Accelerating Infrastructure Through Innovative Finance Tools

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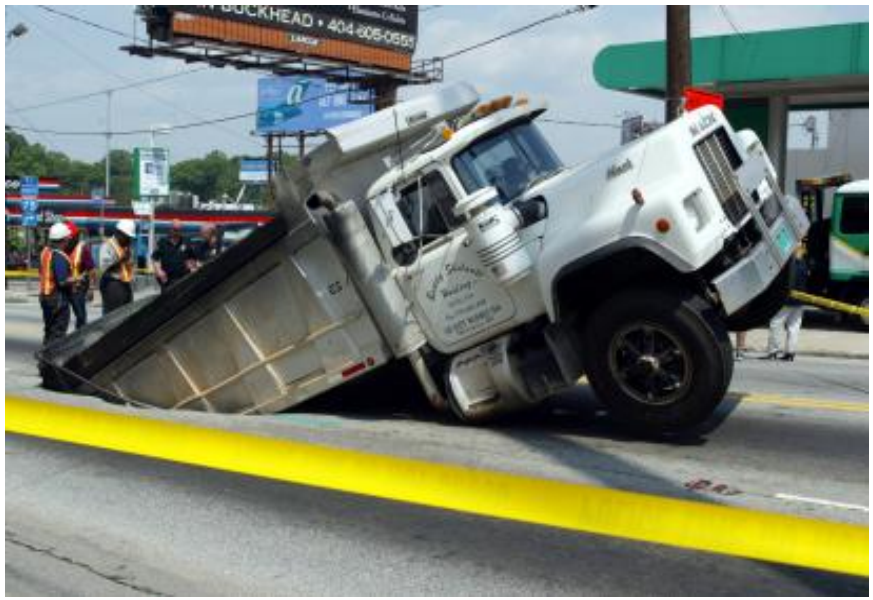
Presentation Outline

- A Perfect Storm in Surface Transportation
- Solutions for Accelerating Infrastructure Projects
  - Credit Tools: GARVEEs, SIBs, TIFIA
  - Value Capture Revenue Sources: Tolling, Congestion Pricing, Alternative Revenues
- Public Private Partnerships: Highway and Transit
- Case Studies
- Summary

The Perfect Storm

- **Federal** – Highway trust fund will go into deficit by 2009
- **State** – Infrastructure aging and deteriorating and are mostly unwilling to raise taxes
- **User Fees:**
  - **Transit –** Fares cover 35 – 40% of operating costs
  - **Highway** – Offers most potential on leveraging access to private capital but require significant transition period before big impact on revenue (meanwhile the market is deflating)
- **Innovative Finance Tools –** Useful, but need to understand the implementation of each tool and all implications

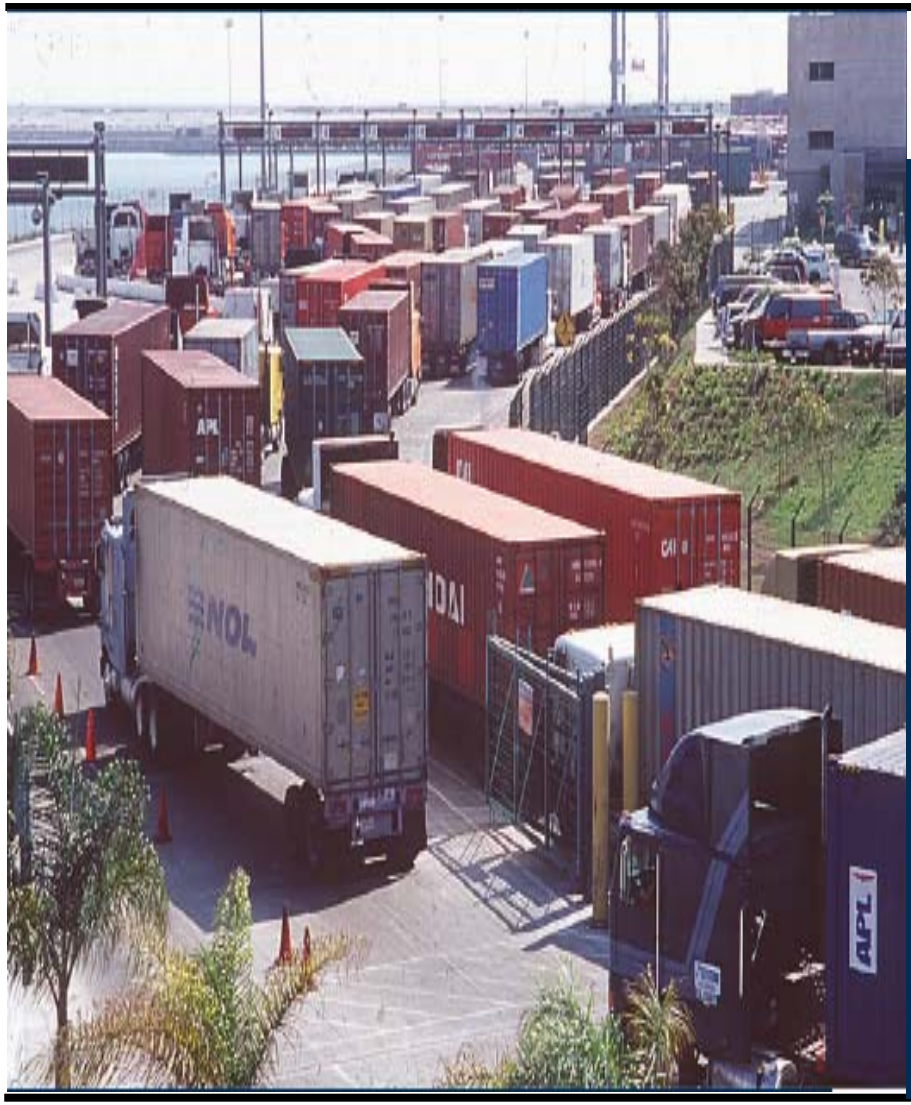
Underinvestment Crisis



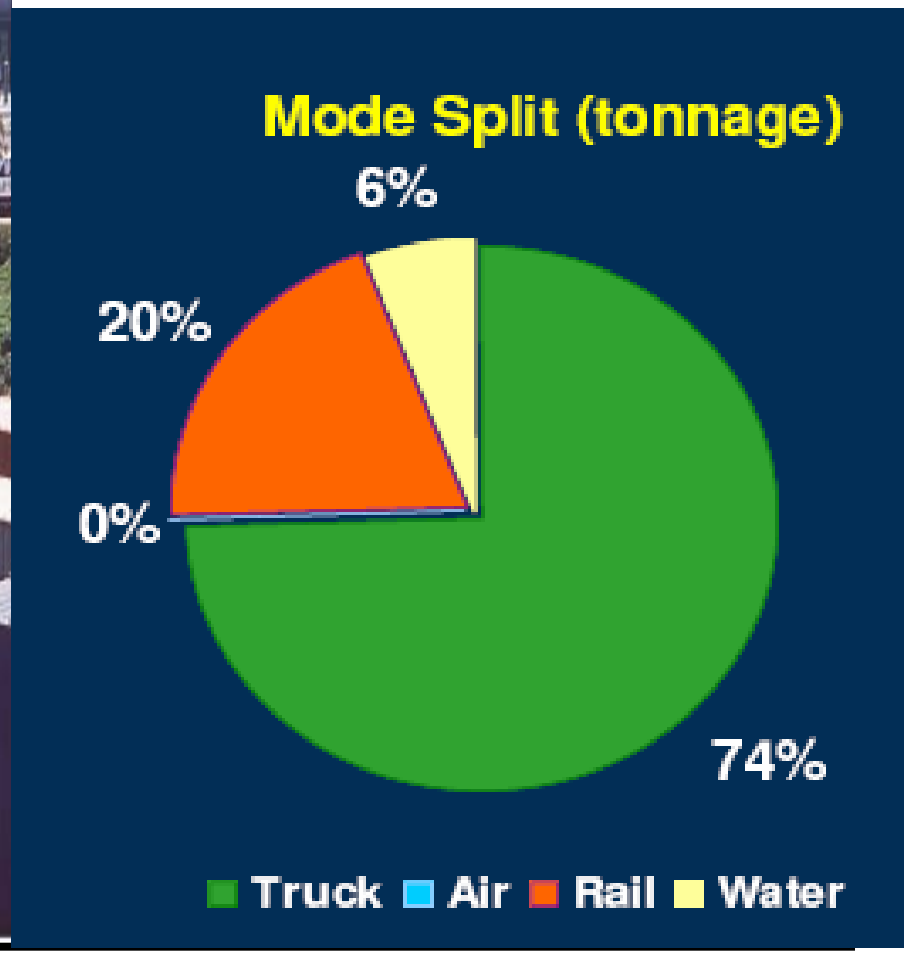
This dump truck was carrying asphalt when the pavement under it gave way, at 14th and Spring Streets, Atlanta

Minnesota I 35W Bridge collapses

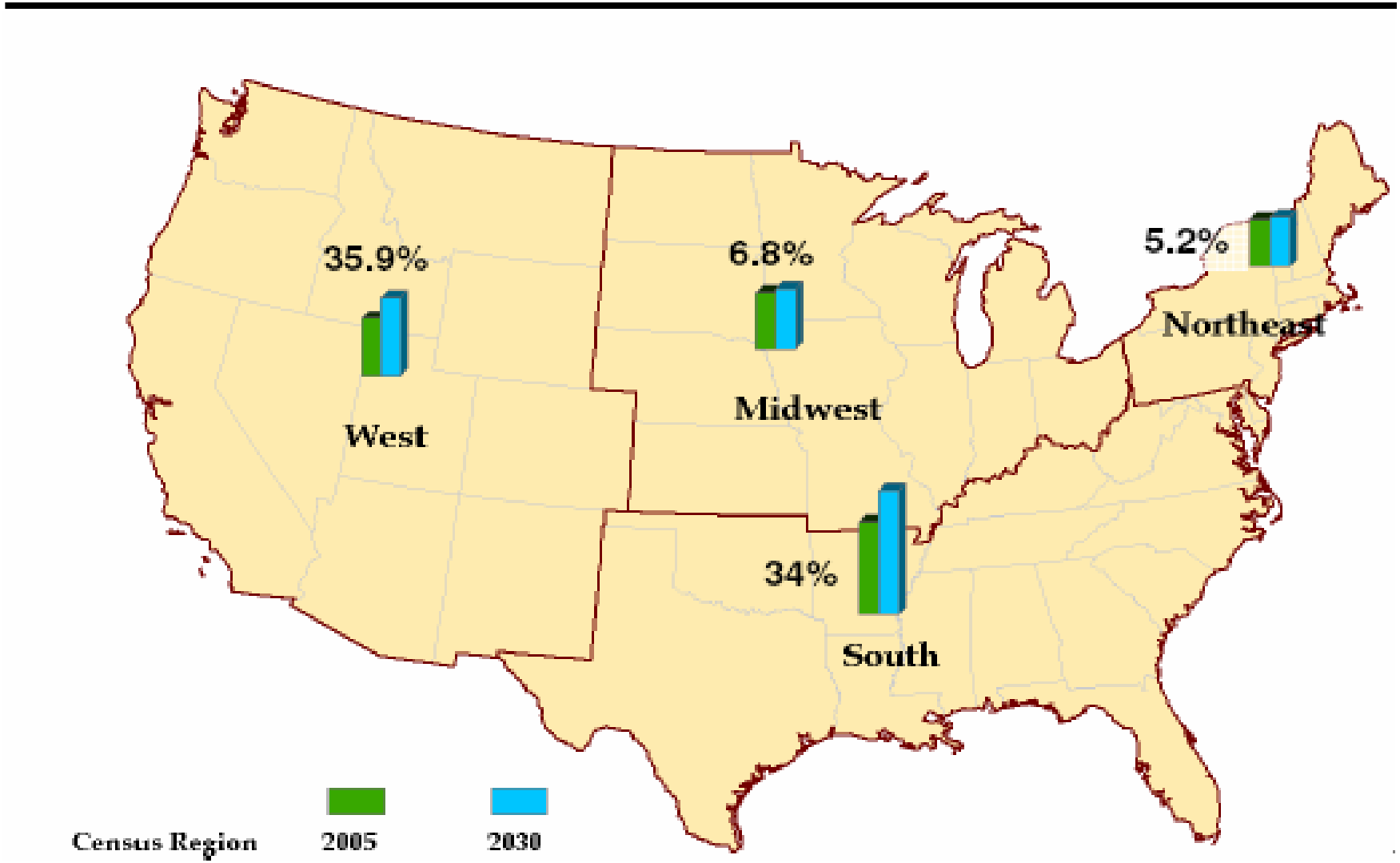
Increasing Freight Movements



Modal and Directional Splits by Weight for Virginia



Census Region Population Forecast 2005 - 2030



Increasing Congestion

The financial cost of congestion:

- 3.7B hours of delay and 2.3B gallons of wasted fuel annually*
- Almost $200B after accounting for unreliability, inventory, and environmental costs across all modes**

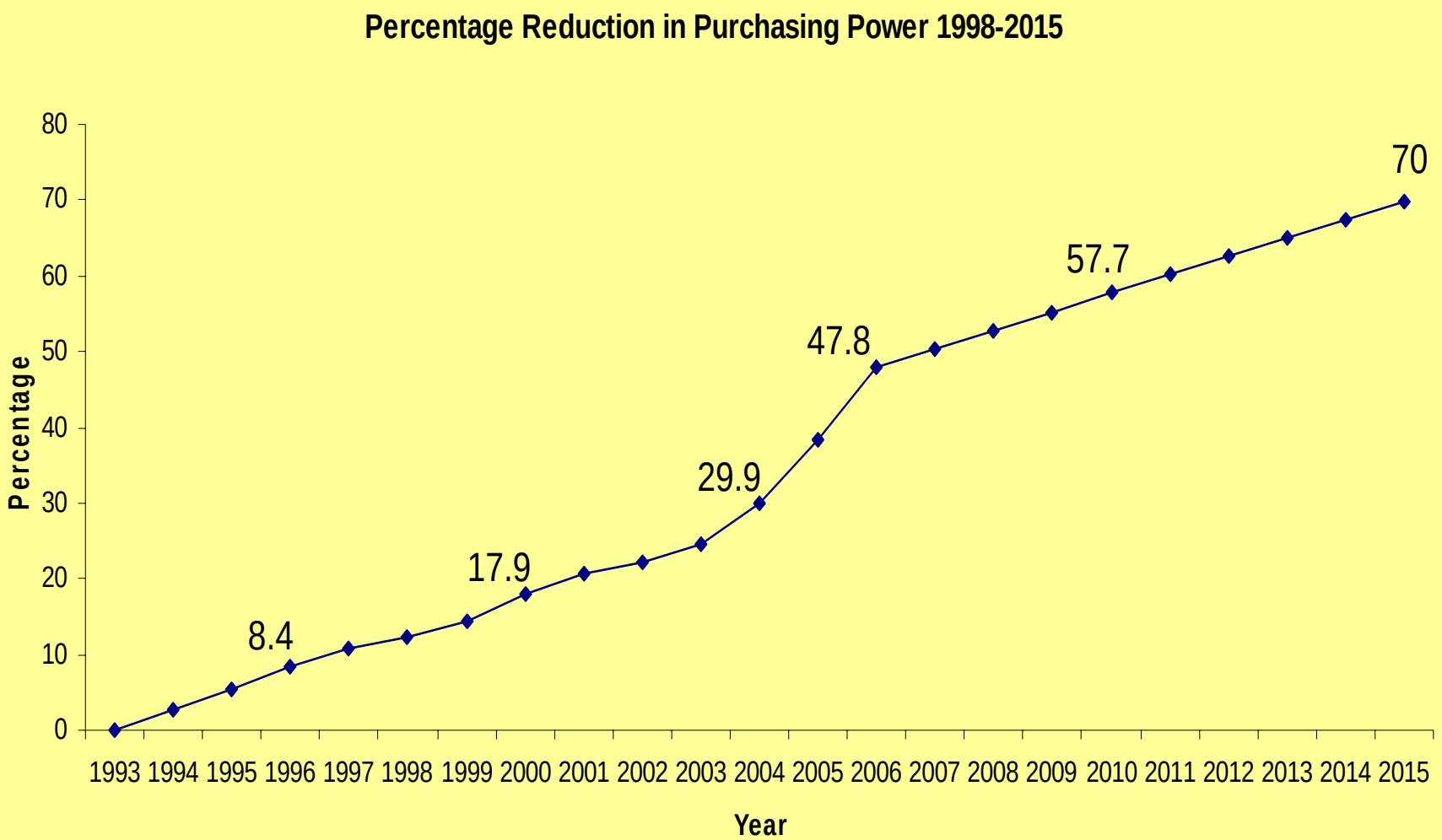
Congestion hurts family and civic life, impacting:

- Where people live and work
- Where they shop
- How much they pay for goods and services

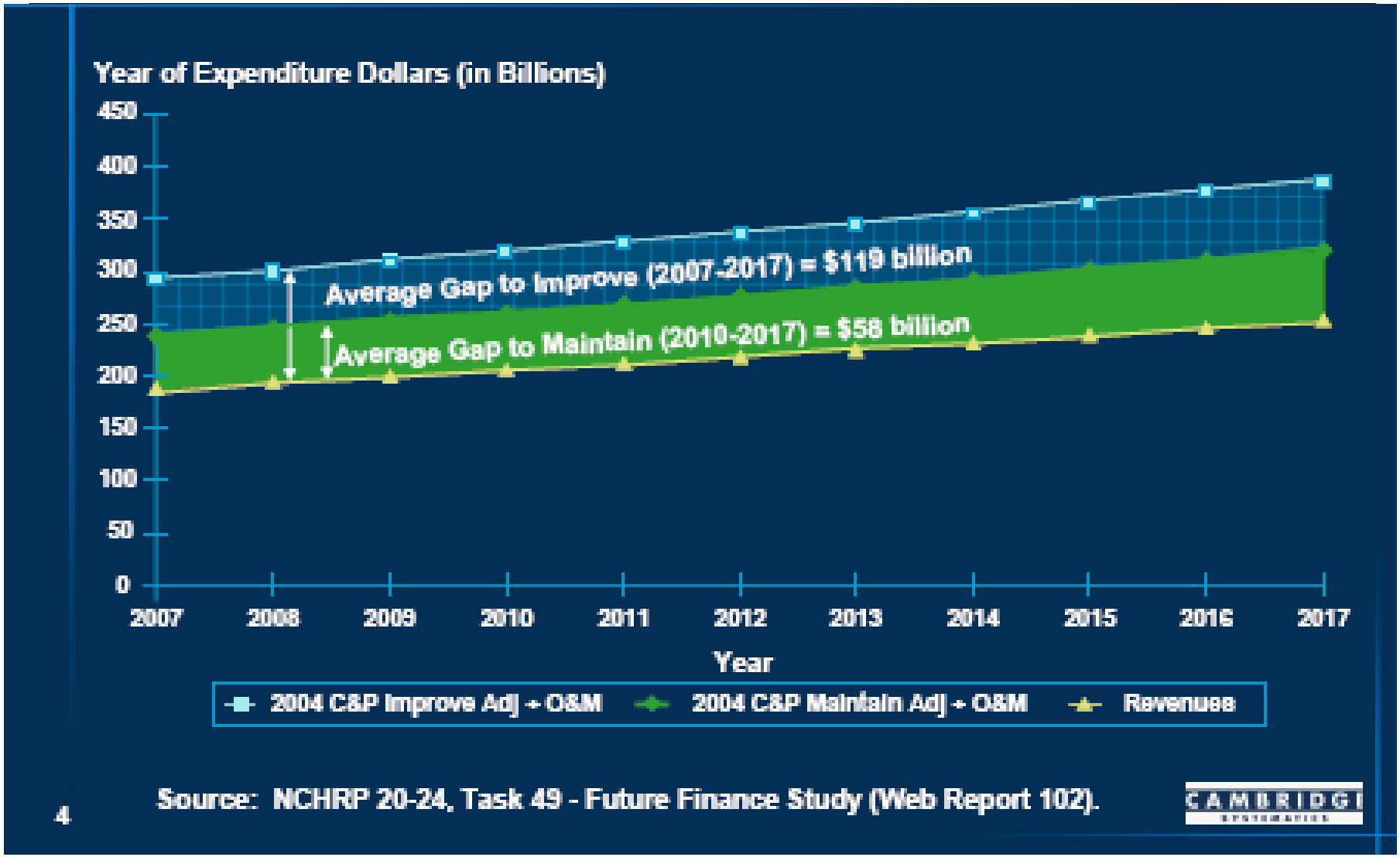
* Texas Transportation Institute, 2005 Urban Mobility Report
** USDOT internal analysis

VA - Vehicle travel up 78%; road miles increased 1% and lane miles 2% in last 20 years

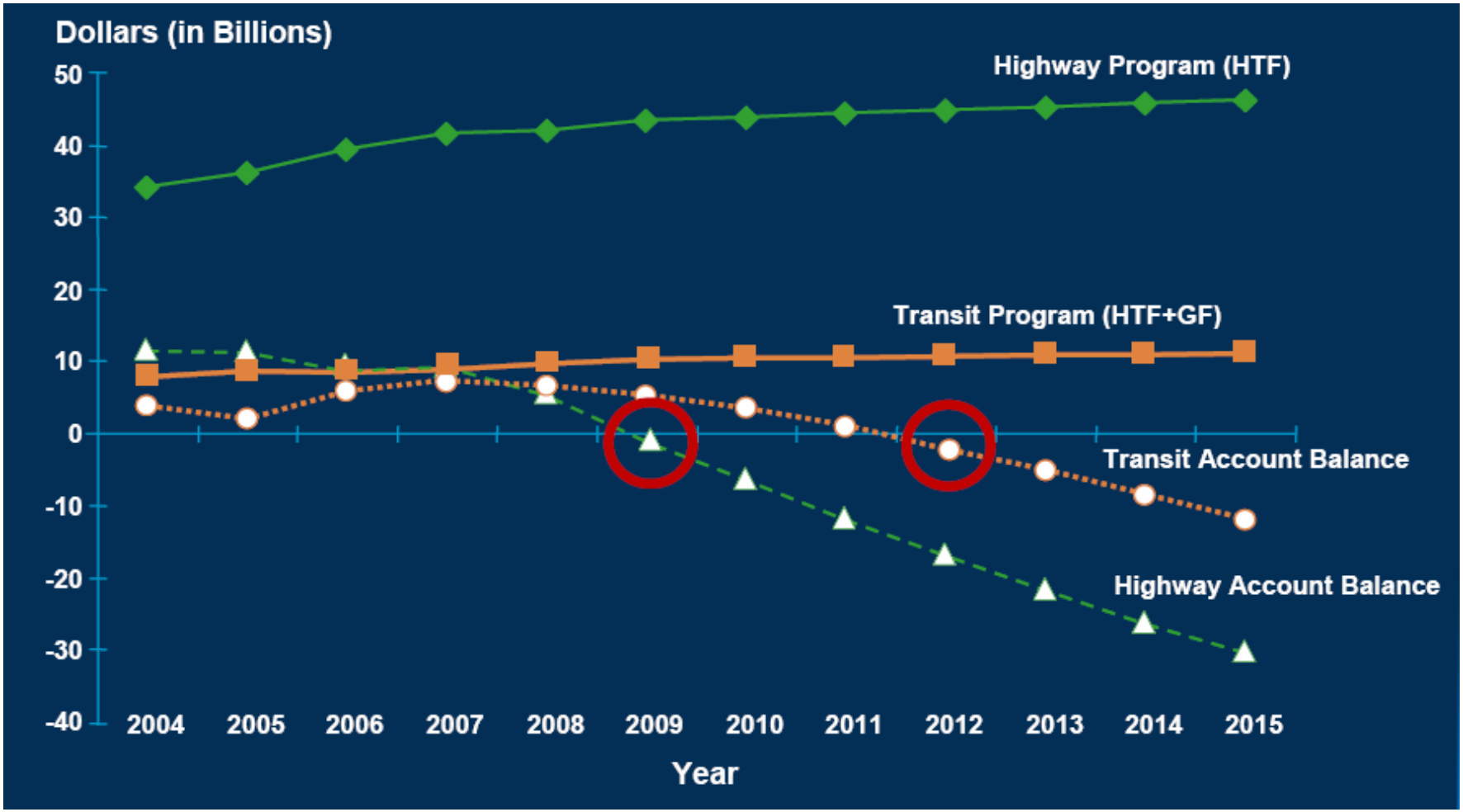
Impact of Inflation



National Funding Gap

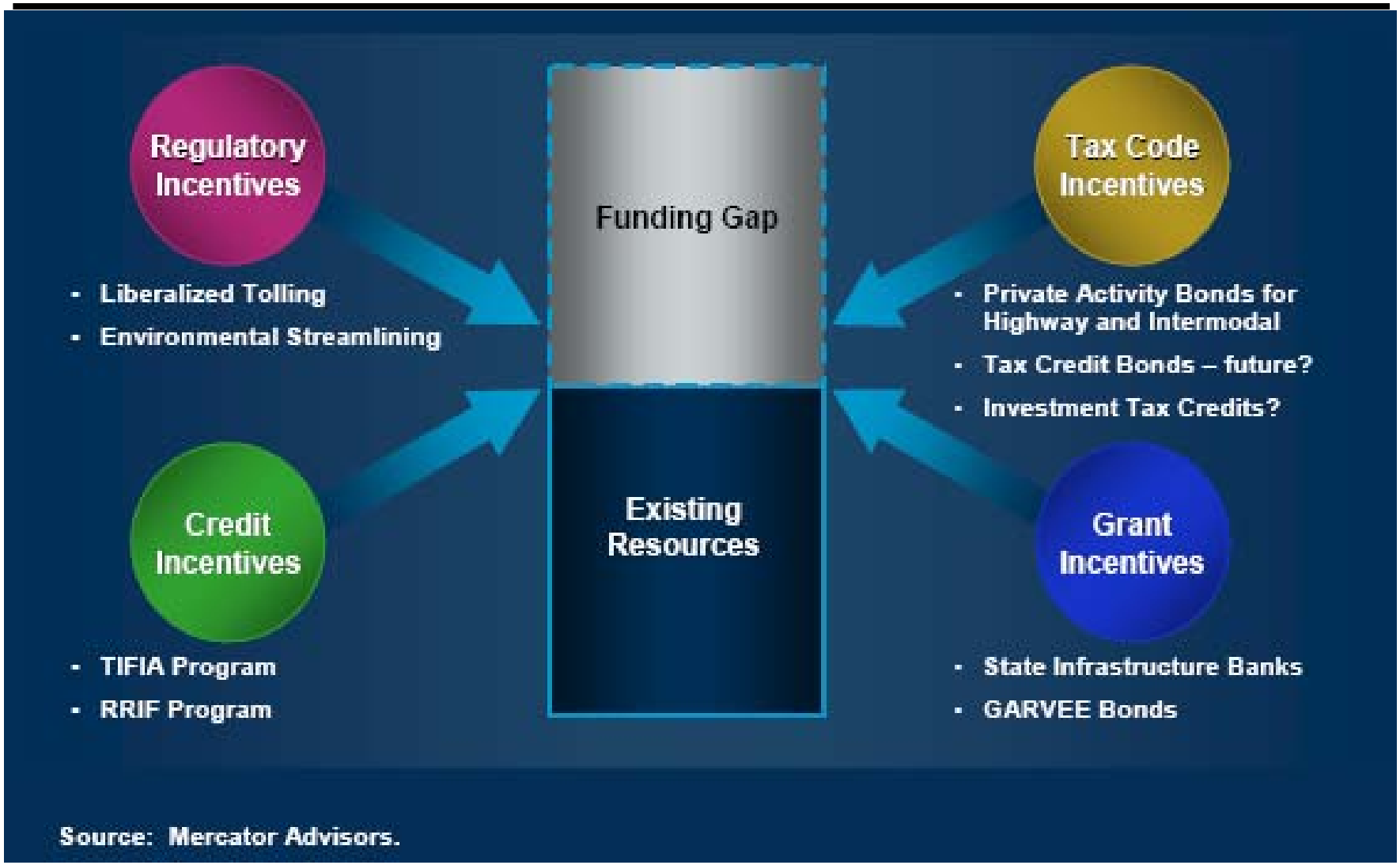


Estimated Highway and Transit Program Levels and HTF Account Balances through 2015*

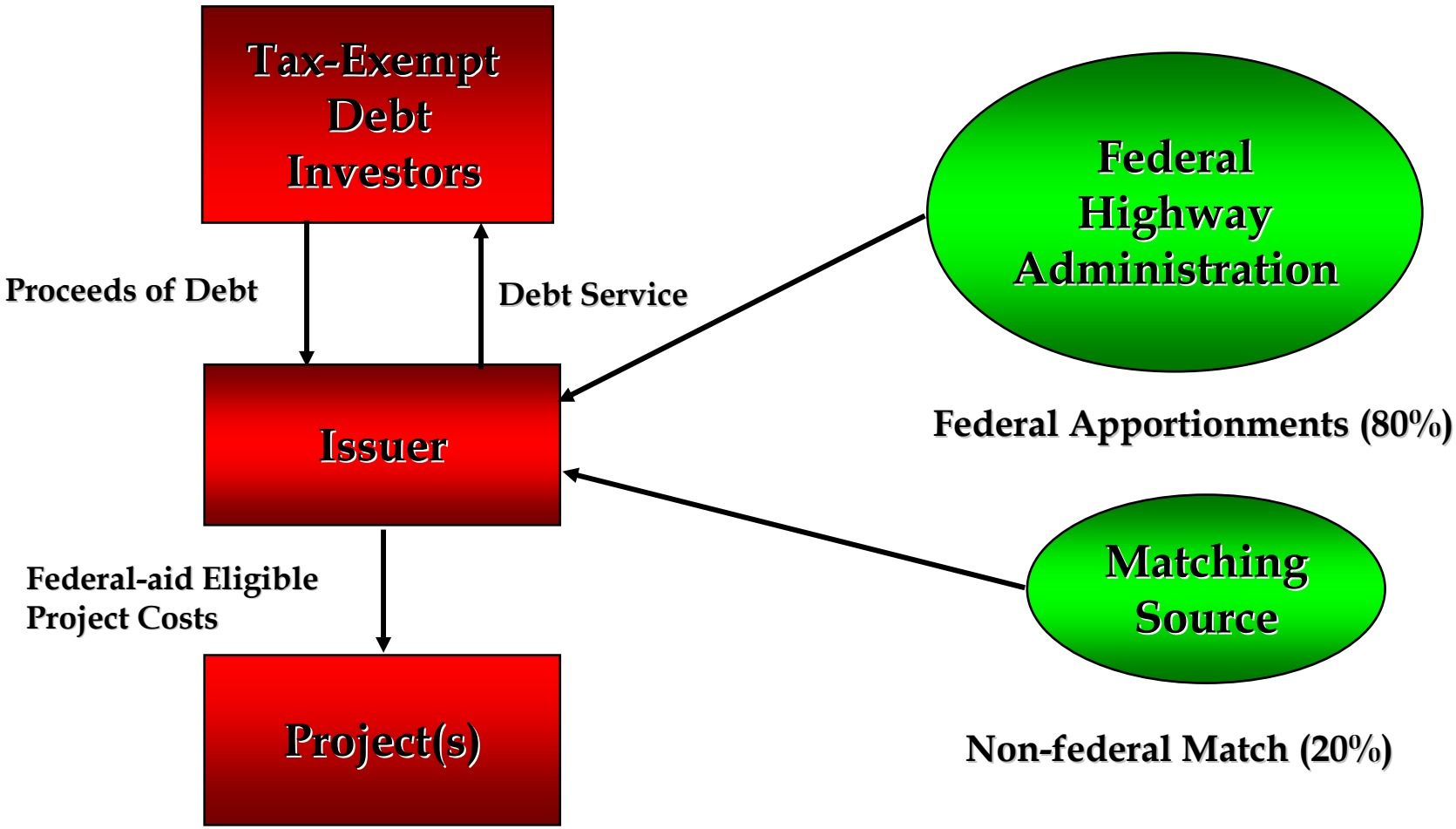


*** Based on 2008 Treasury revenue estimates; Projected spending for 2010-2015 based on current services baseline for discretionary / "other" (non-defense and non-security) outlays assumed to grow 1.15% annually after 2009.**

Federal Financing/ Leveraging Incentives

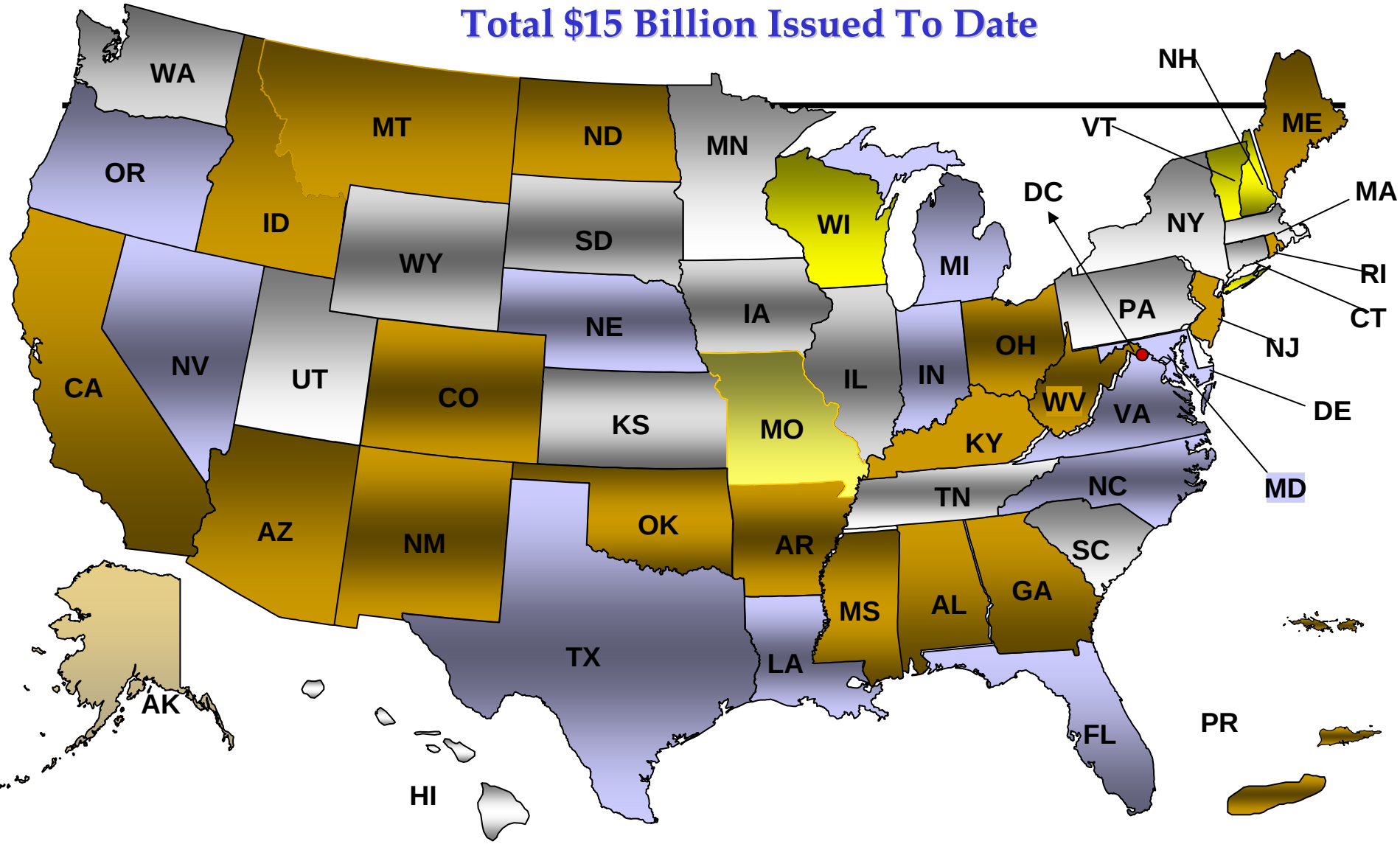


GARVEEs – Flow of Funds

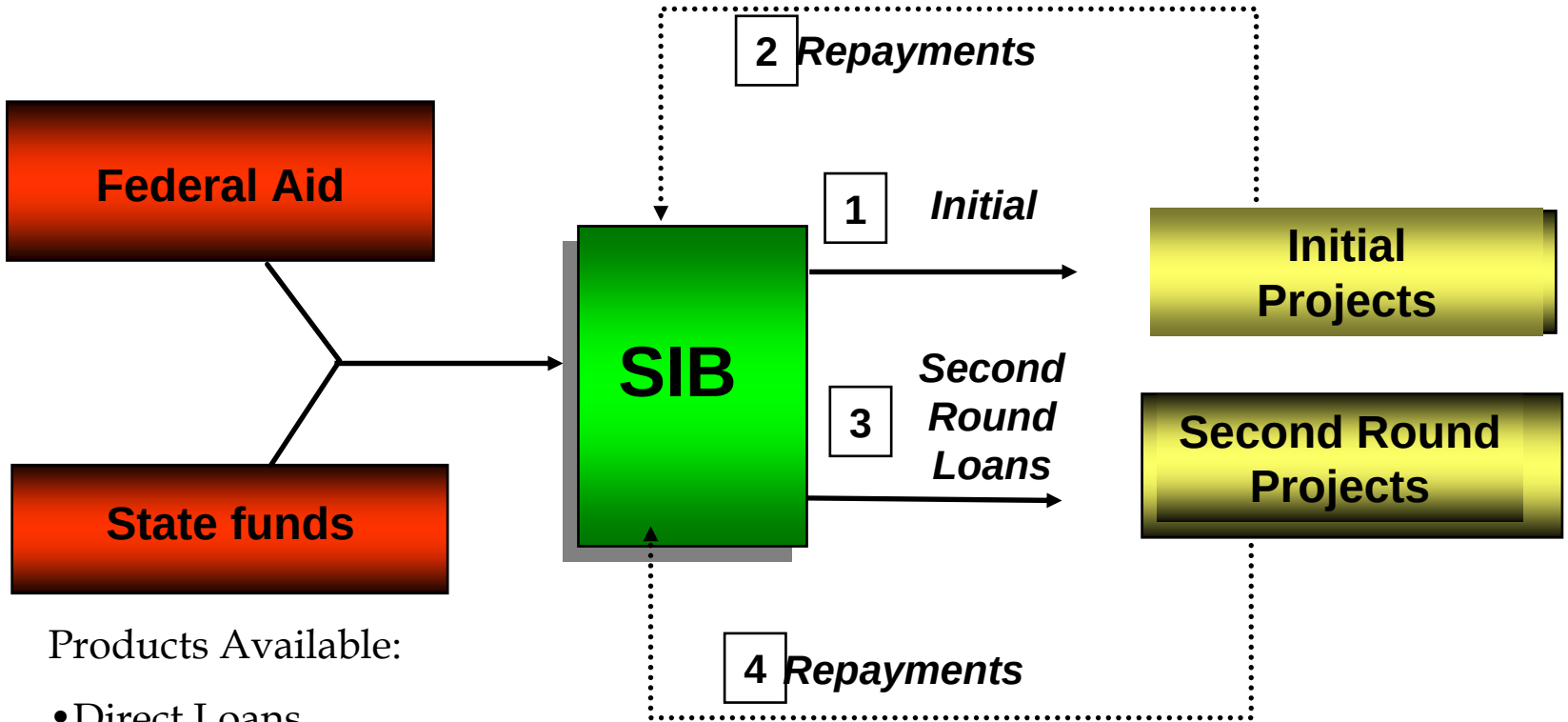


Direct GARVEE Bonds

Total $15 Billion Issued To Date



SIB Flow of Funds



Products Available:

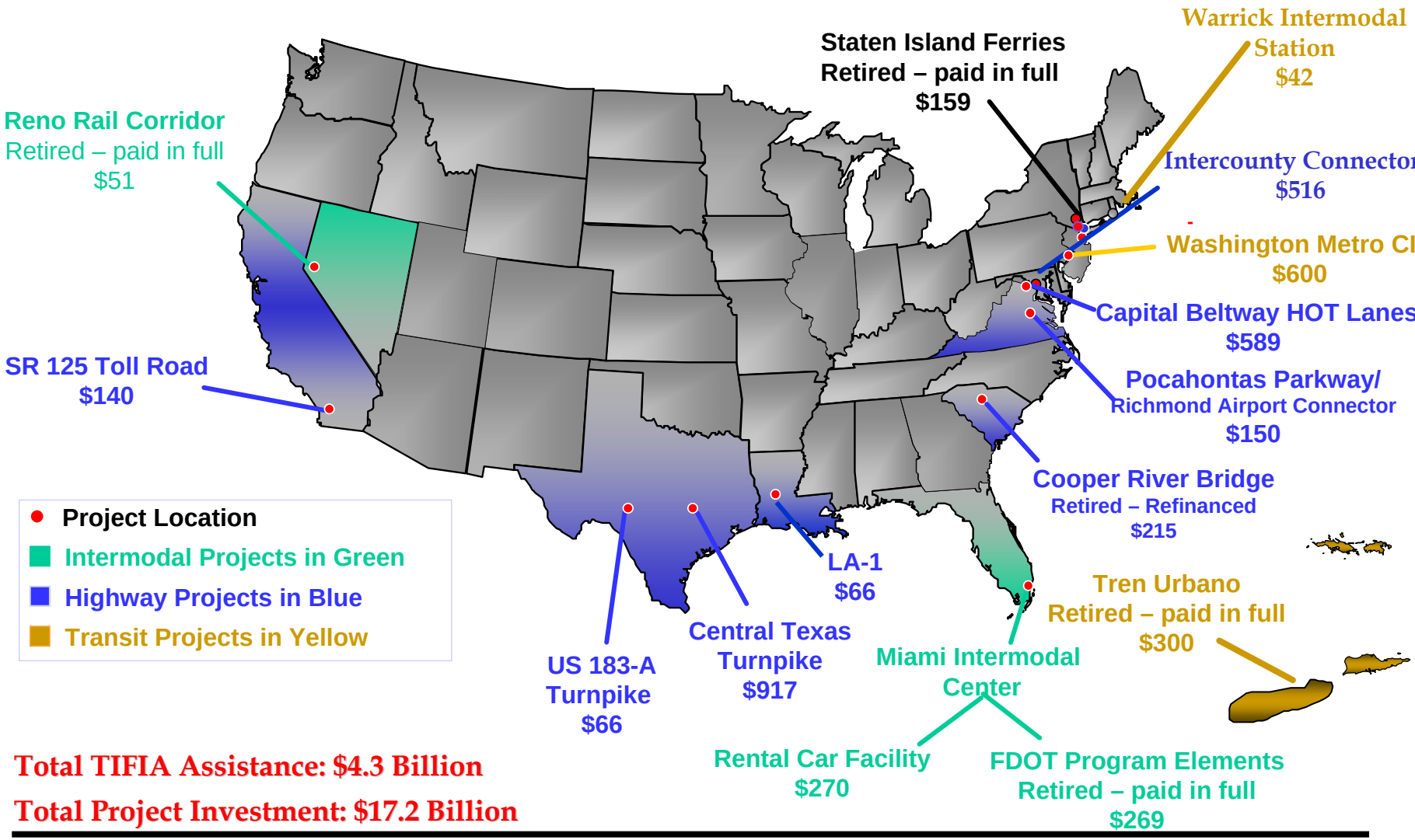
- Direct Loans
- Loan Guarantees
- Interest Rate Buydowns
- Other

As of June 30, 2007, 33 states have entered into 596 loan agreements with a total value just over $6.2 billion

TIFIA Instruments – Co-Investment Tool

- Direct federal credit assistance in the form of loans, loan guarantees and lines of credit
- Designed to provide supplemental and subordinate capital for large project financings
- Limited to 33% of eligible project costs
- Project must cost $50 million
- Project's senior debt must be investment grade ("BBB-" or higher)
- Flexible payment structures including deferrals and prepayments
- Substantial co-investment by private sector helps ensure fiscal discipline

TIFIA Projects
(TIFIA Instruments in Millions)



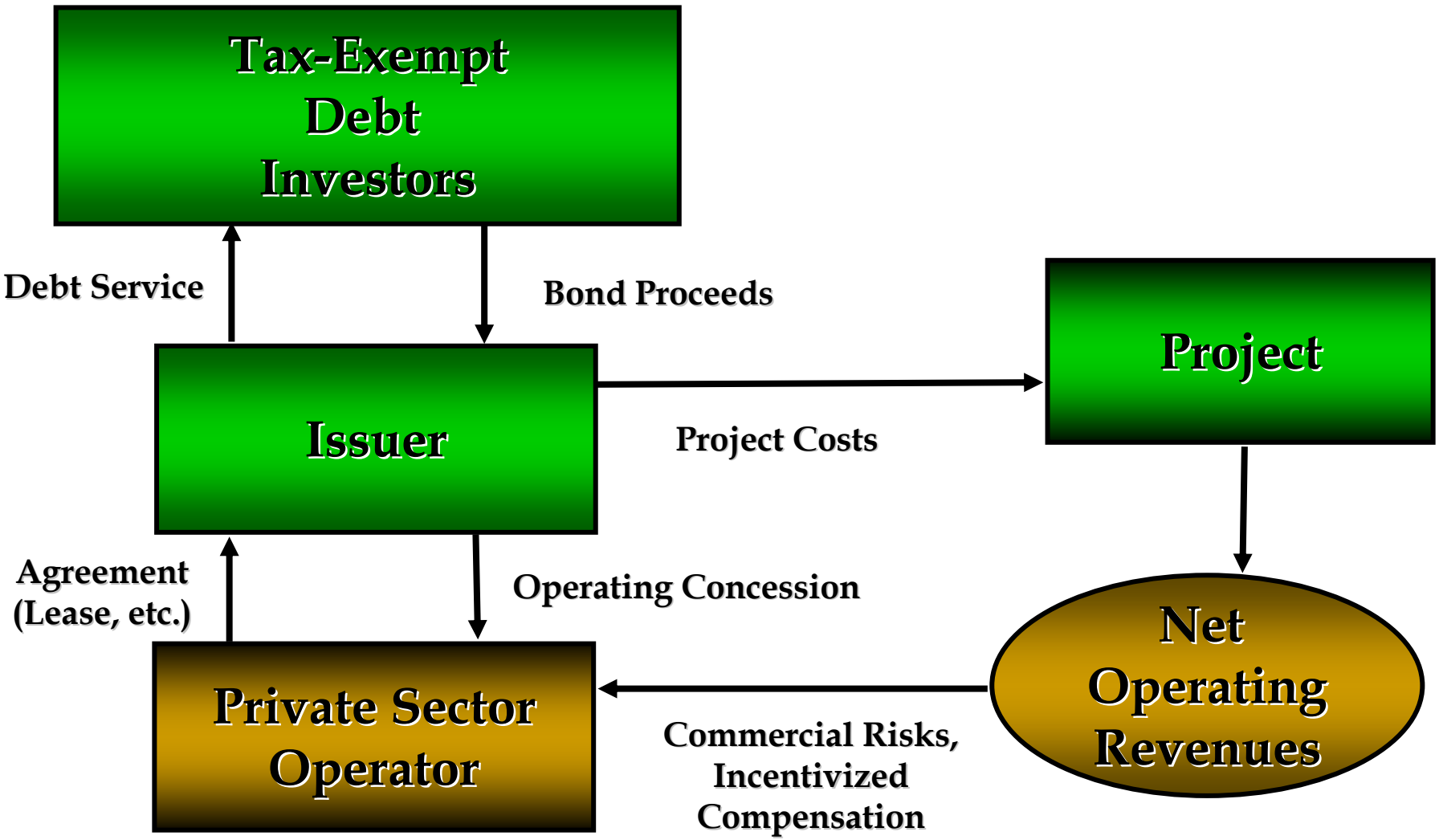
Total TIFIA Assistance: $4.3 Billion

Total Project Investment: $17.2 Billion

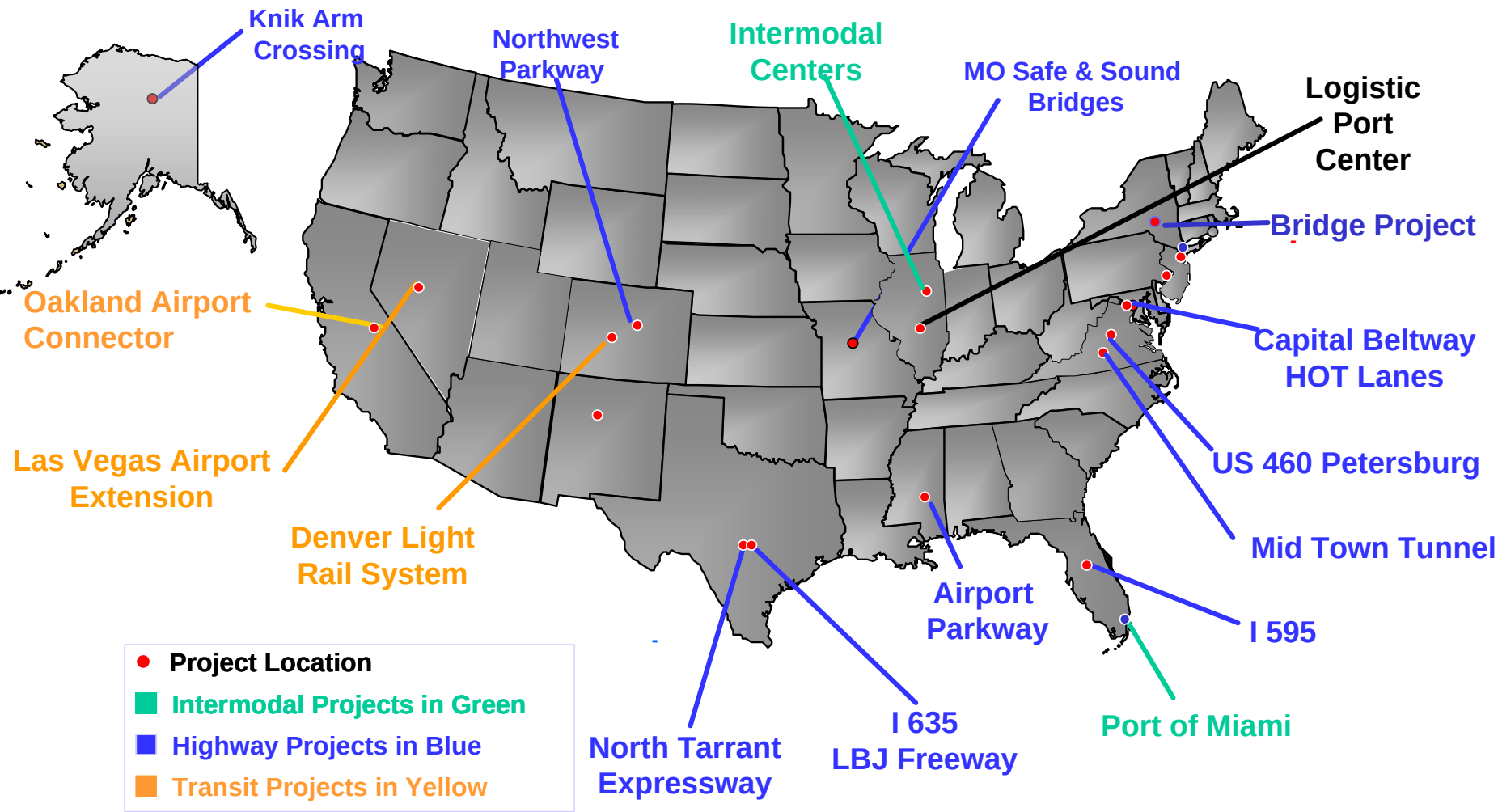
Private Activity Bonds (PABs)

- Section 11143 of SAFETEA-LU cap at $15 Billion
- Authorizes certain highway, transit, rail and intermodal projects with ongoing private participation to issue tax-exempt PABs (exempt from state volume caps)
- Tax-exempt debt is cheaper (20-25% interest savings in PV terms)
- Levels the playing field by providing the same tax incentives for all modes of transportation
- Permits two (2) advance refundings for revenue bond-financed project (versus one or none under current law)

Flow Chart of Private Activity Bonds



PABs Have Been Allocated for Transportation Projects



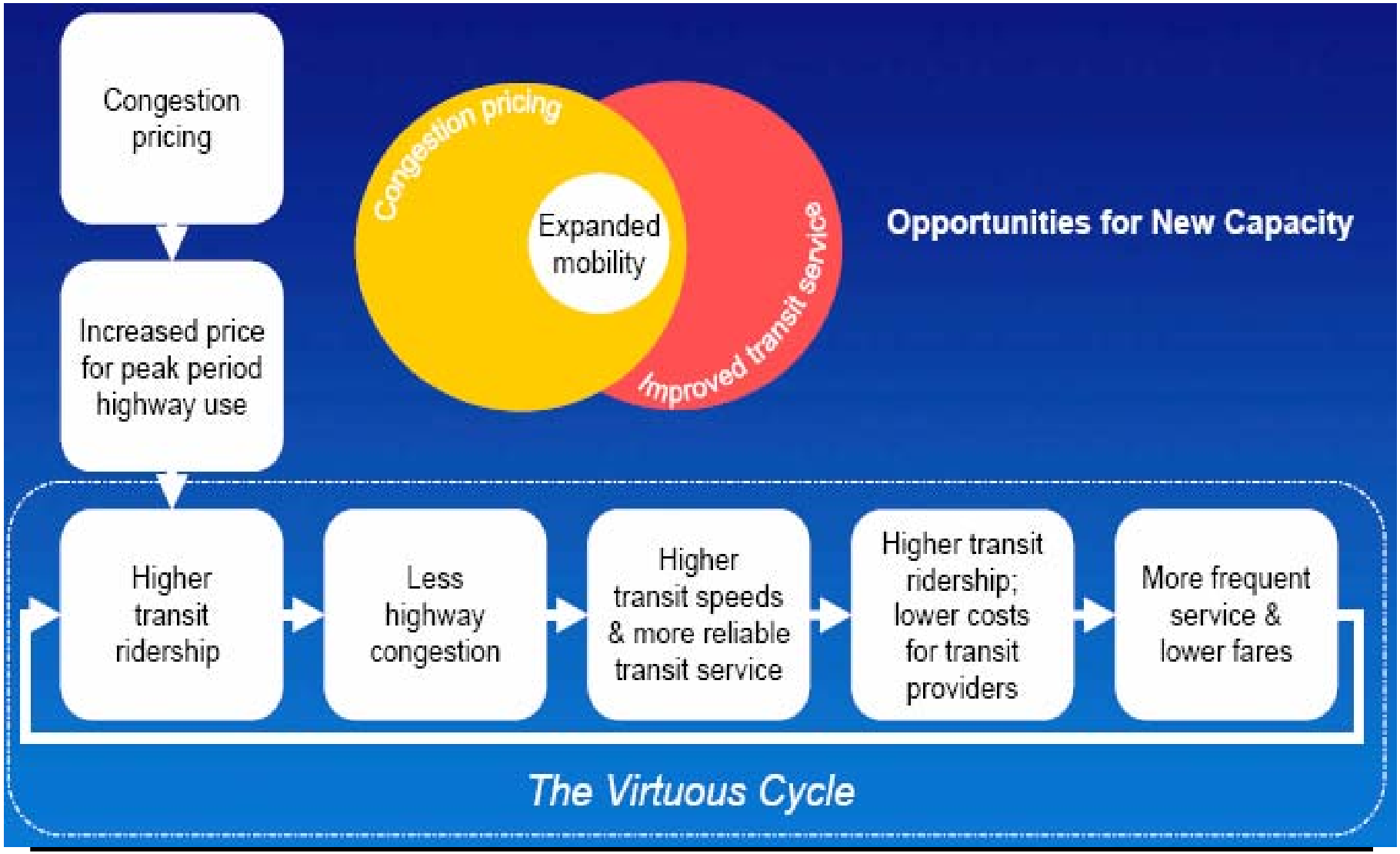
Tolling - Six Programs

1. Express Lanes Demonstration Program
2. High Occupancy Vehicle Facilities
3. Value Pricing Pilot Program
4. Interstate System Construction Toll Pilot Program
5. Interstate System Reconstruction & Rehabilitation Pilot Program
6. Section 129 Toll Agreements

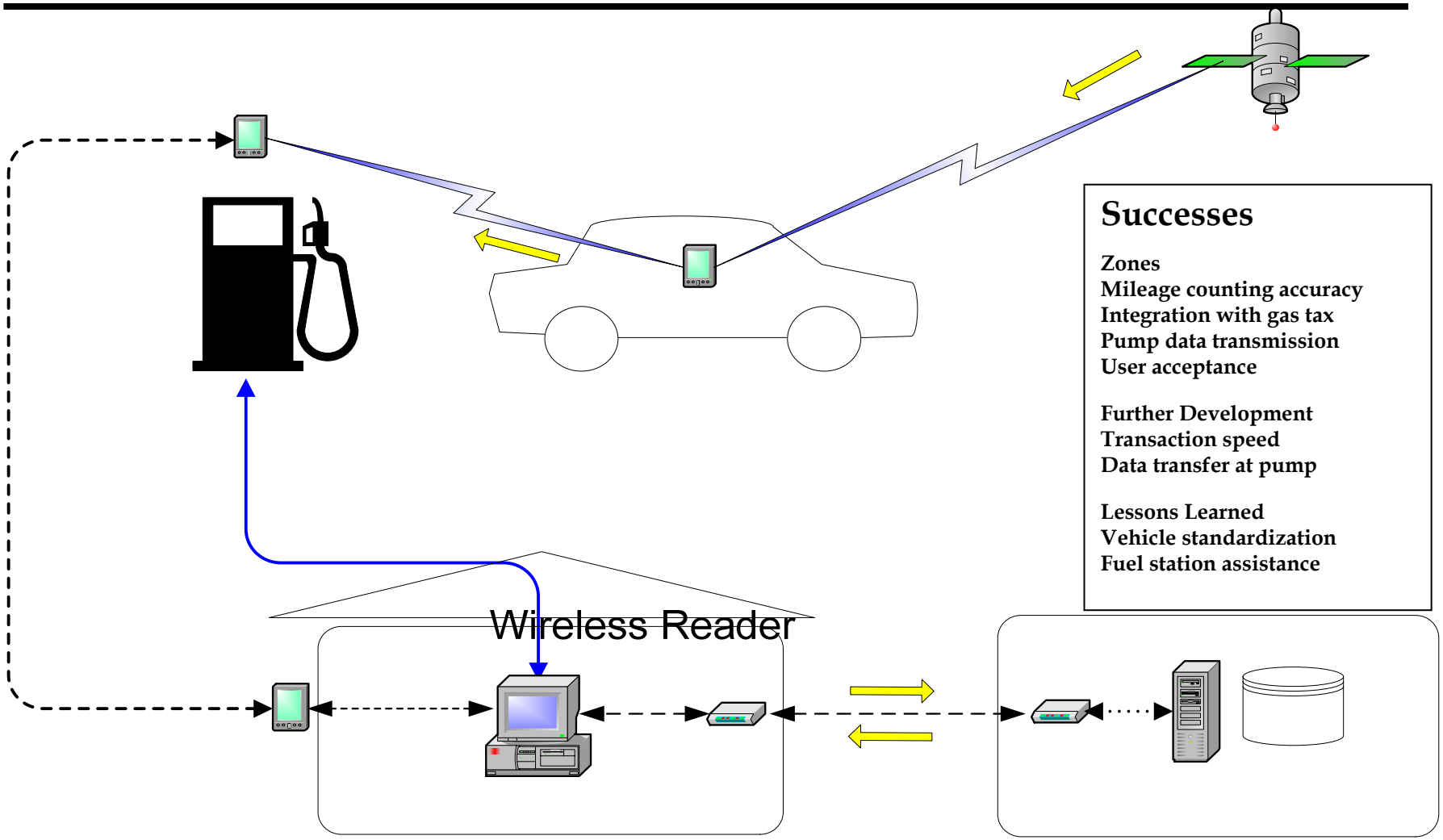
Tolling Website

http://www.ops.fhwa.dot.gov/tolling_pricing/index.htm

Congestion Pricing – Benefits to Transit



Future - Area wide Pricing Technology Test: Oregon



Successes

Zones
Mileage counting accuracy
Integration with gas tax
Pump data transmission
User acceptance

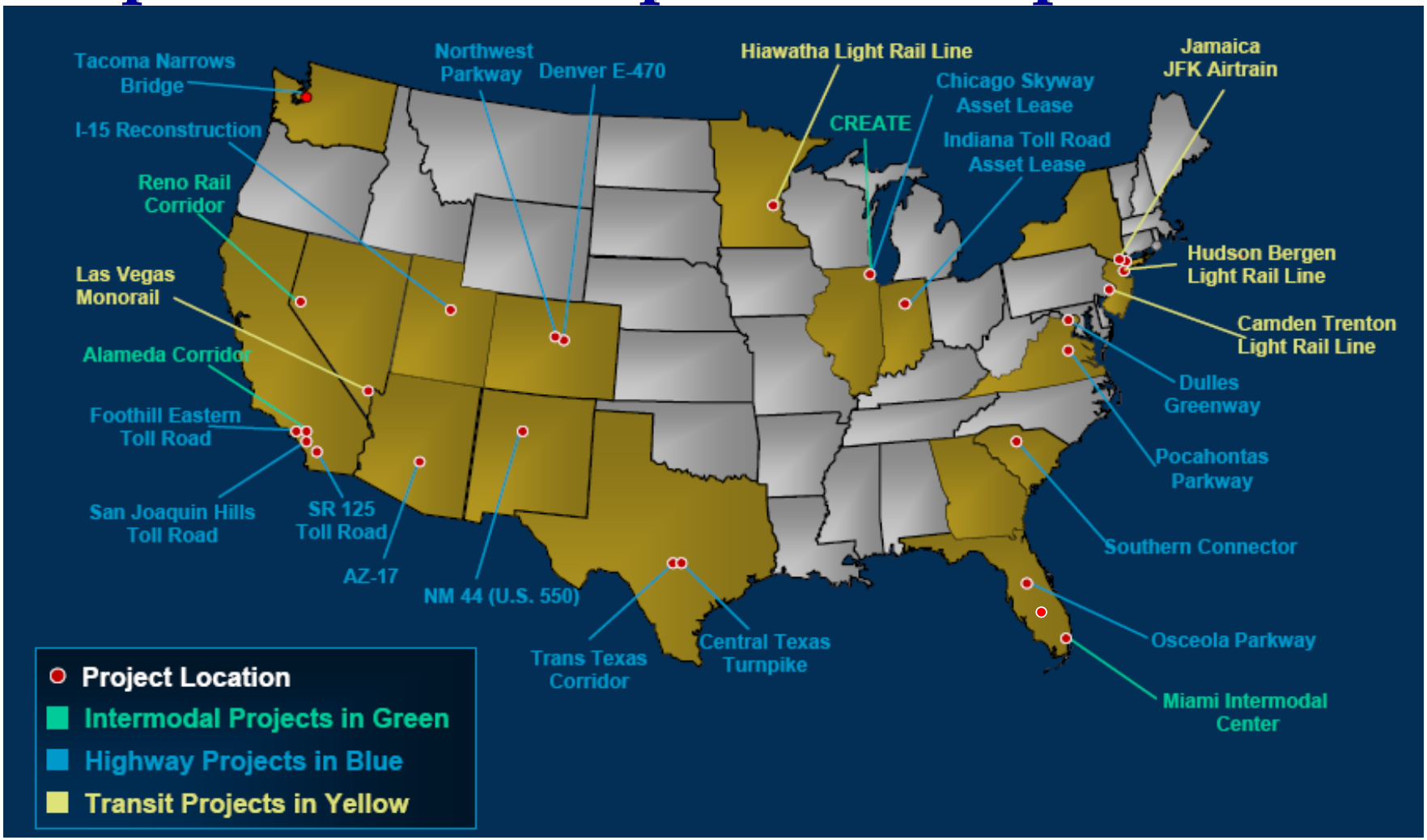
Further Development
Transaction speed
Data transfer at pump

Lessons Learned
Vehicle standardization
Fuel station assistance

Changing Landscape of Infrastructure Finance
PPPs - Why Now?

- Better understanding of private sector capacities and advanced technology
- Competing budgetary priorities: New roads, health, education, welfare, pension, etc.
- Increasing congestion: Impedes economic growth, environmental impact, air toxics, etc.
- Growing realization that status quo may have limitations
  - Gas tax increase a difficult option politically
  - Taxation a blunt instrument – does not allow for congestion pricing, less equitable
- State legislative changes (31 states have or are considering P3 legislation)

States Using Public-Private-Partnerships to Help Address Transportation Capital Needs



Note: Partial List of Financed Projects. Source: Public Works Financing

Types of PPPs Used in Surface Transportation

- **Asset Sale/Lease**
- **Long Term Lease Agreement/Concession**
- **Transit Oriented Development (TOD)/Joint Development**
- Multi-Modal Partnerships
- Build-Own-Operate (BOO)
- **Build-Transfer-Operate (BTO)**
- Design-Build-Finance-Operate (DBFO)
- **Design-Build-Operate-Maintain (DBOM)**
- Design-Build (DB)
- Private Contract Fee Services

Project Delivery Approaches

PPP Leveraged Models Use for Revenue Generating and Subsidized Assets

Concession Model

Revenue Generating Assets

- New Tolled Facilities
- Existing Tolled Facilities

Concessionaire will pay an up-front amount in exchange for future net revenue

Availability Payment Model

Subsidized Assets

- Transit
- Non-Tolled Facilities

Concessionaire will build and/or operate an asset in exchange for a payment stream From the public sponsor

PPP Availability Concession Structure Can:

- Transfer Risk
- Reduce Costs
- Increase Certainty
- Accelerate Funding
- On Schedule
- On Budget

Benefits of a Concession

- More efficient financing results in
  - Concession payment use to advance other projects
  - Lower user fees – Market and pricing driven
- Improved operating efficiencies – Electronic Toll Technology, example
  - Skyway was able to reduce waits by up to 30 minutes
  - Truck usage of Skyway increased 47% from September 2005 to March 2006 due to ETC and other operation improvements
- Better maintenance – Expenditures are investments not costs or burdens
- Customer Support – Free gas or tow for cars broken down

Successful Examples Have Shown PPPs Are A Reality

Leveraging Leases

- Highway - Long-term Lease of Existing Toll Facilities
  - Chicago Skyway, Illinois - $1.83 bn PV benefits
  - Indiana Toll Road, Indiana - $3.85 bn PV benefits
  - Pocahontas Parkway – If project return >6.5%, revenue share starts @ 40% (proxy IRR)
- Transit (prior to 2004) - Monetize the tax benefits of sunk cost - Sales/ Lease Back, Lease/Service Contracts, etc.
  - BART, Boston MBTA, Caltrans, CTA, Dallas DART, Denver RTD, MARTA, New Jersey Transit, New York MTA, etc.

SAFETEA-LU PPP Pilot Program (Penta-P)

- Authorized by SAFETEA-LU, Penta-P is sponsored by the US DOT to study PPP projects in transit
- Three projects were selected in 2007:
  - Oakland, California Airport Connector
  - Denver, Colorado Gold Line Rail Corridor
  - Houston, Texas North & Southeast Corridor High Capacity Transit Extension Projects

Public Private Financing

Case Studies

TOD - Lindbergh Center - Atlanta

- 47 acres at MARTA
  - Development offering
  - Long term lease
- $750m TOD
- $107m public investment
- Two 14-story BellSouth Office Towers
- 330,000 sq ft of retail and dining options
- 2.6 8 million square feet of office space
- 916 rental residential units (Post Property)
- 190-room hotel
- 382 condominium units (Post Property)

MARTA - TODs

- Art Center Station – 3.08 acres; $1.1m annual lease
- Lenox Station – 1.35 acres; $0.2m annual air right lease
- Lindbergh Center Station – 47 acres, $1.5m annual ground lease plus profit sharing
- Medical Center Station – 2.22 acres, $0.4m annual lease
- Bellsouth Satellite Parking Facilities (four stations) - $0.3m
- Chamblee Station – sold 1.46 acre to investor, 25 town homes and additional developments
- Abernathy Road Park and Ride – 11.03 acres, $0.8m annual lease and 15% of net cash flow from project
- Future Projects – Avondale, King Memorial, Lakewood-Fort McPherson Stations, and Abernathy Park and Ride Lot

Penta-P1 -BART Oakland Airport Connector

- 3.2 mile light rail, 2 stations elevated Automatic Guideway Transit(AGT) System
- PPP Structure – DBFO, 35-yr Concession
- Project Cost - $435 million
- Revenue Service – 2012
- Status: Proposal due 5/22/2008

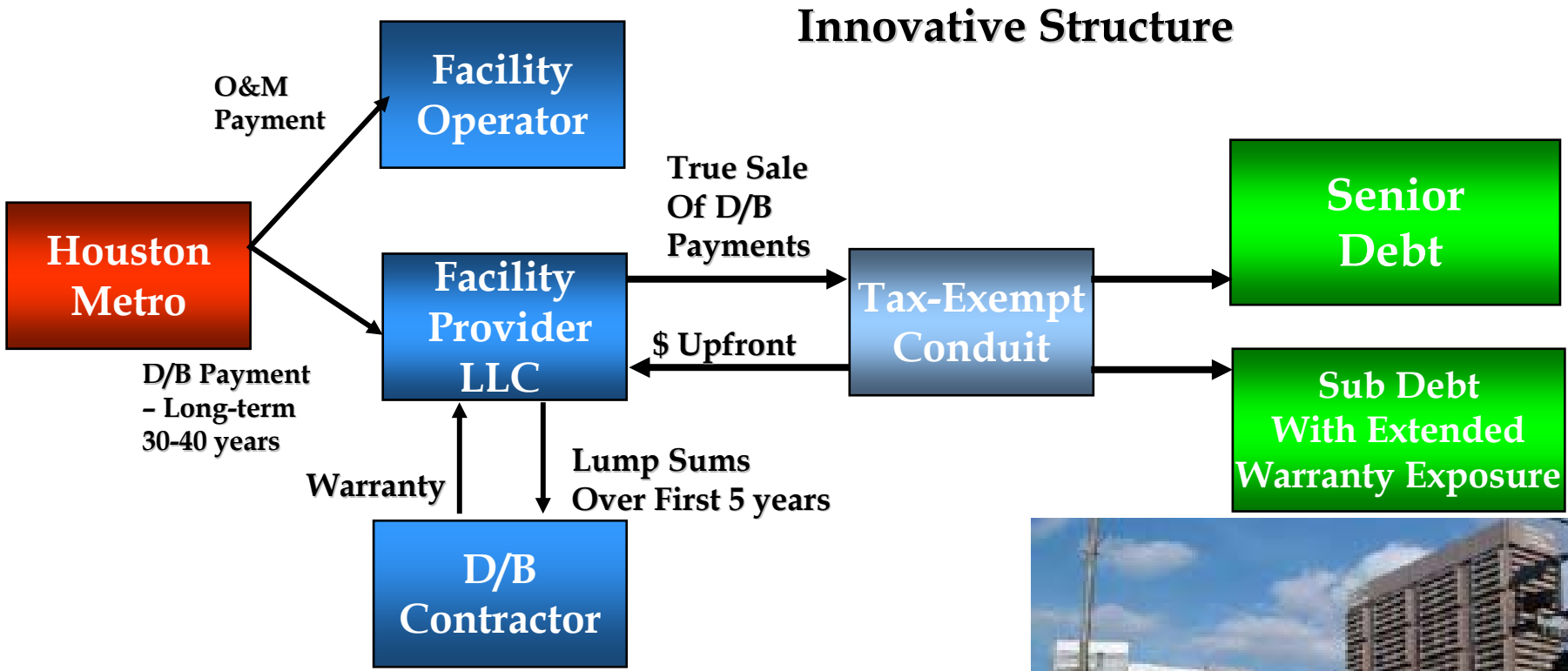
Penta-P2 - Gold Line/East Corridor

- Commuter rail system; 34.8 mile with 13 stations
- Cost: $1.5 billion
- Open: 2015
- Project Status:
  - Environmental process and basic engineering underway
  - RFQ and RFP being prepared
  - MOU with FTA in Summer 2008

Gold Line

East Corridor

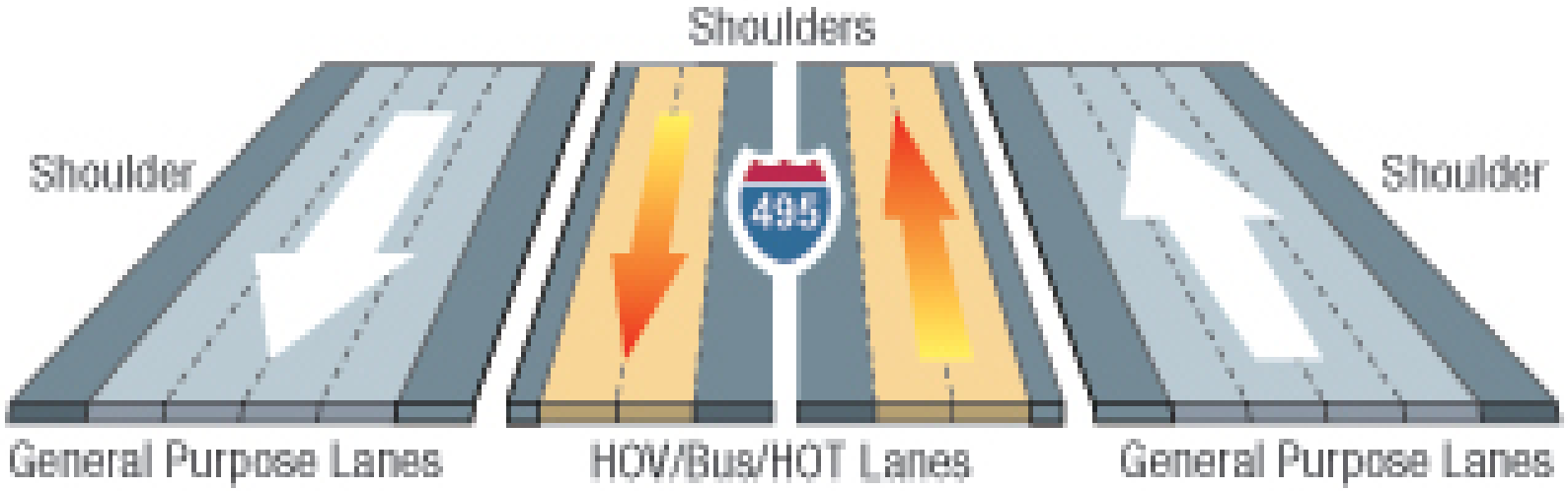
Penta P3 - Houston METRO Light Rail System DBOM



- 30 miles Light Rail Transit (LRT) system
- Cost: $1.8 billion; Open: 2013
- 3 responses to RFQ; 3 teams short listed
- Selected P3 contractor to perform PE and negotiate price for DBOM
  - Washington Group

Creative Financing Case Study

T495: Capital Beltway HOT Lanes



- 14 mile segment of beltway
- Two HOT lanes each direction
- Variable tolls HOV-3 free
- Replacement of aging infrastructure (50 bridges)

Sources & Use of Funds

Source	Amount ($000s)
PABs	**530,943**
TIFIA*	**526,939**
VDOT Contribution	**408,895**
Equity**	**339,440**
Total Sources	1,806,217
Debt to Equity Ratio (VDOT considered equity)	1.41

*Includes $19.2 M Contingency Used

**Includes $45.8 M Contingency Used

Funded 5 yrs. Post Construction

Uses	Amount ($000s)
Construction Costs	
Construction Drawdown***	**1,493,572**
TIFIA/FHWA Transaction Costs	**430**
Operations Start Up Costs	**32,932**
SPV Cost during Construction	**16,262**
Development Costs	**39,800**
Due Diligence &Advisory Fees	**19,273**
Total Construction Costs	1,602,269
Net Financing Costs	**51,854**
Ramp up Reserve	**30,000**
General Project Reserve	**50,000**
Capex Reserve	**19,000**
Debt Service Reserve	**53,094**
Total Uses	1,806,217

***Includes $65M Contingency Used from TIFIA and Equity

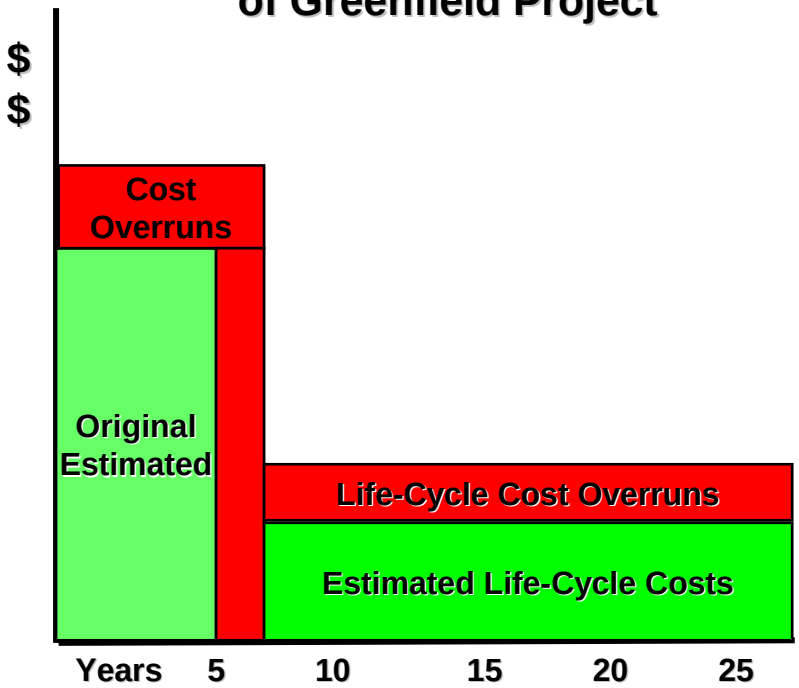
Missouri Safe & Sound Bridge Program

- Public Private Partnership
  - Replacement or rehabilitation of 802 bridges, 30 year DBFOM
  - 25 year availability payments
    - MoDOT Federal-aid bridge funds
    - Up to $700 M Private Activity Bonds

- Missouri Bridge Partners
  - Zachry American Infrastructure
  - Parsons Transportation Group
  - Fred Weber Inc.
  - Clarkson Construction
  - HNTB
  - Infrastructure Corporation of America

SR 125 – South Bay Express

Traditional Procurement of Greenfield Project



- State incurred capital outlays and operating and maintenance costs
- State bears all risks

PPP - California: SR 125

- Private sector funds itself using large portion of debt and shareholder equity; Private sector bears all risks
- Funding: Senior bank loans: $328.0; TIFIA loan: 140.0; Equity contribution: 120.0; Donated right of way: 47.8

In Summary…. USDOT Brings to the Table

Potential Financial Assistance

- Private Activity Bonds to lower the cost of capital required to construct transportation facilities
- Direct loans, loan guarantees, and standby lines of credit under DOT's TIFIA Program
- Grants for transit projects under FTA's New Starts/Small Starts Program
- Grants for traffic and congestion management under FHWA's Intelligent Transportation Systems (ITS) Program
- Grants for implementation of pricing under FHWA's Value Pricing Pilot Program

Facilitate/Help Remove Barriers

- New tolling authorities under SAFETEA-LU
- SEP-15 Flexibility

In Summary…. USDOT Role in Infrastructure Finance

Educate

- Web page, publications on infrastructure project finance
- Research and Development
- Sponsorship of Conferences/Meetings (TRB, ARBTA)
- Outreach to capital markets/project sponsors
- Technical assistance available for States - FHWA National Resource Center – 15 disciplines provide services

Validate

- Continuous oversight of projects with Federal funds or credit assistance

Questions