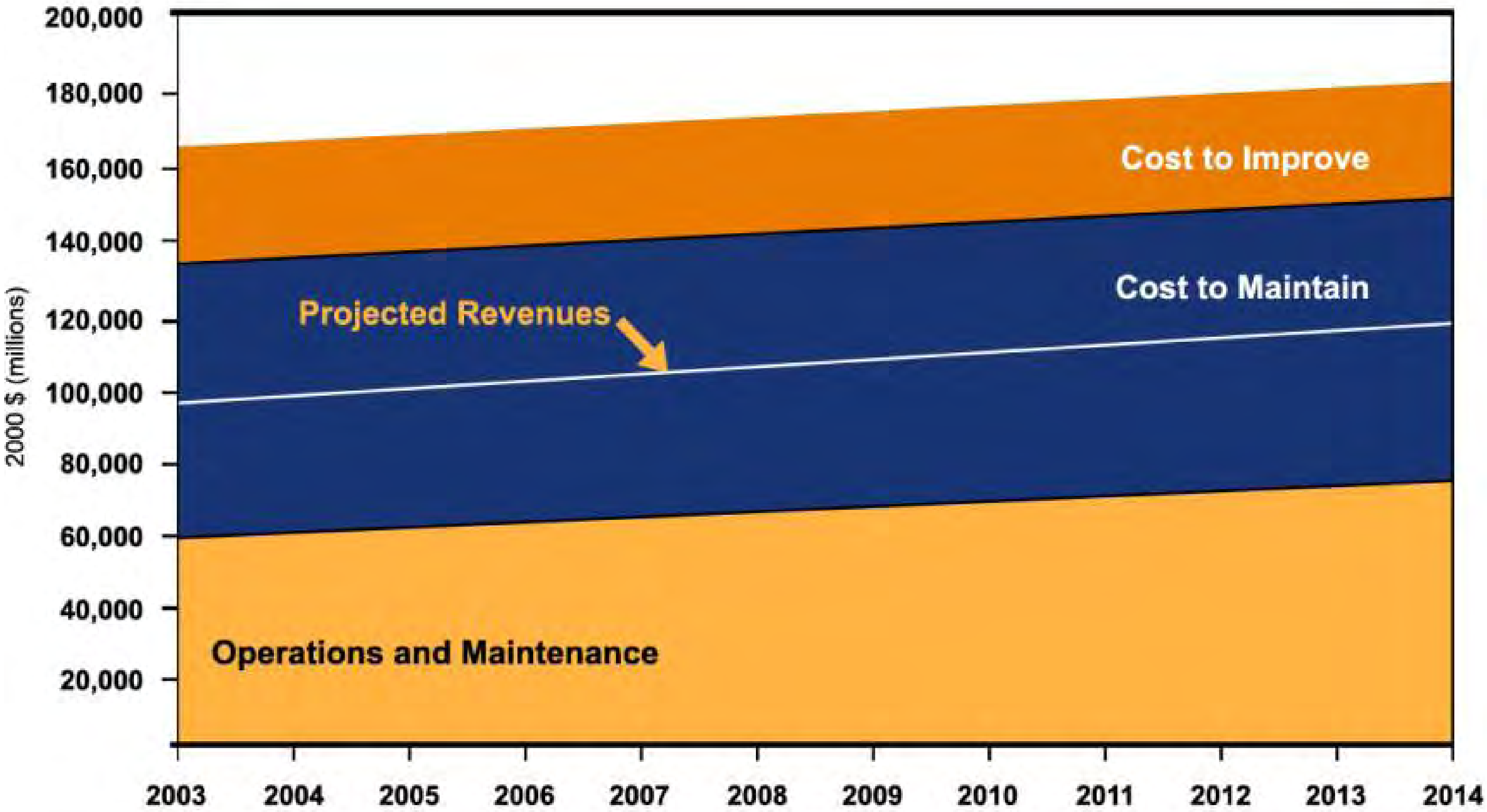
Factors Driving New Sources of Funding and Financing

- $2.2 trillion financing gap in transportation infrastructure for the next five years
- Programmed expenditures exceed expected revenues in the Highway Trust Fund
- Increased vehicle fuel efficiency may further erode Highway Trust Fund
- Weakened financial position of public agencies due to recession
- Aging infrastructure and facility replacement
- Rising costs of operations and maintenance

Recognition that most states must find alternatives to supplement federal funding solutions

Public Financing Gap

Comparison of Projected Highway Revenue with Investment Requirements



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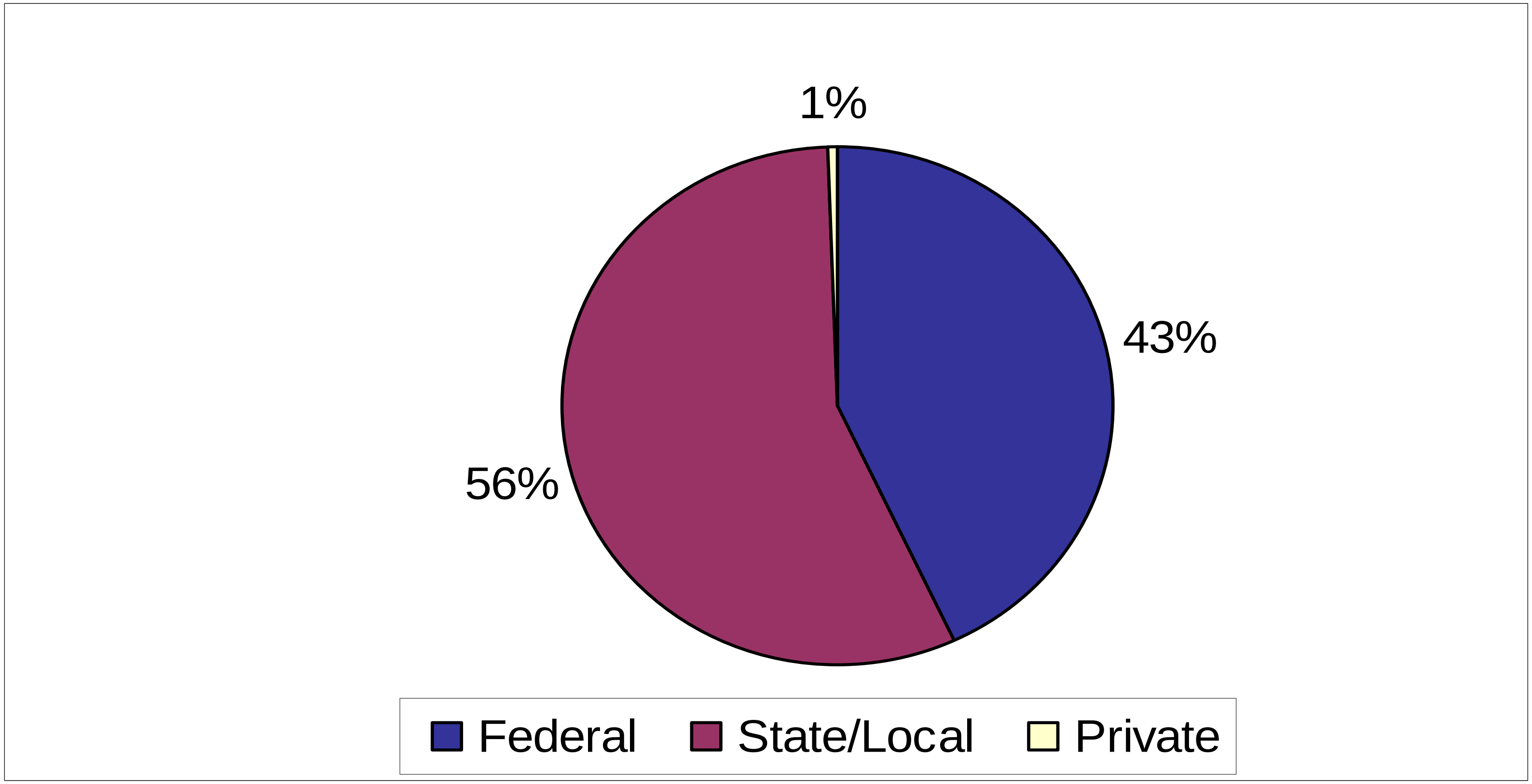
Funding Sources

- $108 Billion in total transportation expenditures in 2007
- State/Local, 56%; Federal, 43%
- Private Sector: > 1%



Source: ARTBA

Closing the Financing Gap with Private Sector Capital

Transportation Financing and Funding Tools Available

LOCAL

- Right of Way
- Tolls
- Capital Investment
- Special Tax Districts
- Transportation Corporations

STATE

- Dedicated Highway Trust Fund (Leveraged and Pay-Go)
  - Motor Fuel / Sales Tax
  - Sales Tax on Motor Vehicles
  - Use Tax on Motor Vehicles
  - Licensing Fees
- Tolls and Toll Credits
- Obtain Design/Build Contract
- Grants/Capital Contributions
- Provide Shadow Tolls
- Back-up Appropriations for Toll Roads, Highways
  - O&M, CapEx, DSRF Guarantee

FEDERAL

- Highway Trust Fund
- GARVEE / GANs
  - Direct / Indirect
- Section 129 Loans
- TIFIA
  - Direct Loan, Line of Credit, Loan Guarantee Highway Trust Fund
- State Infrastructure Bank
  - Loans, Guarantees, Interest Rate Buydowns
- Private Activity Bonds
  - SAFETEA-LU Alternative Funding
- Build America Bonds
- TIGER Grants

PRIVATE

- Toll Concession
  - Debt
  - Equity
- Leverage Availability Payments, including Shadow Tolls
- Provide Design/Build Contract
  - Subordinate loan/up-front equity as consideration for contract

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Why Consider Innovative Financing?

Private financing provides the public sector with a variety of benefits

- **Close** financing gap
- **Leverage** limited public funding
- **Accelerate** project development
- **Transfer** design and construction risks
- **Transfer** financing and operational responsibilities
- **Create** financing tools for state and local governments
- **Recover** previous costs and debt obligations
- **Increase** inter-agency and stakeholder coordination

Attracting Private Capital

- Successive Federal legislation has encouraged innovative financing
  - ISTEA
  - TEA-21
  - TIFIA
  - SAFETEA-LU
- Tolling of interstate highways
- Streamlining environmental approvals
- New lending instruments
  - TIFIA
  - Private Activity Bonds
  - Build America Bonds

Attracting Private Capital

Federal direction is positive……….

THE BOND BUYER

THE DAILY NEWSPAPER OF PUBLIC FINANCE

LaHood Urges 'Creative' P3s to Fund Infrastructure

Bond Buyer | Tuesday, March 10, 2009

By Audrey Dutton

Lawmakers need to consider moving toward "creative public-private partnerships," such as through the development of toll roads, in order to adequately fund the nation's infrastructure, Transportation Secretary Ray LaHood said at a public transportation conference here yesterday.

Speaking to members of the American Public Transportation Association, LaHood also said lawmakers should be open to the idea of giving local transit agencies operational funding ability in the next multi-year authorization bill.

But the secretary, who took heat last month from the White House for advocating a mileage tax, clarified that the opinion was his own and not President Obama's.

After speaking generally about the Obama administration's commitment to transit growth and high-speed rail funding, LaHood pointed to the recent addition of a tolling lane on Interstate 95 in Miami-Dade County.

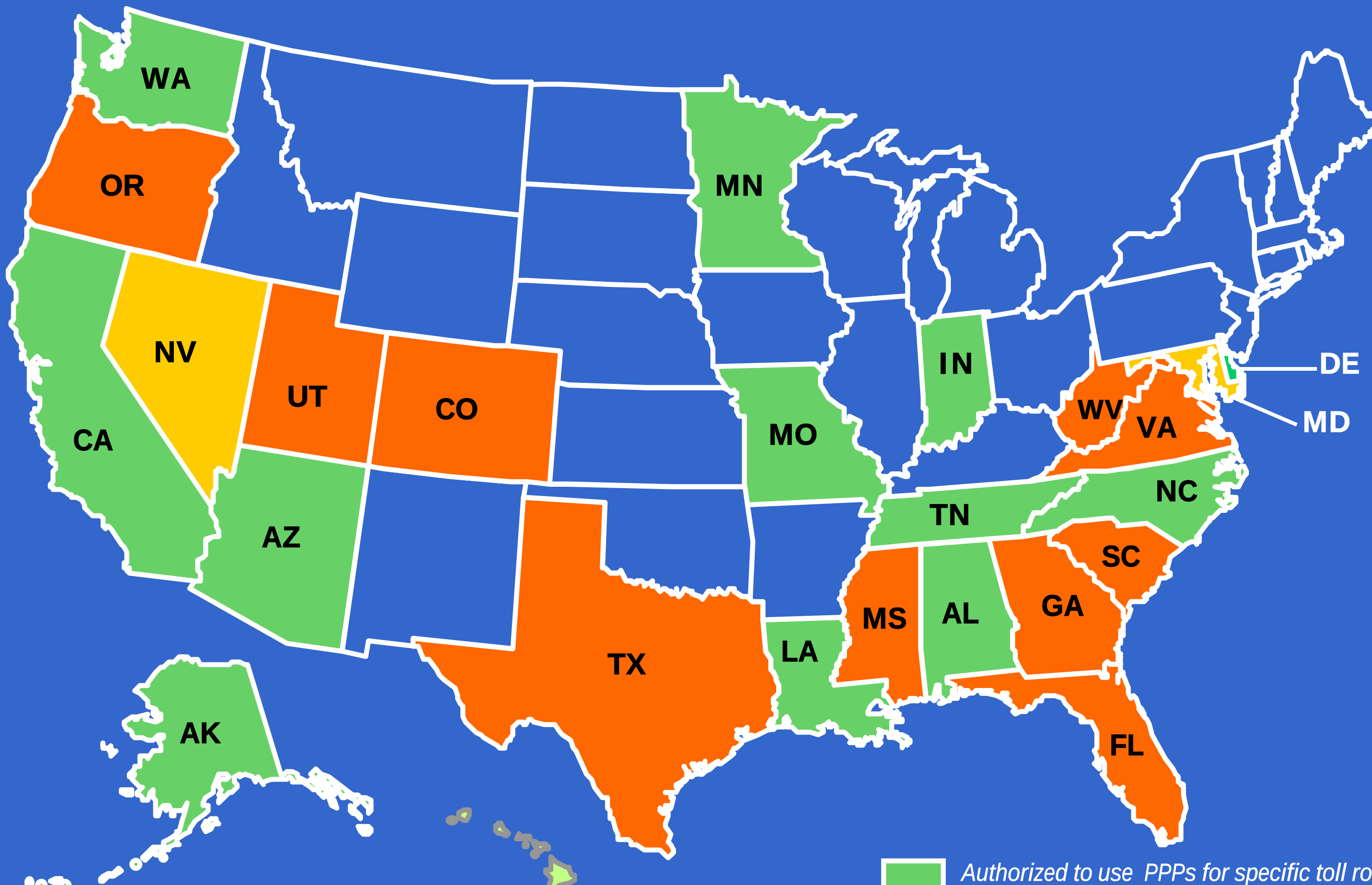
Current Federal Considerations

National Surface Transportation Infrastructure Financing Commission

- Established by Congress to assess the nation's funding crisis and address the growing transportation infrastructure investment deficit
- National Infrastructure Financing Entity Recommendations*
  - Allow states and localities to impose tolls on the Interstate System for new capacity and congestion relief
  - Expand Interstate Highway Reconstruction and Rehabilitation Pilot Program from three slots to five
  - Reauthorize TIFIA with a larger volume of credit capacity, broadened scope, and greater flexibility - $1 Billion/year
  - Invest $500 million per year to re-capitalize State Infrastructure Banks
  - Expand the highway/intermodal Private Activity Bond (PAB) program from $15 billion to $30 billion
  - Consider authorizing the issuance of tax credit bonds to support capital investments with public benefits

**Also referred to as the National Infrastructure Bank or National Infrastructure Reinvestment Corporation*

States With Innovative Financing and Private Funding Authority



Authorized to use PPPs for specific toll road or bridge projects, for a pilot program, or where a project receives specific legislative approval

Authorized to use PPPs for toll roads or other transportation facilities

Authorized to use PPPs for certain transportation projects, but not toll roads

Source: U.S. Department of Transportation

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Market for Transportation Infrastructure

Private Funding/Financing Assistance

- Private Equity
- Federal Credit Programs
- Private Activity Bond (PAB's) financing
- Guaranteed fixed price/schedule
- Right-of-way donation
- Efficiencies/cost savings through innovation
- Operation and maintenance

Federal Credit Programs

- TIFIA
  - Eligible transportation projects must be at least $50 Million in total costs
  - Eligible ITS projects must be at least $15 Million in total costs
  - 35-year repayment period
  - Interest Rate: 4.25% (October 19th 2009)
  - Dedicated revenue stream for repayment
  - Senior debt must be investment grade
  - Sponsors can be state and local governments, private firms, special authorities, and transportation improvement districts
- Build America Bonds (BABs)
  - Federal subsidy through federal tax credits to investors in an amount equal to 35% of total interest payable
  - BABs can lower net borrowing costs by roughly 50 to 70 basis points
  - Recovery Zone Economic Development Bonds provides a federal subsidy of 45 percent of total interest payable

Availability Payment Delivery Mechanism

- Private sector firm obtains financing and is repaid over time + rate of return on its equity investment
- Contract term approximately 30 to 35 years
- Private sector typically takes on design and construction risks
- Public agency typically retains project revenues, but takes on revenue risk
- Availability Payments based on meeting performance standards related to:
  - **Facility Availability:** limiting lane (highway) and station (transit) closures
  - **Quality:** Pavement conditions, service frequency, etc.
  - **Safety:** Reduction in accident rates
  - **Volume Payment:** AADT or transit ridership
- Contract can also include acceptance payments for early completion

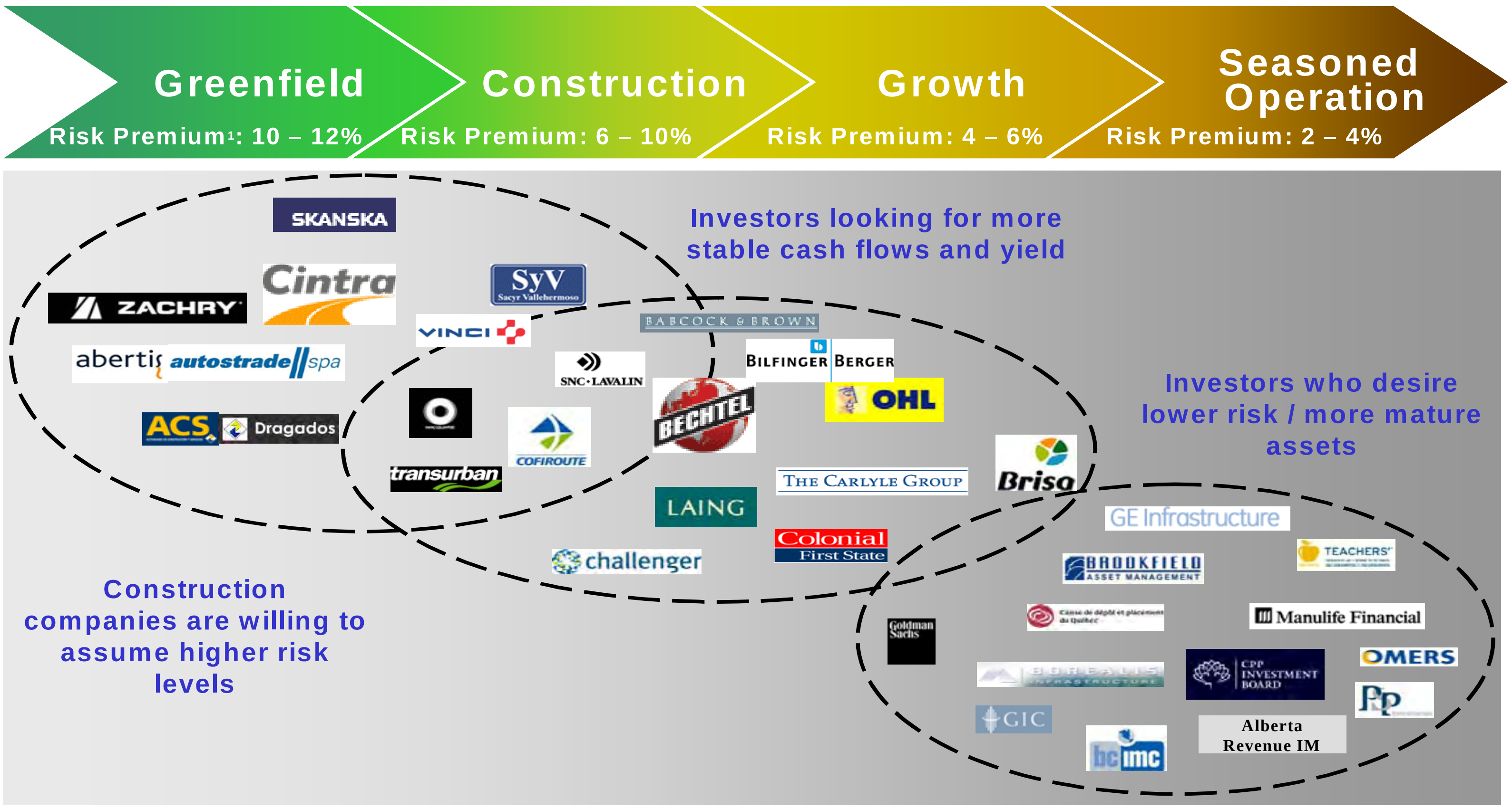
Debt Capital

- Financial institutions have weakened balance sheets
- Difficult to get full credit backed bond insurance on municipal issues
- Difficult to get competitive lending terms
- Few projects are 100% privately financed
- Bond investors expect timely repayment of debt obligations

Equity Capital

- Continued interest in transportation infrastructure
  - Significant supply of equity capital chasing limited U.S. transportation assets
  - 10-15% returns on some project currently exceed U.S. stock market performance, municipal bonds, and international equities
  - Historically low interest rate for agencies with strong credit ratings
  - Mutual funds, hedge funds, pension funds, etc. looking for potentially less risk investment with long-term perspective

Types of Equity Investors



[1] Risk premium constitutes spread against 10-Year Treasury

- Equity investors expect return on investment
- ROI depending on project risks

Equity Capital

- Concessionaire/operators still remain very active
  - Ferrovial
  - SNC-Lavalin
  - Macquarie
  - Balfour Beatty
  - Bombardier
  - Washington Group
- Pension Funds

- Major Investment Banks/Firms establishing Equity/Infrastructure Funds
  - Morgan Stanley (US)
  - Goldman Sachs (US)
  - Carlyle Group (US)
  - Citi (US)
  - JP Morgan (US)
  - K&R (US)
  - Macquarie (US)
  - UBS (US)
  - Barclays (UK)
  - Berkshire Hathaway (US)
  - CALPERS(US)
  - CPPP (Can)
  - Mass Mutual (US)
  - OMERS (Can)

Roadway PPP Transactions-Greenfield

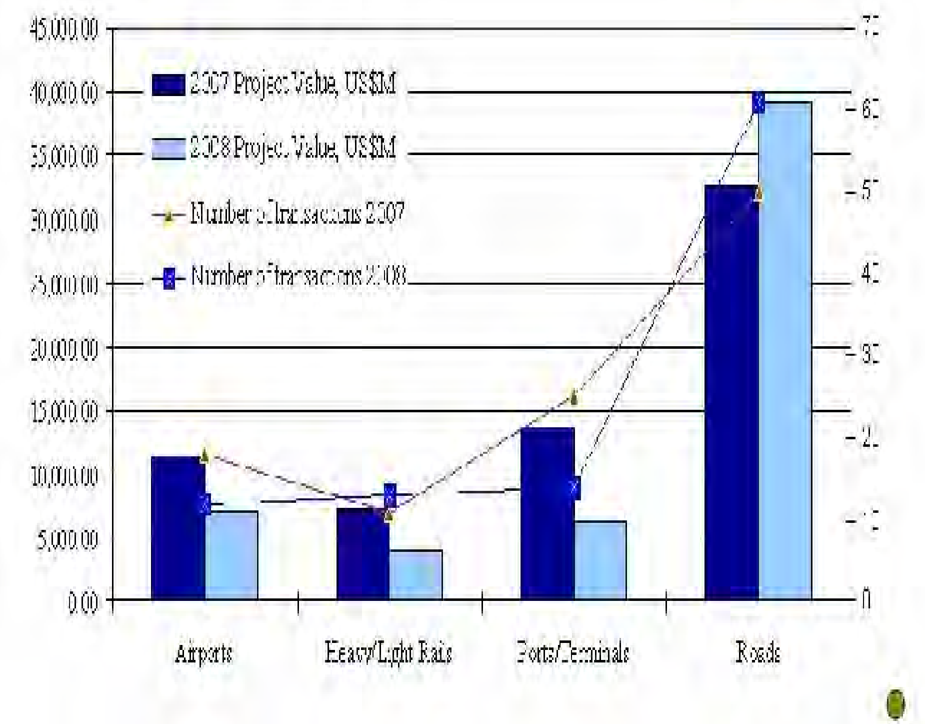
Project	*Owner*	*Contract*	*Amt ($M)*	*Lead Sponsor(s)*
I-595 Express	FDOT	Availability Concession	$1,635	ACS Dragados, Macquarie
North Tarrant Express	TxDOT	DBFO	$1,600	Cintra, Meridiam
I-635 Managed Lanes	TxDOT	DBFO	$1,500	Cintra, Meridiam
I-495 Capital Beltway HOT Lanes	VDOT	DBFO	$1,998	Fluor, Transurban
SH 130 Segments 1-4	TxDOT	DB	$1,369	Fluor
SH 130 Segments 5-6	TxDOT	DBFO	$1,358	Cintra, Zachry
E-470	CDOT	DB	$1,200	Washington Group, Kiewit
Foothill Eastern Toll Road	TCA	DB	$803	Flatiron
South Bay Expressway (formerly SR 125)	Caltrans	DBFO	$773	Macquarie
Tacoma Narrows Bridge	WSDOT	DB	$615	Bechtel/Kiewit
Dulles Greenway	VDOT	DBFO	$350	Macquarie

Transit PPP Transactions

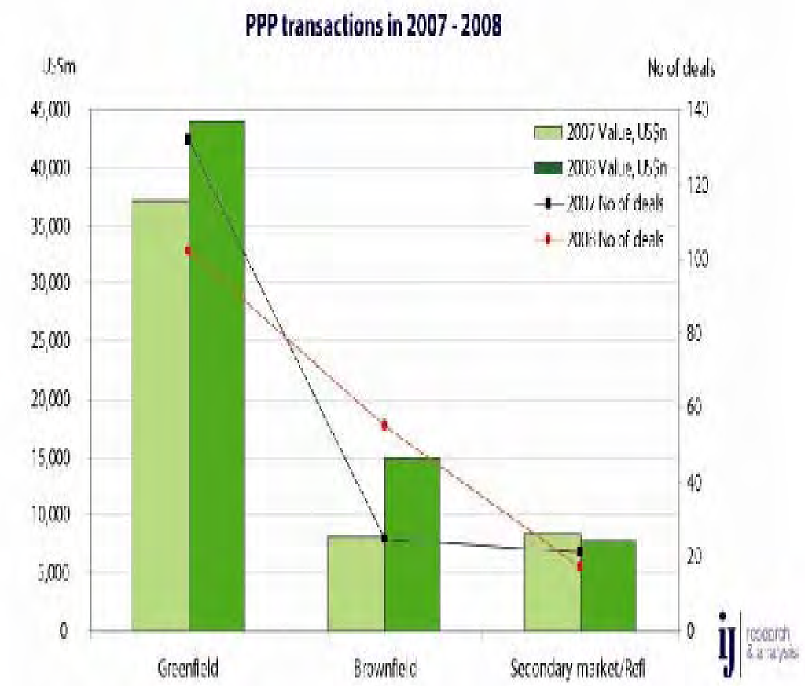
Project	*Owner*	*Contract*	*Amt ($M)*	*Lead Sponsor(s)*
Hudson-Bergen Light Rail	New Jersey Transit	DBOM	$1,674	Washington Group
RAV Line	Gr. Vancouver Transit Authority	DBFO	$1,650	SNC-Lavalin
T-REX	CDOT/RTD	DBOM	$1,186	Kiewit/Parsons
Jamaica-JFK Airtrain	Port Authority of NY/NJ	DBOM	$980	Skanka/Bombardier
Las Vegas Monorail	L.V. Monorail LLC	DBOM	$800	Bombardier/Granite
Eastside Light Rail	Los Angeles County Metropolitan Transportation Authority	DB	$600	Washington Group
BART San Francisco Airport Ext.	Bay Area Rapid Transit	DB	$530	Tutor-Saliba
Trenton River Light Rail	New Jersey Transit	DBOM	$508	Bechtel
Hiawatha Light Rail	MnDOT/Metropolitan Council	DB	$291	Granite
Gold Line Light Rail	Los Angeles County Metropolitan Transportation Authority	DB	$267	Kiewit/Washington Group
Palm Beach-Ft Lauderdale Rail	Tri-County Commuter Rail Authority	DB	$232	Herzog/Granite
Blue Line Extension	Washington Metropolitan Area Transit Authority	DB	$200	Lane/Granite
Portland Airport MAX	TriMet	DB	$125	Bechtel

2008 PPP Activity Overview

PPP Activity in 2008



PPPs by Transaction Type



However, the right PPP projects are still being financed! (I-595 and I-495)

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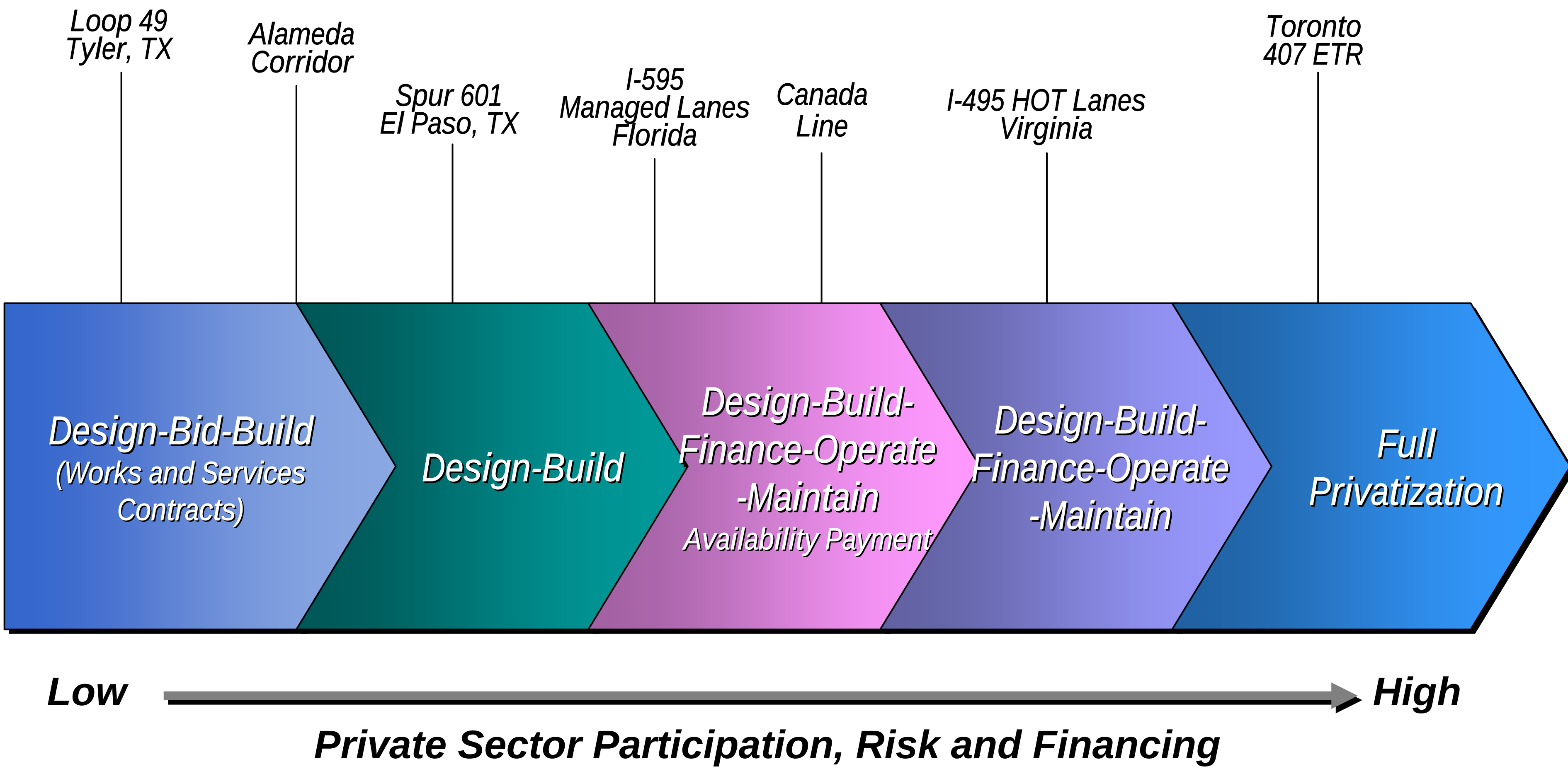
Innovative Financing Delivery Mechanisms, Trends and Examples

Options for Program Delivery



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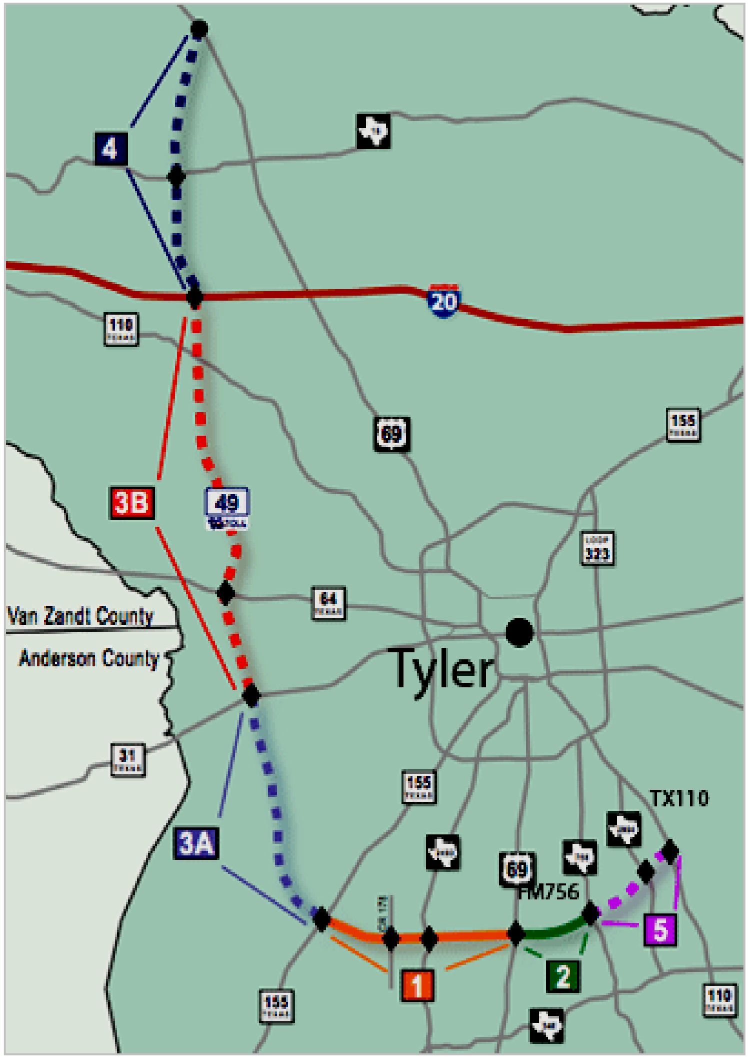
Project Funding Mix

Project	*Federal Grant*	*Federal Loan*	*Local Government*	*Private Debt*	*Private Equity*
Loop 49, Tyler, Texas	✓		✓	✓	
Alameda Corridor	✓	✓	✓	✓	✓
Spur 601, El Paso, Texas			✓		✓
I-595 Managed Lanes, Florida		✓			✓
Canada Line	✓		✓	✓	✓
I-495 HOT Lanes, Virginia		✓	✓		✓
Toronto 407 ETR					✓

Design-Bid-Build

Loop 49, Tyler, Texas

- $235 Million total cost
- 31.4 mile greenfield project
- System-financing: toll revenues from earlier segments to secure bonds
- Financed through a mixture of local, state, and federal funds
- TxDOT leading project development, retains ownership, and has toll setting authority
- Northeast Texas Regional Mobility Authority (NETRMA) to build capacity to carry out future projects
- 34% financed to date
- Segments 3B, 4 and 5 unfinanced



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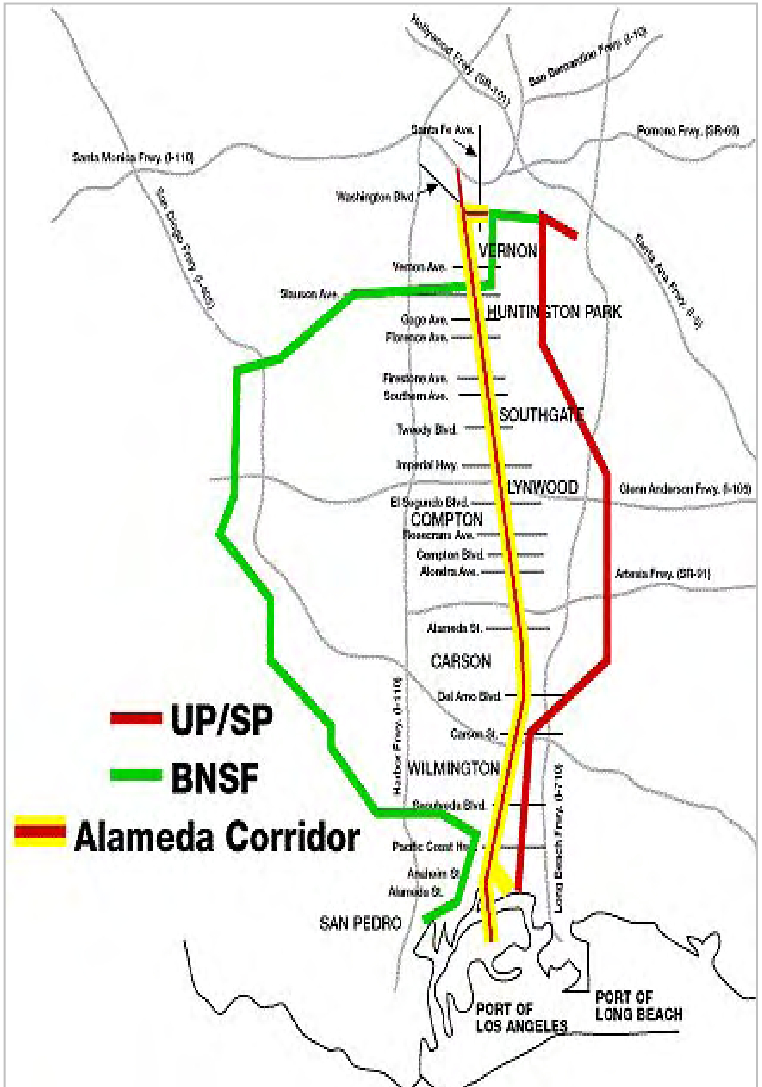
Design-Build



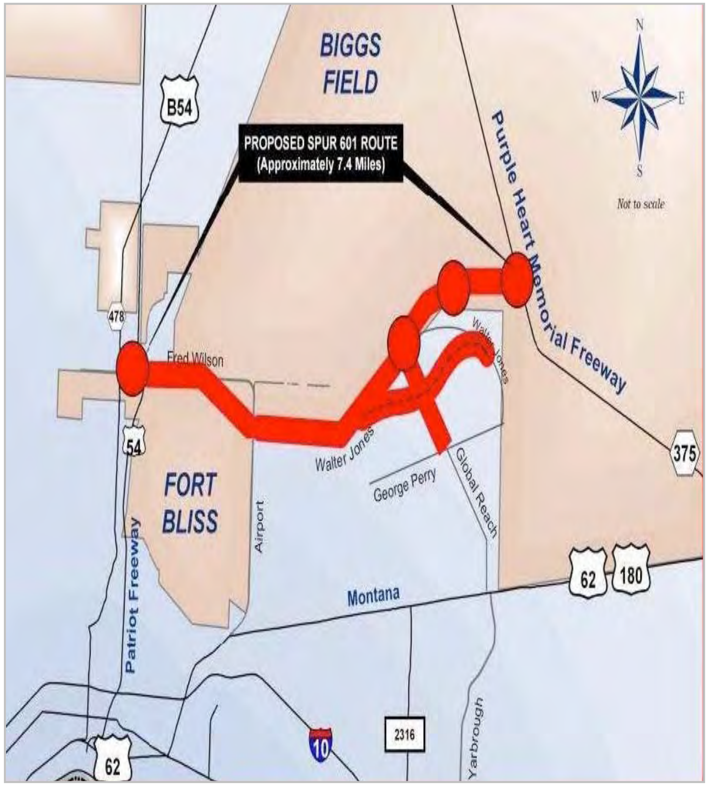
Alameda Corridor

- $2.4 Billion, 20-mile greenfield facility
- Consolidation of 3 rail lines
- 3-mile north segment and 7-mile south segment developed using design-bid-build
- 10-mile trench developed through a $700 million design-build contract
- Multiple funding sources:
  - $394 Million in grants from the Port of Los Angeles and the Port of Long Beach
  - $347 Million in grants from Los Angeles County MTA
  - $400 Million Federal loan was precursor for TIFIA program
  - $1.16 Billion in revenue bonds
- Extensive coordination between public agencies and private entities
- Loan and bonds secured by use and container fees paid by railroads
- Federal government provided seed capital

Design-Build

Spur 601, El Paso, TX

- $321 Million, 7.4 miles
- Financed though public grants and bonds
  - TxDOT: $55 Million in grants
  - Tax-exempt bonds: $233 Million
  - Other: $33 Million
- Debt issued by Camino Real Regional Mobility Authority (CRRMA), the "conduit" bond issuer
- Competitive debt terms for 1st time issuer
- Pass-through financing agreement between TxDOT and CRRMA
- TxDOT pays CRRMA $15.7 m to $17.5 m every 6 months based on vehicle counts
  - 15 years
  - "Shadow" toll based on vehicle type: autos, $0.25 and trucks, $0.85
- TxDOT owns and operates facility
- CRRMA can seek financing for other projects



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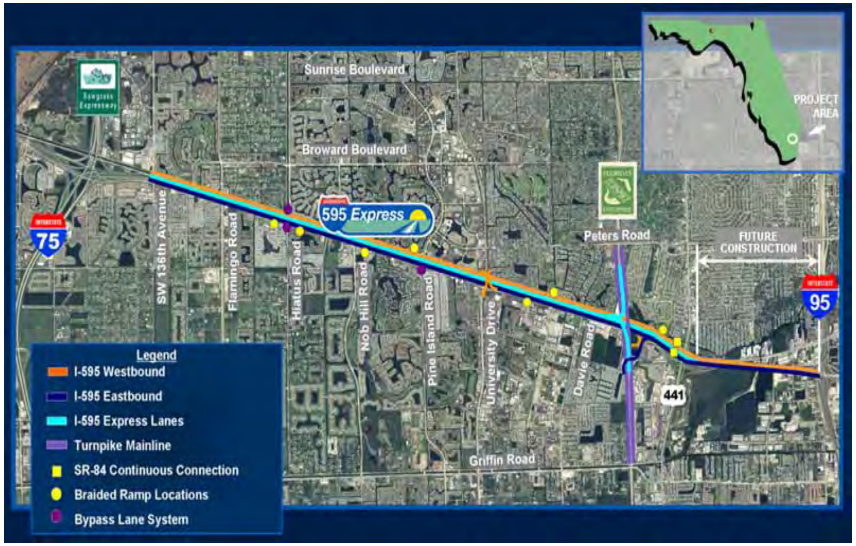
Design-Build-Finance-Operate-Maintain
Availability Payments

I-595 Managed Lanes, Florida

- Reconstruction, widening and resurfacing of 10.5 mile mainline
- Addition of two auxiliary lanes in each direction
- Construction of three reversible express lanes along median
- Two frontage lanes
- $1.6 Billion total costs
- Value-for-money analysis found that concession with availability payments would have cost savings of $400 Million compared to DBFOM contract
- Close of Finance achieved during difficult market conditions
  - Bank loans: $780 Million
  - TIFIA: $665 Million
  - Concessionaire: $170 Million
  - 88/12 Debt/Equity Ratio

- 35-year contract (including construction)
- Availability Payments
  - Reduced lanes closures
  - Adherence to O&M standards
  - $685 m to concessionaire by 2018
- Internal rate of return: 11.54%
- FDOT responsible for toll setting and retains revenues
- FDOT owns facility



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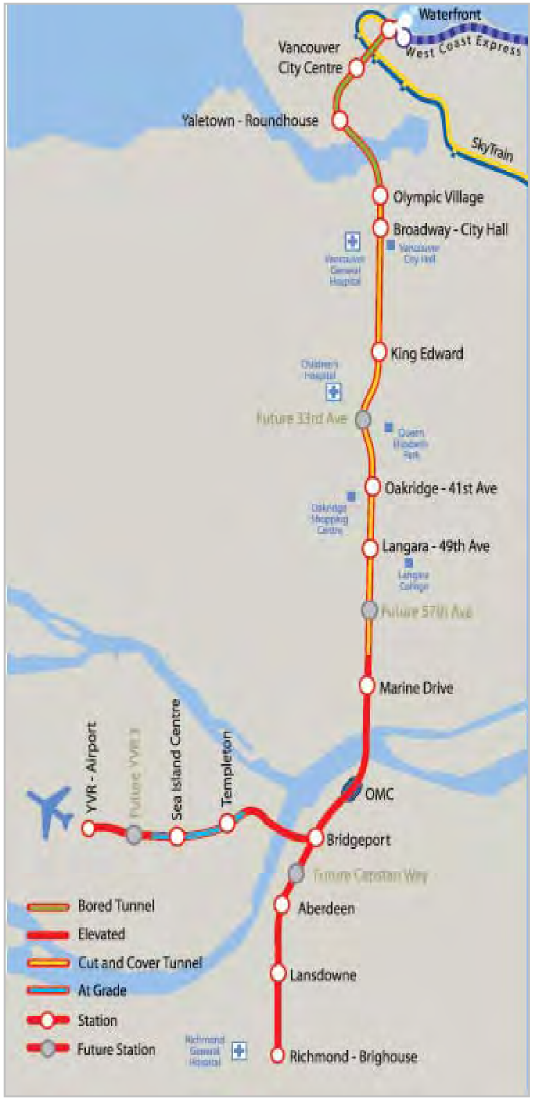
Availability Payments



Canada Line

- C$1.9B, 12 mile, 2 transit lines, 16 stations
- 35-year contract
- 82% financing from Transport Canada, BC Province, TransLink, Vancouver International Airport Authority (VYR) and City of Vancouver
- Canada Line Transit Inc. (CLCO) owned by four public agencies, is a subsidiary within TransLink
- Estimated 18% financing from concessionaire
- Payments based on:
  - **Availability**: access to stations and safety
  - **Quality**: train arrival times and headway;
  - **Volume Payment**: ridership
  - **Special Events Adjustment**: special event increasing ridership above a 3-day average
- To open by Fall 2009 prior to 2010 Winter Olympics
- Competitive procurement and Value-for-Money analysis
- 40% over budget requiring additional funding from Federal and BC governments
- Concessionaire is precluded from competing with VYR in its park and ride facilities

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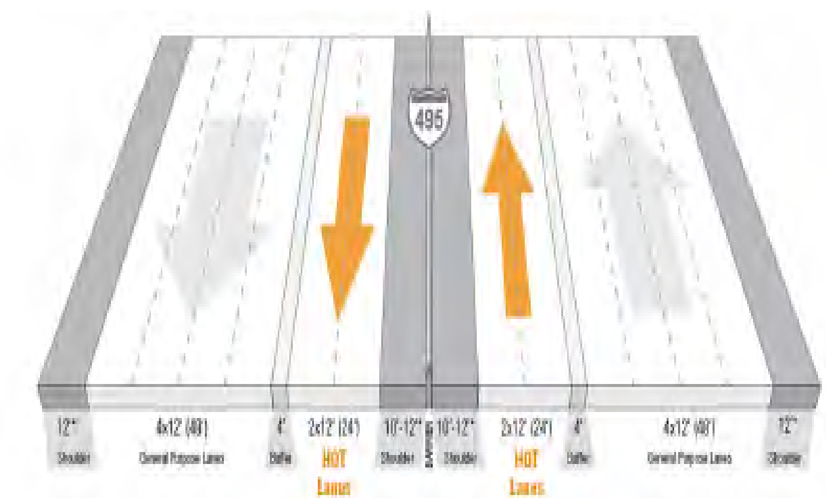
Design-Build-Finance-Operate-Maintain

I-495 HOT Lanes, Virginia

- DBFOM for a new HOT lanes project
- Unsolicited proposal
- $2.0 billion, 14-mile, HOT lanes with two lanes in each direction
- 85-year contract (including 5-year construction)
- Financing from a variety of sources
  - TIFIA: $586 Million; PABs: $586 Million
  - Commonwealth of Virginia: $409 Million in grants used for interchange improvements
  - Concessionaire: $349 Million
  - Interest Income: $69 Million
- Concessionaire assuming construction, financing and revenue risks
- Concessionaire has toll setting authority and revenue risk
- Revenue sharing with VDOT, increases at higher rates of return
- Competing facilities allowed
- VDOT retains facility ownership



Design-Build-Finance-Operate-Maintain

Partial Privatization

Toronto 407 ETR

- One of the first DBFOM transactions in N. America
- Privatization of completed 41-mile central segment
- Construction of western and eastern segments, total 67 miles
- C$4.0 billion, including C$3.1 Billion concession fee to the Province of Ontario and construction costs of C$900 Million
- Concessionaire has toll setting authority and is responsible for toll collection
- 99-year contract
- Project demand exceeded forecasts. Recent valuations of facility, C$6 Billion to C$10 Billion
- Concessionaire responsible for expansion
- Negative public reaction over toll rates and toll collection led to legal disputes between concessionaire and the Province of Ontario
- Legal disputes settled in 2006

Project Comparison—Goals and Results

Project	*Year Complete*	*Competitive Procurement*	*VfM*	*Project Goals*	*Results Achieved*
Loop 49, Tyler, Texas	2014	Yes	No	Accelerate development, minimize public funds	TBD
Alameda Corridor	2002	Yes	No	Increase rail capacity, improve safety, and faster trains	✓
Spur 601, El Paso, Texas	2011	No	No	Accelerate development provide alternate route and reduce congestion	TBD
I-595 Managed Lanes, Florida	2014	Yes	Yes	Accelerate development, add capacity and reduce congestion	TBD
Canada Line	2009	Yes	Yes	Accelerate development, improve mobility and reduce congestion	✓
I-495 HOT Lanes, Virginia	2013	No	No	Accelerate development, add capacity and reduce congestion	TBD
Toronto 407 ETR	2001	Yes	No	Accelerate development and reduce congestion	✓

Other Types of Innovative Financing

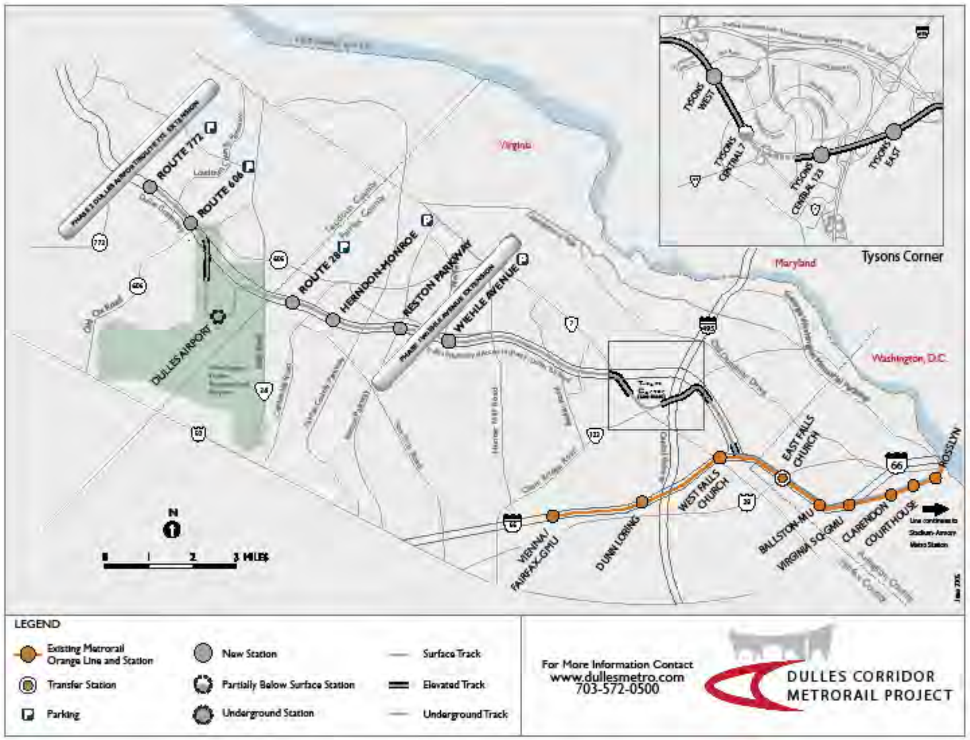
- System Financing/Hybrid Financing
- Transit Oriented Development
- Annual O&M Cost Reduction Measures
  - Roadway Routine Maintenance
  - Rest Areas
- Specialty Programs
  - Emergency Response Programs
  - Interchange Funding Programs

What others are doing…… Transit Oriented Development

- Station Development
  - Full Development
  - Leasing of Land
  - Air Rights
- Advertising
  - Concession Fees/Rent
  - Station Naming Rights
- Donations
  - Rights of Way
- Assessment Districts
  - Special Purpose Tax Districts

South Capital Station, Mixed-Use TOD
NMDOT and Santa Fe Properties Development Co.

What others are Doing ……Dulles Corridor Metrorail Extension



- 23-mile new Metrorail line
- Branches off the Orange Line after East Falls Church
- 11 new stations
  - Five (5) in Phase I
  - Six (6) in Phase II
- Seamless integration with current 106-mile Metrorail system
- Estimated Cost for Phase 1 and Phase 2: $5.14 Billion
- Funding

FTA (FFGA)	$900 Million
State Funding	$275 Million
MWAA	$215 Million
Loudoun County	$252 Million
Fairfax County	$845 Million
Dulles Toll Road Bond Proceeds	$2,651 Million
TOTAL:CONTRIBUTIONS	***$5,138 Million***

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What others are Doing…..Sponsorship Programs

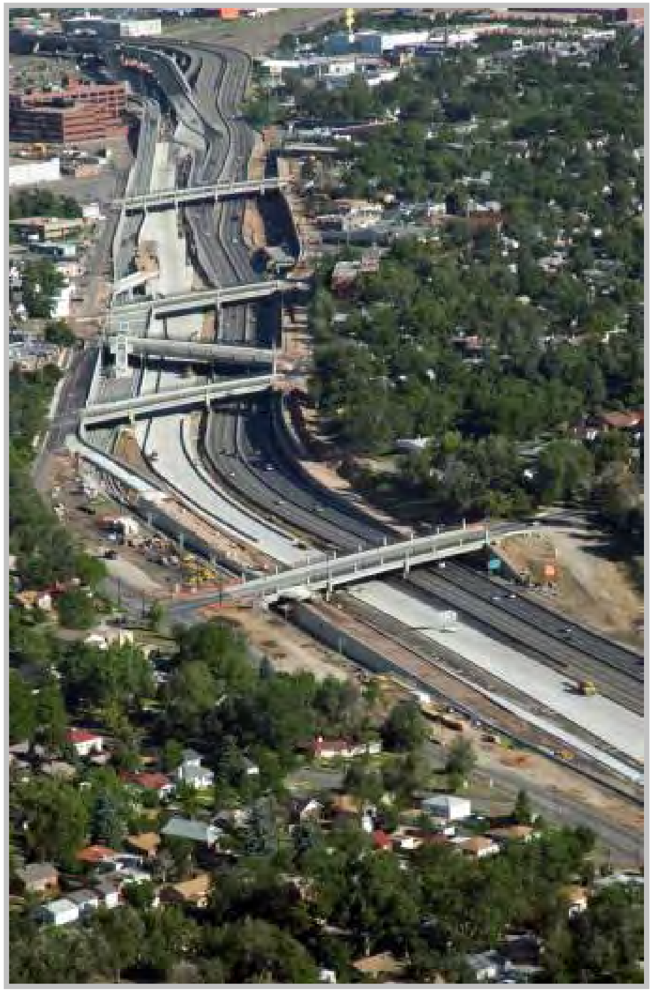
GDOT: Receives $1.7 million a year in return for allowing a sponsor to display their logo on their HERO units, uniforms of drivers and road signage. The $1.7 million is GDOT's match for federal funding.

FTE: Is receiving $1.96 million over a four year period (2008-2012) for sponsorship of the Road Ranger Program. All monies are reinvested in the program. In return the sponsor is allowed to display their logo on side of vehicles, uniform of drivers and signage on road and toll plazas.

Innovative Financing Considerations

Program Considerations

- Private Participation is not free money
- Private Participation is not necessarily cheaper
- Project financial viability varies wildly
- Requires stable, long-term funding source to attract debt and equity investors
- Higher risk, higher expected return
- Projects with no or poor return will not likely attract private capital
- Very few projects are 100% feasible without public sector contributions



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Potential Barriers to Entry

- Weak demand and high revenue risk
- High technical and environmental risks
- Weak political and financial commitment from public sector
- No or limited return on investment
  - Project rate of return > cost of capital
- Competition from highways, transit, and private entities
- Legal and regulatory environment
  - Tolls and user fees
  - Contract duration
  - Lending restrictions
  - Taxation
  - Land Use
  - Rate of return and revenue sharing
- Tort Liabilities
- Legislative and political risks

Disadvantages and Risks of Private Funding

- Disadvantages
  - Reduced public control
  - Several proposed projects have not built
- Risks
  - Selection of inadequate partner
  - Time and cost overruns
  - Insufficient toll collection
  - Inadequate toll rates
  - Inadequate level of service
  - Selection of financially unstable private partner
  - Insufficient public acceptance of tolls
  - Disincentive to increase capital expenditures early to reduce O&M costs
  - Potential impact to public debt limits

Public Sector Responsibilities

- Legal and regulatory framework
- Toll/fare setting, increases and collection
- Contract enforcement and oversight
  - Operations and maintenance (O&M)
  - Facility expansion
- Police/toll violation enforcement
- Accounting of direct and indirect public guarantees and financial support
- Environmental reviews
- Stakeholder coordination
- Public outreach

Conclusions

- Despite the current financial environment, projects are being procured and reaching financial close
- Project identification and selection along with the selection of “right” delivery method is critical
- Project scale and size may go through several iterations
- Stand alone and greenfield projects are the most difficult to finance
- Few projects are 100% financed on their own -- Additional funding sources are required
- Agency, stakeholders, and public need to be aligned with project goals
- “Partnership” is the key for successful project development

Thank You!

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