



# The Benefits of Private Investment in Infrastructure

Note: Updated as of August 2011



Note: All dollar figures are measured in today's terms

# This Summary of Information was Compiled by



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## **In Coordination With**

Abertis, Allen & Overy LLP, Bank of New York Mellon, Barclays Capital, Carlyle Infrastructure Partners, CH2M Hill, Chadbourne & Parke LLP, Citi Infrastructure Investors (CII), Credit Suisse, Debevoise & Plimpton, Freshfields Bruckhaus Deringer, Fulbright & Jaworski, Greenhill & Co., Heritage Oak Capital, Kirkland & Ellis, Mayer Brown, McKenna Long & Aldridge LLP, Merrill Lynch, Morgan Stanley, RBC Capital Markets, Scotia Capital, Skanska, and UBS.

# Private Capital in Infrastructure Works



- Jointly public and private investment in infrastructure can create **millions of jobs**. The private sector is already largely responsible for designing, building, and financing our nation's infrastructure and can do more.



- Over **\$250 bn of private capital has been raised**, and some additional legislative and administrative changes could accelerate infrastructure projects and enhance funding.



- Private investment in infrastructure **frees government dollars** for allocation to other troubled areas of the economy and transfers risk away from the public partner to the private entity.



- Private investment has been proven worldwide to generate **positive economic growth** and can act as a stimulus by providing investment grade projects to invest in.



- Private capital allows U.S. workers through their pension funds to invest in the growth of our national economy, generate jobs, and **enhance our global competitiveness**.

# Private Capital is Ready to Create Jobs

Private investment in infrastructure could generate **1.9 million** jobs in the U.S. market...



**National Unemployment**

Source: Bureau of Labor Statistics, US Department of Labor, July 2011

Private investment  
could help to reduce  
unemployment by  
approx. **14%**

*“Right now, there are over a million construction workers out of work after the housing boom went bust, just as a lot of America needs rebuilding. We connect the two by investing in rebuilding our roads and our bridges and our railways and our infrastructure.”*

*~ President Obama, July 8th, 2011*

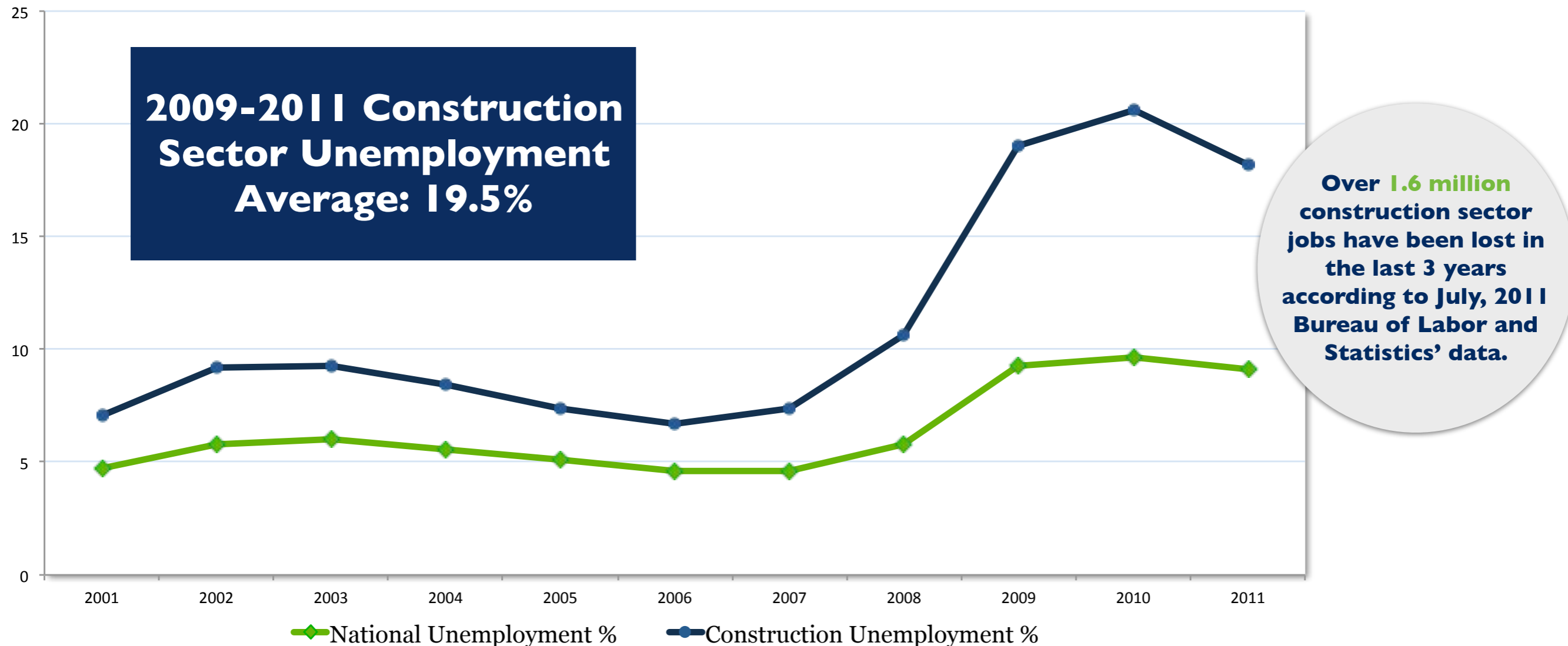
**...Incentives to invest private capital must be taken into account in the proposed National Infrastructure Bank and SAFETEA-LU reauthorization.**

**Note:**

1. Actual figure is 1,875,000 projected private jobs given \$250 bn of private capital invested over 10 years at 60 percent leverage.

# Construction Sector Hit Harder

Construction unemployment remains significantly **higher** than the national average ...



Source: Bureau of Labor Statistics, US Department of Labor, July 2011 [annual averages]

... “Simply put, there just isn’t enough demand for construction to fuel the kind of hiring needed to get industry employment back to where it was in **2007**” ~AGC Chief Economist Ken Simonson, June 3rd, 2011

# Private Capital is Available to States Facing Deficits

## How Private Capital Could Help Alleviate State Burden

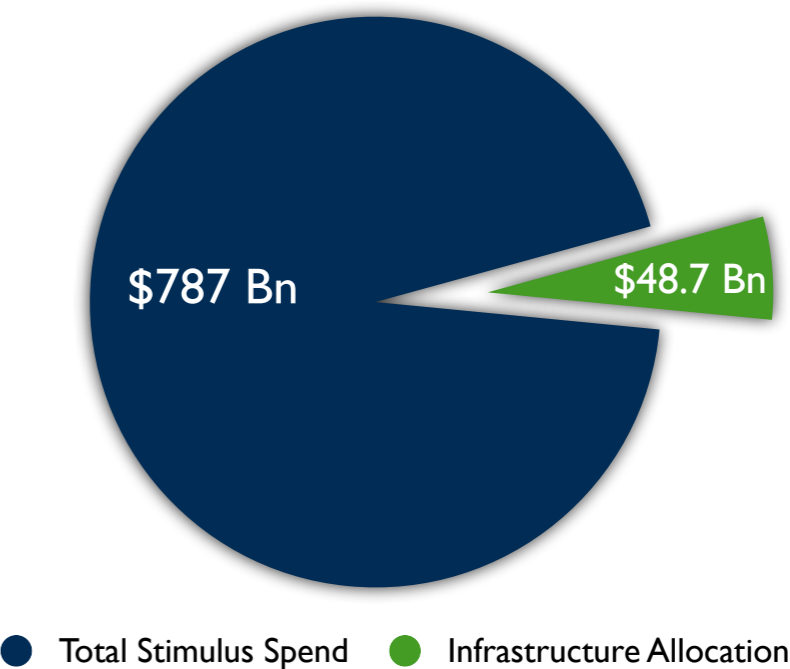
Nearly all of the \$48.7 billion stimulus money has been awarded by the Department of Transportation and states could face lower levels of federal funding -- making it clear that private capital can help in the very short-term and over the long-term after federal stimulus funding is fully distributed.

There are a number of major projects that will not be able to fit “shovel ready” stimulus criteria -- but will need to be addressed through alternative financing methods in the future.

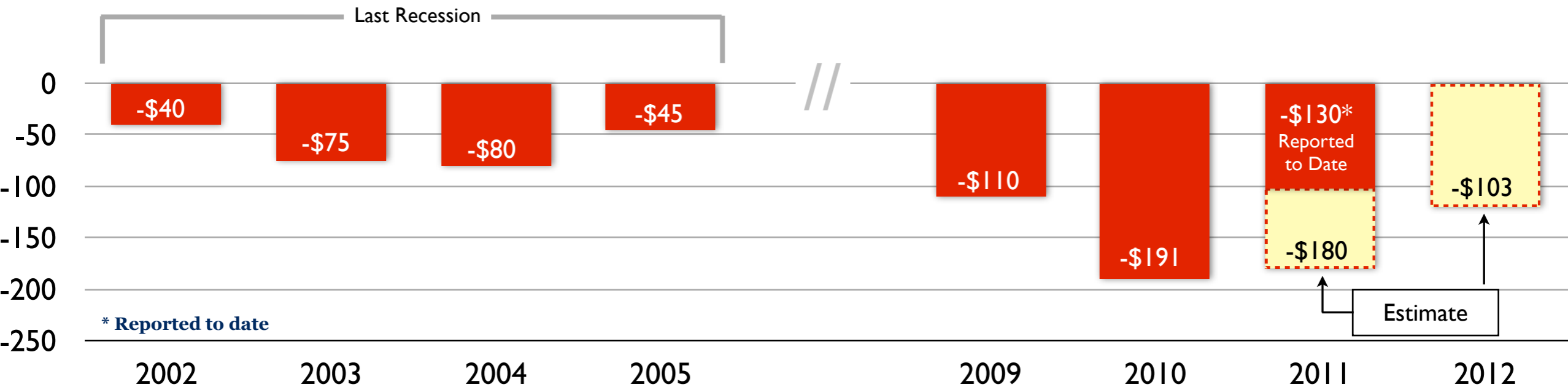
Given the ASCE’s 2009 report card and the \$2.2 trillion needed over the next five years to repair America’s infrastructure -- the stimulus package was not able to address all of our infrastructure needs.

Pew Center on the States 2010 opinion polls suggest infrastructure spending cuts are favored over cuts to education and health care to balance state budgets -- creating a need for new methods of financing infrastructure projects without increasing debt or raising taxes.

## Infrastructure Spending in Stimulus Plan



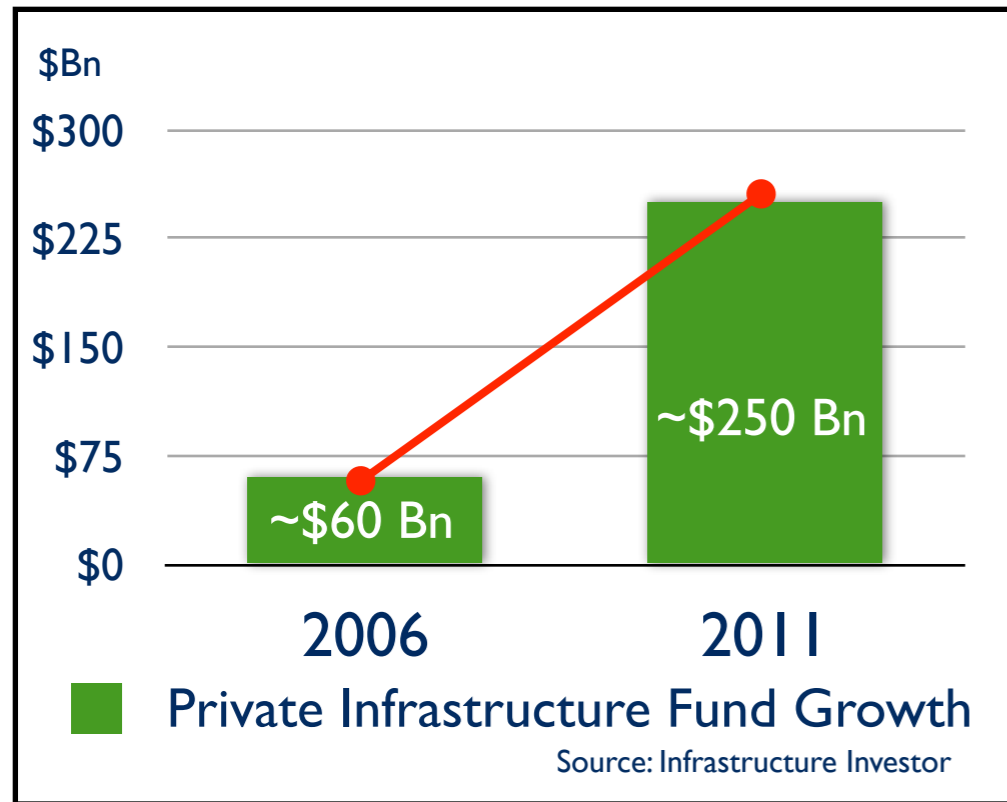
## How Bad Will it Get: Total State Budget Shortfall in each fiscal year, in billions



Source: Center on Budget and Policy Priorities, as of Feb 2010

# Growing Public Pension Fund and Investor Interest

The total equity capital committed to infrastructure is in excess of **\$250 billion**.



## Growing US Pension Fund Interest

- According to data recently compiled by the research firm Prequin, there are now 49 pension funds interested in infrastructure with approximately \$38 billion of funds available for investment in such projects.
- Some of the larger U.S. public pension funds are now forming their own internal teams to pursue direct investment in transportation projects.
- Dallas Police and Fire Pension System acquired a 10% ownership stake in the \$2.7 billion Texas LBJ Freeway PPP project. Additional funds considering direct infrastructure investments include California Public Employee Retirement System and the San Diego Country Employees' Retirement Association.

Dedicated funds available for infrastructure have quadrupled from 2006 to 2011 and such private investor interest remains strong.

In addition to companies that invest in infrastructure, there are over 60 infrastructure funds ready to invest in the U.S. market with a levered purchasing power of ~\$625 billion.

An important and growing source of private capital for transportation investment in the United States comes from quasi-public, tax-exempt institutions such as public pension funds, university endowments and charitable foundations, which are in essence sub-national sovereign wealth funds of the United States.

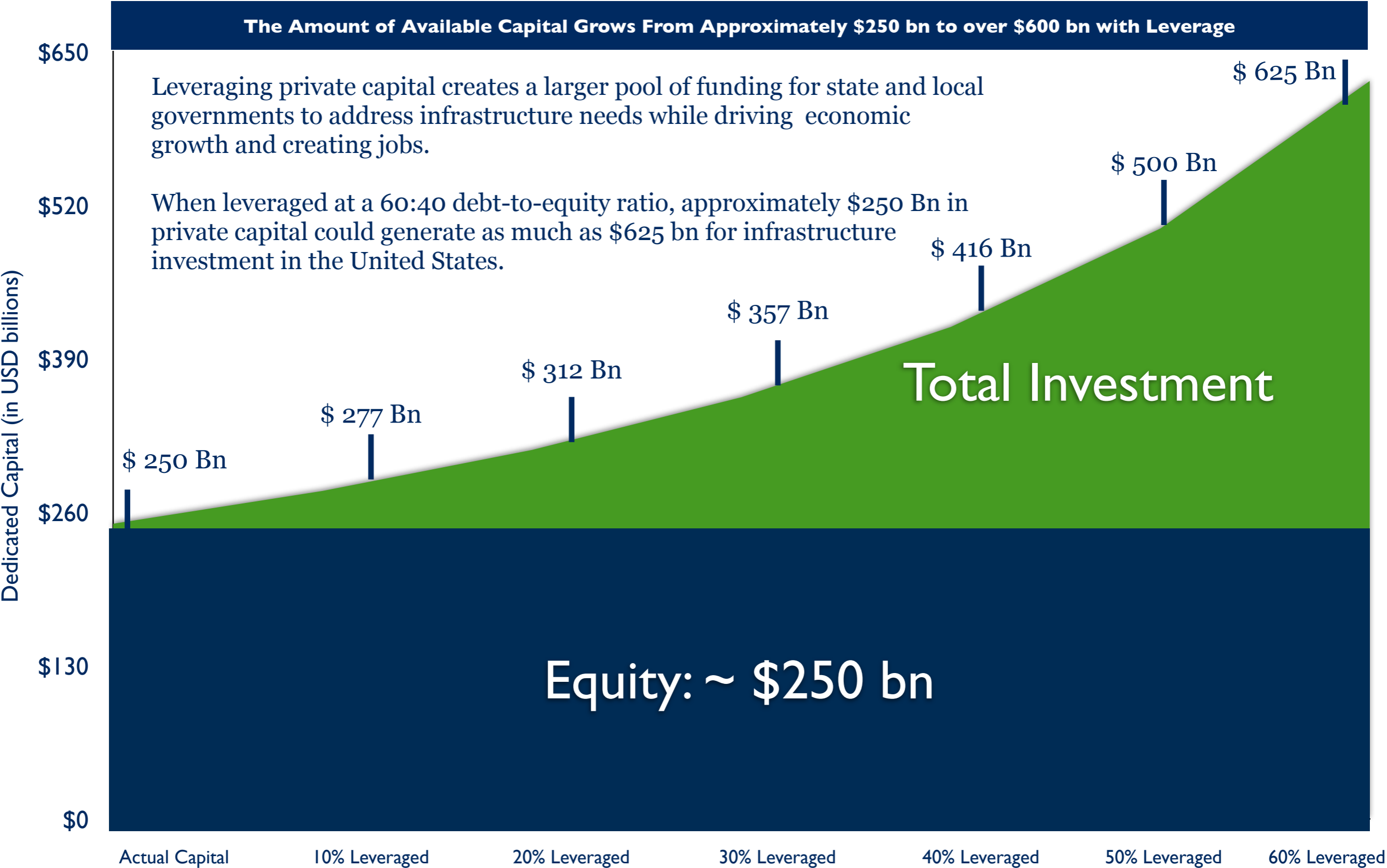
The total equity capital available to invest in U.S. infrastructure is likely to substantially grow in the coming years assuming our nation taps into the current pool of equity capital.

# Leveraging Private Capital

The Amount of Available Capital Grows From Approximately \$250 bn to over \$600 bn with Leverage

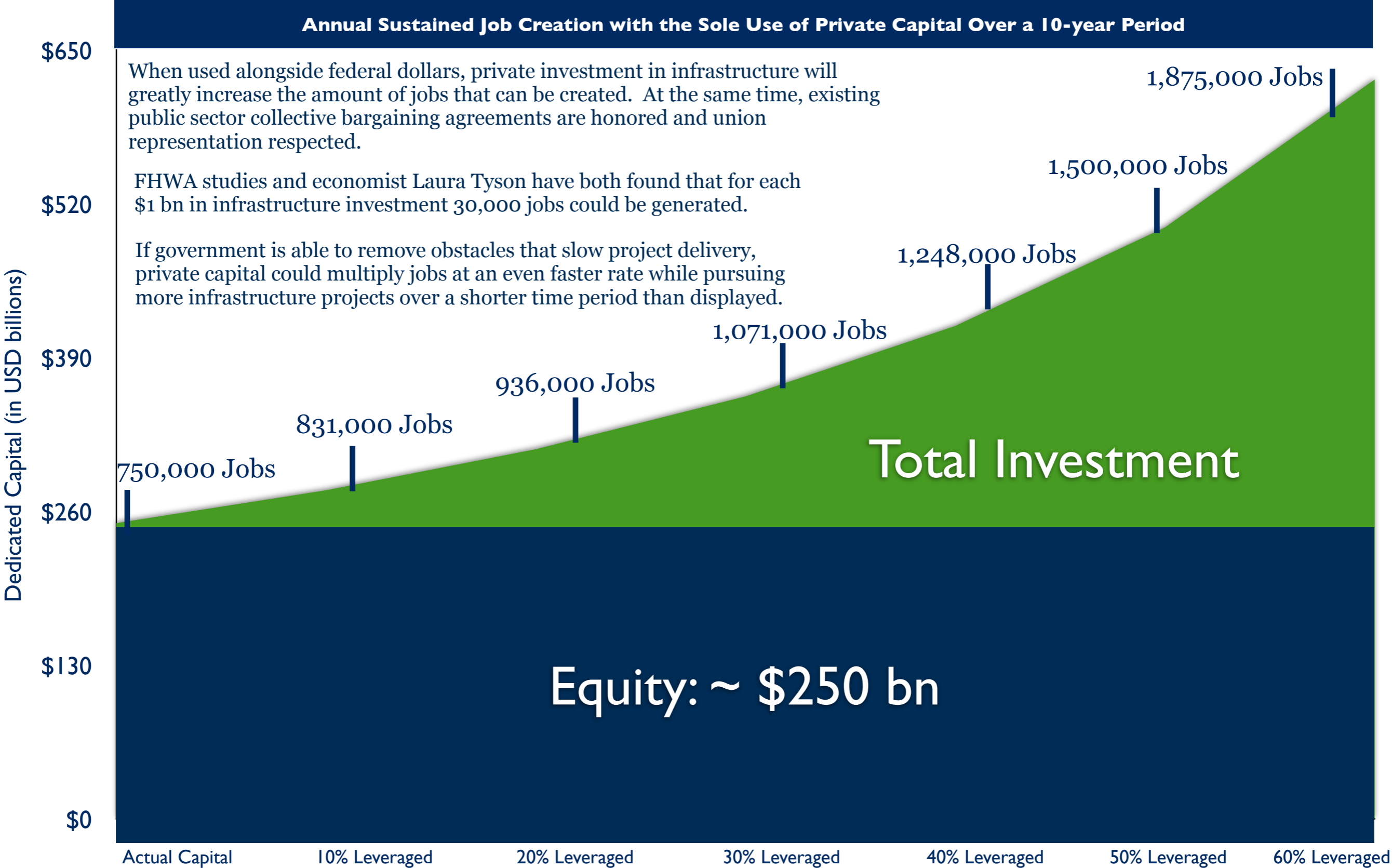
Leveraging private capital creates a larger pool of funding for state and local governments to address infrastructure needs while driving economic growth and creating jobs.

When leveraged at a 60:40 debt-to-equity ratio, approximately \$250 Bn in private capital could generate as much as \$625 bn for infrastructure investment in the United States.



Note:  
Scenario assumes the approx. \$250 bn in available capital is distributed evenly over a 10-year period and does not take into account fluctuations in funds' size.

# Private Investment Creates Jobs



Note:  
Scenario assumes the approx. \$250 bn in available capital is distributed evenly over a 10-year period and does not take into account fluctuations in funds' size.

# Benefits of Private Capital

Private Capital  
Complements  
Public Interest

**Government retains asset ownership:** The public entity regulates infrastructure assets funded with private capital, much like utilities are regulated, while transferring operating, maintenance, and financing risks to the party best equipped to manage them.

**Government receives direct funding (upfront payment / portion of future revenue) and/or investment through project delivery:**

- Private capital proceeds can be reinvested in infrastructure or other public goods providing long-term economic benefits to the general public.
- Proceeds from leasing existing assets or invested in new projects can allow state and local governments to meet federal matching requirements for funding of projects in the absence of available tax revenues.

**Government sets and enforces standards:** The public partner sets and enforces the operating and safety standards of the infrastructure assets while they are improved and operated by the private investors. In many cases the government also sets requirements for Disabled Business and Small Business Enterprises, as well as local employment participation in the arrangement.

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**Greater access to funding:** Private investment can provide billions of dollars of new infrastructure funding while supplementing funds provided by state and federal governments. In certain cases, federal and even state dollars may not be necessary for project delivery, depending on the nature of the project.

**Greater value for money:** Through global best practices, experience and innovation in design, finance, construction, operation and maintenance, private investors can bring greater efficiencies at a lower cost to the procurement of infrastructure assets and services creating disciplines and benchmarks around spending and development.

**Greater accountability:** If the private entity partner fails to meet minimum requirements under the concession agreement then the public entity partner may terminate the agreement at significant financial loss to the private sector partner. This provides a significant incentive for the private sector partner to perform materially above minimum contractual obligations and exceed government-required service levels.

**Greater long-term efficiencies (life cycle planning):** The private sector has incentives to maintain high quality infrastructure assets and thereby provide the end user with a safer and improved quality of service over the useful life of the asset or contract. Under traditional government procurement, the party that builds the facility does not always take into full account the future cost of maintaining what gets built.

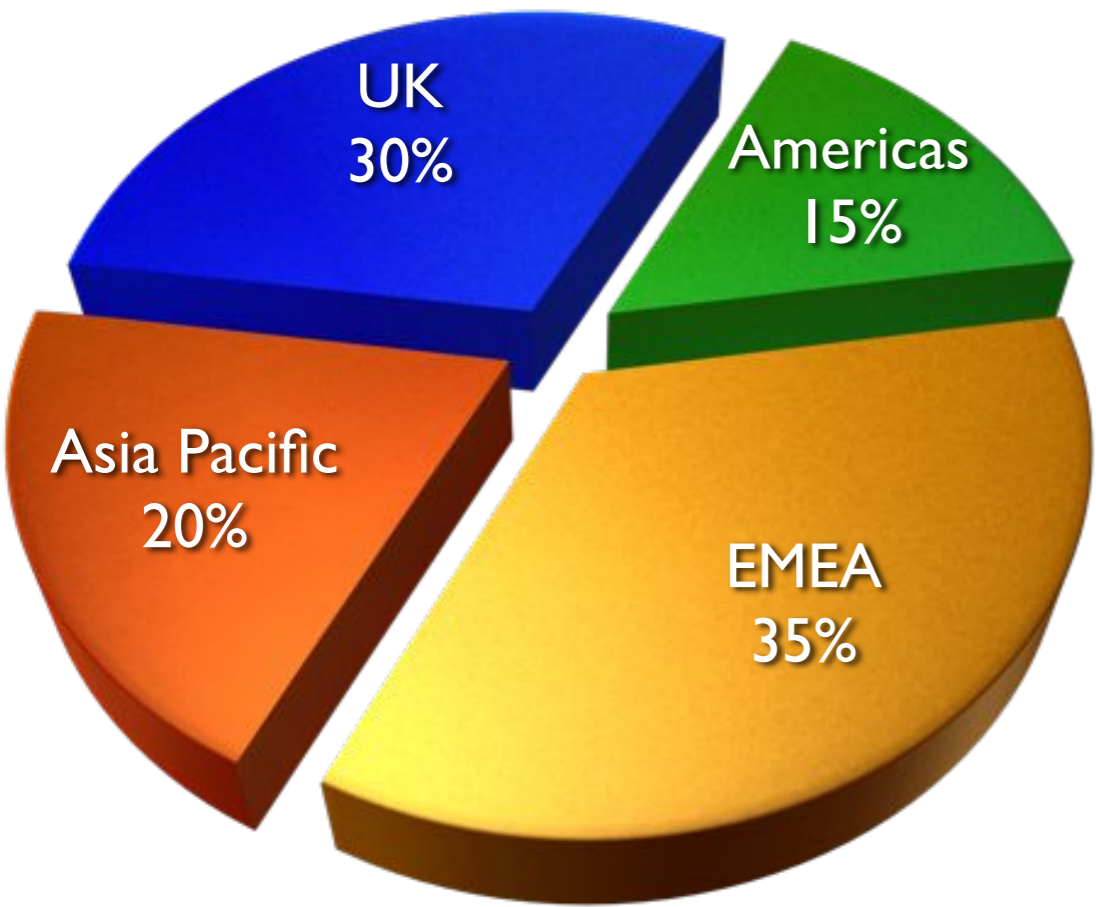
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**Less public debt:** The use of private capital allows state and local governments to avoid taking on more debt to fund projects, which either reduces interest payments or allows states and municipalities to use their bonding capacity to finance other needed government services.

**Less taxes for taxpayers:** Taxpayers benefit because the state does not have to rely solely on tax revenues to support infrastructure investment or debt servicing.

# America Trails the World in Private Infra Investment

Global PPP Market By Region 2006 (\$61,309 million)



Americas	\$9,212 million
Asia Pacific	\$12,285 million
EMEA	\$21,391 million
UK	\$18,421 million

**Note:** This Graph excludes energy, telecoms & water  
**Source:** Dealogic Projectware

## Outlook

- Through 2030, annual infrastructure investment requirements for electricity, road and rail transport, telecommunications and water are likely to average around 3.5% of world gross domestic product (GDP).  
Source: OECD “Infrastructure to 2030”
- While the United States is trying to reduce its infrastructure funding gap (est. at \$1.6 trillion), other countries are surpassing us with new investment decreasing the U.S.’ global economic competitiveness.  
Source: American Society of Civil Engineers
- Our nation currently spends just 2% of GDP on infrastructure investment. By contrast, that number is about 5% in Europe and between 9% and 12% in China.

Source: Building America’s 21st Century Infrastructure, Progressive Policy Institute

## Competition

- Places such as Australia, Canada, the EU, and the United Kingdom already rely on private investment and have successfully executed hundreds of privately-financed infrastructure projects to drive economic growth while protecting the public interest.
- The United States needs to act before private funds are diverted elsewhere.

## Risk of Inaction

- In general, the U.S. is considered a safe and stable place to invest money and private capital will flow here if it is welcome. However, there could be disruption to this flow if states use stimulus money to crowd out private investment or displace private capital by solely using traditional government procurement processes and public money to complete infrastructure projects.
- If states solely rely on federal funds for all “shovel ready” projects, it could take several years to develop a replacement roster of economically attractive projects for the private sector. In the meantime, the government will have forfeited the potential to use private capital and save its money for other competing stimulus needs.

# Conclusion and Recommendations

- At a time when public sector resources have never been scarcer and our infrastructure performance has never suffered more in the last 50 years, public private partnerships (P3s) are a powerful policy tool currently available to governments to tackle multiple issues simultaneously and provide an additional project delivery tool for SAFETEA-LU reauthorization.
- In authorizing a new transportation bill, the federal government can utilize the private sector to more effectively address employment and infrastructure demands utilizing two key policy levers:
  - Programmatic Changes:
    - Reform and expand TIFIA by increasing the total TIFIA authorization and the percentage of each project TIFIA can fund.
    - Utilize existing discretionary resources(eg. TIGER 3) to leverage additional private investment.
    - Create a permanent \$3-5 billion dollar/year competitive discretionary grant program that is based on merit rather than earmarks.
    - Require a value-for-money analysis for large projects.
    - Create a performance pilot to test process streamlining and authorize up to 3 states to participate.
  - Regulatory Changes:
    - Expand flexibility for states to implement direct user fees on Federal-aid highways.
    - Enhance State Infrastructure Bank resources.
    - Require private investment through PPPs before federal transportation grant money is awarded to states.
    - Set targets to reduce Pre-Construction approval timelines.
  - Tax Code Changes:
    - Reform and expand the use of Private Activity Bonds (PABS) for infrastructure projects.
    - Permanently remove the Alternative Minimum Tax (AMT) applicability and state and federal cap allocation.
    - Make a taxable bond option available for PABS or reissue the Build America Bonds (BABs) program and include projects with private sector investment.
    - Add Infrastructure Assets to existing REIT Rules.
- Create a National Infrastructure Bank (NIB) that is authorized to lend at favorable terms to both the public and private sectors for qualified infrastructure projects.
  - Base structure on the European Investment Bank (EIB) with federal and state guarantees to backstop new NIB debt issuance to provide loans for infrastructure projects.

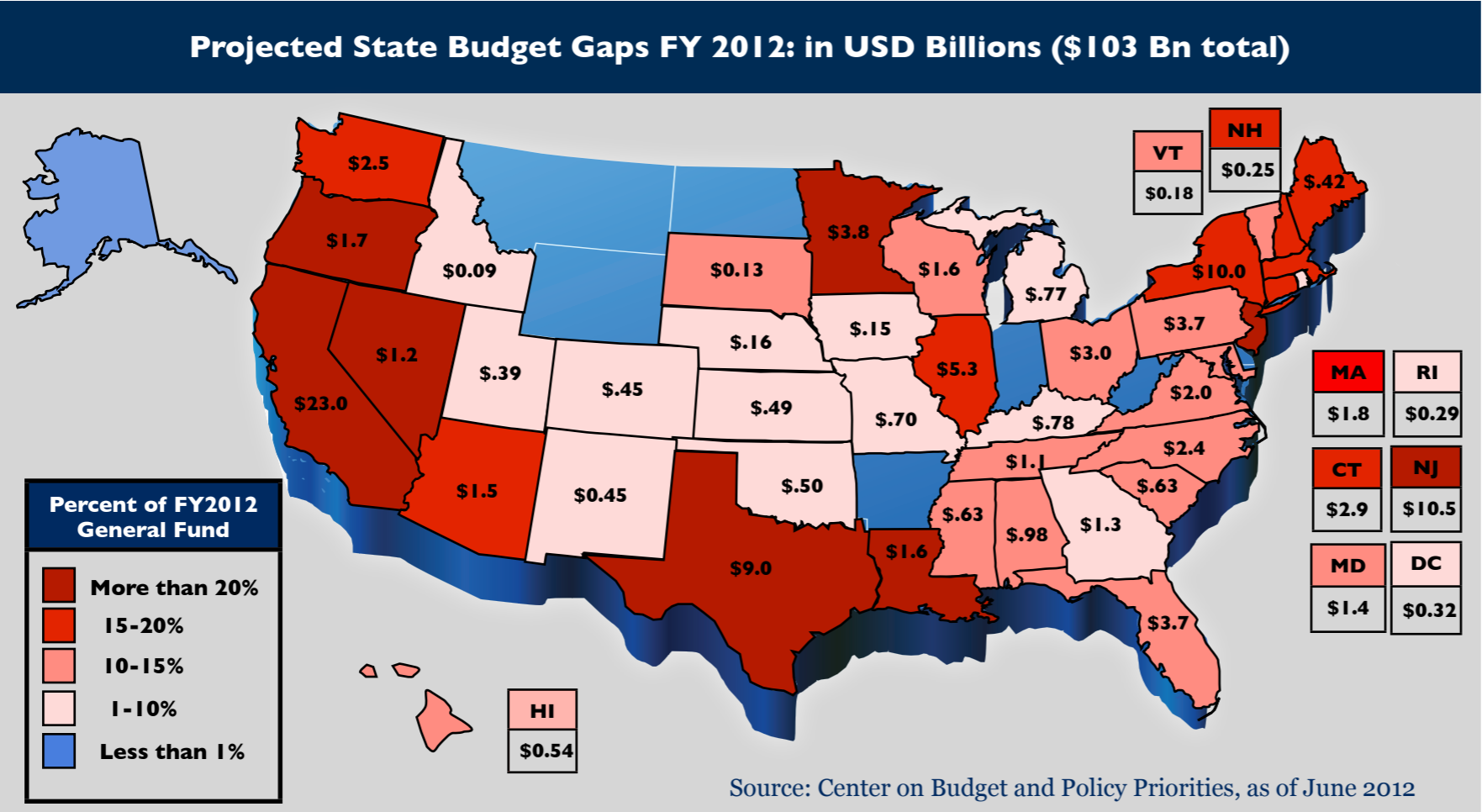
# Supporting Materials



This summary of information was created by Sphere Consulting in coordination with Abertis, Allen & Overy LLP, Bank of New York Mellon, Barclays Capital, Carlyle Infrastructure Partners, CH2M Hill, Chadbourne & Parke LLP, Citi Infrastructure Investors (CII), Credit Suisse, Debevoise & Plimpton, Freshfields Bruckhaus Deringer, Fulbright & Jaworski, Greenhill & Co., Heritage Oak Capital, Kirkland & Ellis, Mayer Brown, McKenna Long & Aldridge LLP, Merrill Lynch, Morgan Stanley, RBC Capital Markets, Scotia Capital, Skanska, and UBS.

# State Deficits

Budget Shortfalls



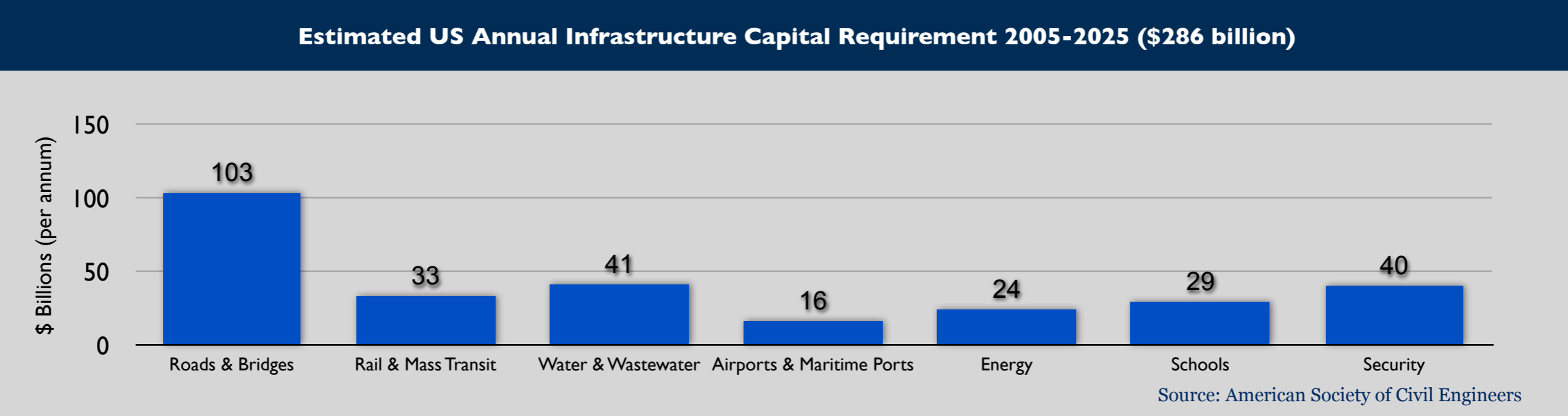
### States in Crisis

State budgets are being squeezed by reduced tax revenues and increased social spending which has forced them to take on more debt and drain their reserve capital.

IN FY2011 46 states (plus the District of Columbia) have faced budget shortfalls totaling \$130 billion.

State governments are experiencing detrimental increases in their individual debt-to-GDP ratios.

“Asked which of their state’s biggest expenses they would least protect from budget cuts, far more respondents in each state offered to put **transportation** on the chopping block.” source: Pew Center on the States Facing Facts December 2010 study



# Private Capital Can Help the US Make the Grade

The American Society of Civil Engineers (ASCE) gives the U.S. transportation network a grade of D. This reflects the wide-spread need for new capital funding sources, including tapping private sector capital.

## US Infrastructure Report Card 2012 Estimated 5 Year Investment Need: \$2.2 Trillion

<b>Roads</b>	<b>D-</b>	Poor road conditions cost U.S. motorists \$54 billion a year in repairs and operating costs-\$275 per motorist. Americans spend 3.5 billion hours a year stuck in traffic, at a cost of \$63.2 billion a year to the economy.Total spending of \$59.4 billion annually is well below the \$94 billion needed annually to improve transportation infrastructure conditions nationally.
<b>Aviation</b>	<b>D</b>	Air travel and traffic have reportedly surpassed pre-Sept. 11 levels and are projected to grow 4.3%annually through 2015.
<b>Rail</b>	<b>C-</b>	Freight rail tonnage is expected to increase at least 50% by 2020.The freight railroad industry needs to spend \$175 to \$195 billion over the next 20 years to maintain existing infrastructure and expand for freight growth. Expansion of the railroad network to develop intercity corridor passenger rail service is estimated to cost approximately \$560 billion over 20 years.
<b>Transit</b>	<b>D</b>	Transit use increased faster than any other mode of transportation – up 21%-between 1993 and 2002. In 2002, total capital outlays for transit were \$12.3 billion.The Federal Transit Administration estimates \$14.8 billion is needed annually to maintain conditions, and \$20.6 billion is needed to improve to “good” conditions.
<b>Inland Waterways</b>	<b>D-</b>	A single barge traveling the nation's waterways can move the same amount of cargo as 58 semitrucks at one-tenth the cost-reducing highway congestion and saving money. Of the 257 locks on the more than 12,000 miles of inland waterways operated by the U.S.Army Corps of Engineers, nearly 50% are functionally obsolete. By 2020, that number will increase to 80%.The cost to replace the present system of locks is more than \$125 billion.
<b>Bridges</b>	<b>C</b>	Between 2000 and 2003, the percentage of the nation's 590,750 bridges rated structurally deficient or functionally obsolete decreased slightly from 28.5% to 27.1%. However, it will cost \$9.4 billion a year for 20 years to eliminate all bridge deficiencies.

# 2011 Market Dynamics

## Challenging Municipal Bond Financing

- Declining issuance / increasing rates.
- Insured bond issuance continues to suffer.
- Moody's Investors Service downgraded municipal debt at the fastest rate in at least 20 years in 2009.

### Result

Reduced Access to Financing

## States and Municipalities are Being Negatively Effected

- Credit-rating cuts for California, Illinois and Arizona pushed the value of downgraded tax-backed bonds to \$199.8 billion, **the most in at least two decades.**
- The Bond Buyer one-year note index, which is based on one-year tax-exempt note yields is at an all-time low of 0.28%, the previous low as in 1989.
- 46 states face deficits ranging from 15% (Arizona) to 0.6%. (Florida)

**Current Market Dynamics - Decreasing Funding Sources Cannot Support State / Municipal Needs, Housing Bottom May Have Hit a Bottom**

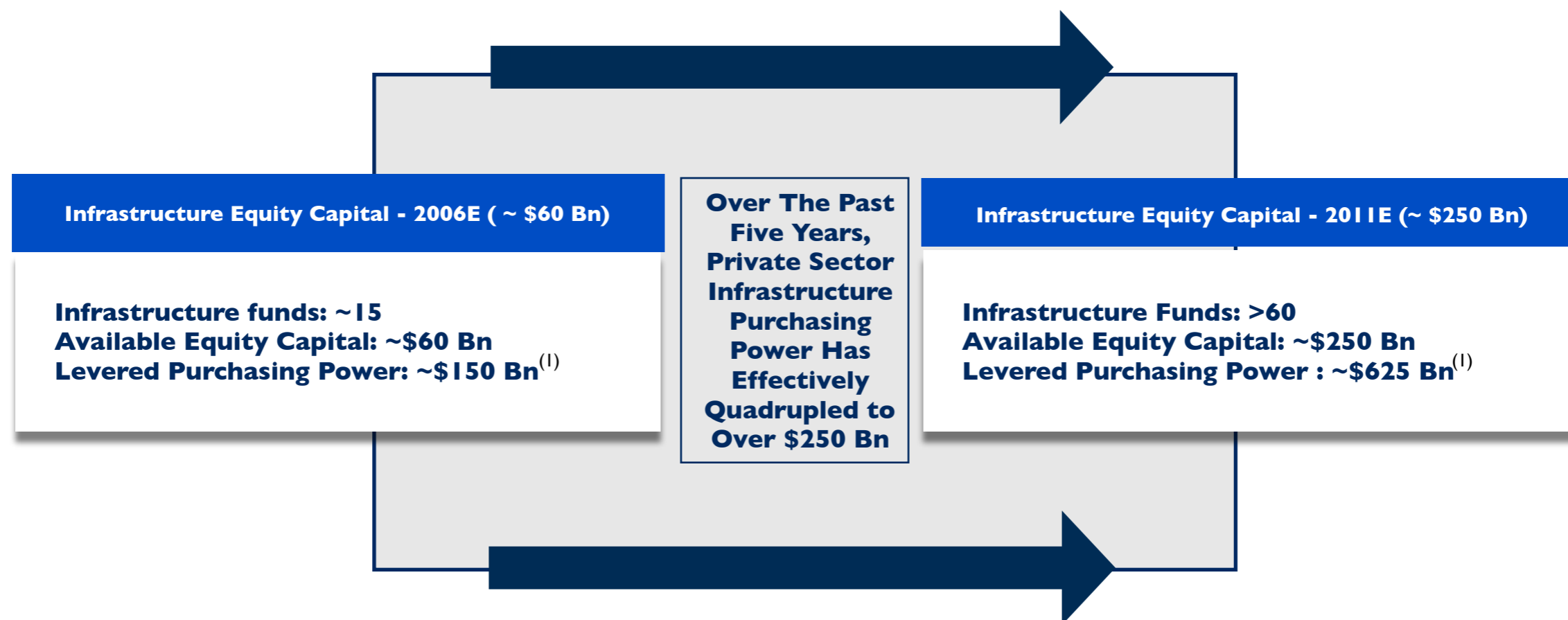
**"The economy gets no respect but it is doing significantly better..."**  
~Michael Strauss, chief economist at Commonfund

Primary Sources of Tax Revenue	Evidence of Decline
<b>Real Estate Taxes: Has a Bottom Been Hit?</b>	<ul style="list-style-type: none"> <li>• Over the past 2 months, housing starts have <b>surged 14.61 percent</b>, beating many economists predictions.</li> <li>• Freddie Mac's House Price Index (FHPI) over the year ending with the third quarter of 2011, tracked U.S. home sales prices as <b>down 9.0 percent.</b></li> <li>• Groundbreaking activity for housing starts sits at 629,00 units for June 2011, still well below historical norms of 1.2 million new starts per month.</li> </ul>
<b>State Sales Taxes: Continuing to suffer</b>	<ul style="list-style-type: none"> <li>• <b>Consumer confidence stands at a pessimistic 58.5</b>(consumer spending 70% of U.S. GDP)</li> <li>• Data suggest that real consumer spending <b>will rise by just 2.1% in 2012</b>, according to economic research from The Conference Board.</li> <li>• The index of leading economic indicators points to continued slow growth for the U.S economy. Real GDP growth for the first quarter of 2011 was measured at 1.9%.</li> </ul>
<b>State Income Taxes: Declining</b>	<ul style="list-style-type: none"> <li>• Ratings for <b>279</b> state and local-government tax-backed bonds <b>were reduced in 2009</b>, up from 81 in 2008.</li> <li>• Unemployment stands at <b>9.2</b> percent in June, 2011 and manufacturers <b>added to payrolls for the first time in three years in 2010.</b></li> <li>• To date, President Obama has allotted <b>\$140 billion</b> towards helping state deficits over a 2.5 year period</li> </ul>

The Bond Buyer July 20, 2011, Washington Post July 19, 2011, U.S Commerce Department June, 2011. Marketwatch, February 26, 2010, Bloomberg, January 25, 2010

# Growth in Available Private Capital

- Since 2006, over \$500 billion of incremental leveraged purchasing power has been generated for infrastructure.
- The capital market environment in 2011 was increasingly turbulent throughout the year, but fund raising in infrastructure sector has remained fairly strong in this difficult environment.
- Investor interest in the sector remains strong, with more investors putting in place dedicated programs with separate infrastructure allocations.



**Abertis**  
**ABN Amro**  
**Alinda**  
**Alternia**  
**Babcock & Brown**  
**Borealis**

**Caisse de Depot**  
**Carlyle Group**  
**Challenger**  
**Cintra SA**  
**Citi Infrastructure Investors**  
**CKI**

**CPP Investment Board**  
**CVC Capital Partners**  
**EQT**  
**FCC**  
**Ferrovial**  
**GIP**

**Goldman Sachs**  
**Highstar**  
**Hochtief**  
**Infracapital**  
**JP Morgan**  
**KKR**

**Macquarie**  
**Merrill Lynch**  
**Morgan Stanley**  
**Ontario Teachers Pension Plan**  
**RREEF**

**Sacyr Vallehermoso**  
**Santander**  
**Terra Firma**  
**Transurban**  
**UBS**  
**Other** <sup>(2)</sup>

## Notes

1. Estimated fund sizes levered at 60% debt-to-equity

2. "Other" includes Blackstone, John Laing/Henderson, Ampere, DIF Infrastructure, Fortis, HSBC, Industry Funds Management (IFM) and other firms

# Increasing Pension Fund Participation

State pension systems in Alaska, California, Illinois, Maine, New Jersey, New York, North Dakota, Texas, and Washington have already made infrastructure allocations and others are likely to follow as new partnerships, coalitions, and channels of capital flow are being formed and funds build direct investment capabilities.



**Pension Fund interest in Investment in Infrastructure is Growing**

Probitas Partners estimated that nearly 100 closed-end funds were in the market for more than \$110 billion. (The majority of this is used for brownfields). Pension funds enjoy this type of investment due to an ability to tap into a long term revenue stream and diversify their investment portfolios. Additionally, pension fund investment enables US workers to invest in the growth of America and enhance our competitiveness.

## Pension Funds Are Already Actively Pursuing PPPs in the US

### Pension Fund Investment Structures / Vehicles

- Private infrastructure funds
- Co-investment alongside fund managers
- Publicly traded infrastructure vehicles
- Private or public corporations
- Direct investment into projects (PPPs)
- Preferred or common stockholder (appetite for direct equity investment in publicly traded corporations)
- Senior or subordinated debt investor

Recent Pension Fund Investment in Infrastructure

- The publicly owned Houston Airport System announced that it had entered into a joint venture (on a negotiated basis) with a private development company and with the financial backing from the Ontario Municipal Employees' Retirement System (OMERS) to pursue P3 deals.
- The Dallas Police & Fire Pension System agreed to become an equity investor in the two PPP projects in Texas (North Tarrant Express) and I0-635/LBJ Freeway), which marks the first time a US pension fund has directly invested in a US toll road project.

# More Private Capital for Infra Available

Investors are Looking to Infrastructure in 2011

## Strong Market Appetite for Infrastructure Investment

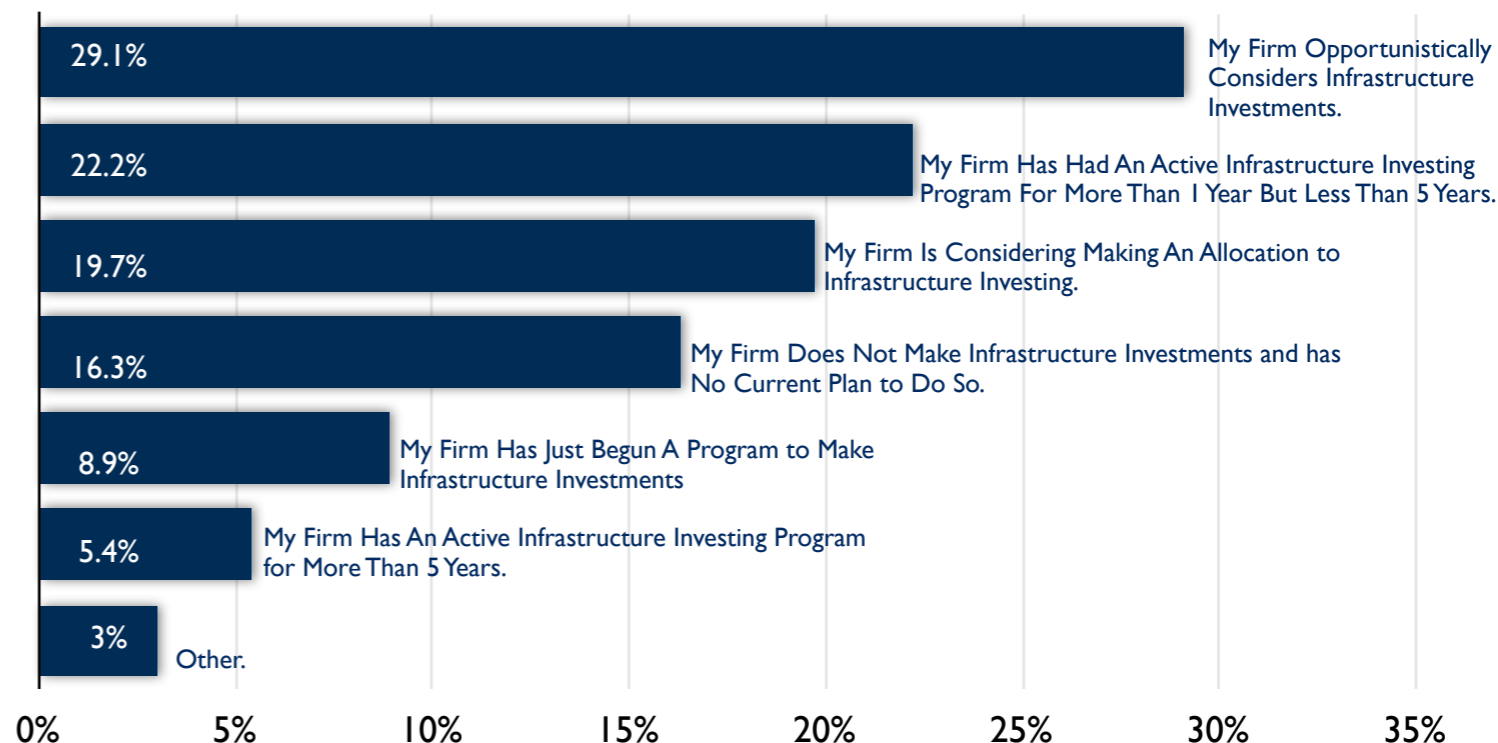
### Poll: Funds Ready to Invest in Infrastructure

- **Investors are optimistic for Infra opportunity**
  - 36% of active investors reported that their appetite was likely to increase next year.
- **Stable and Increasing Allocations**
  - 29% of respondents said they would increase allocations to infrastructure.
  - 35% reported that they would continue to allocate similar amounts. Investors are optimistic.
  - Only 5% of respondents said that they planned to decrease future commitments to the sector.

Note:

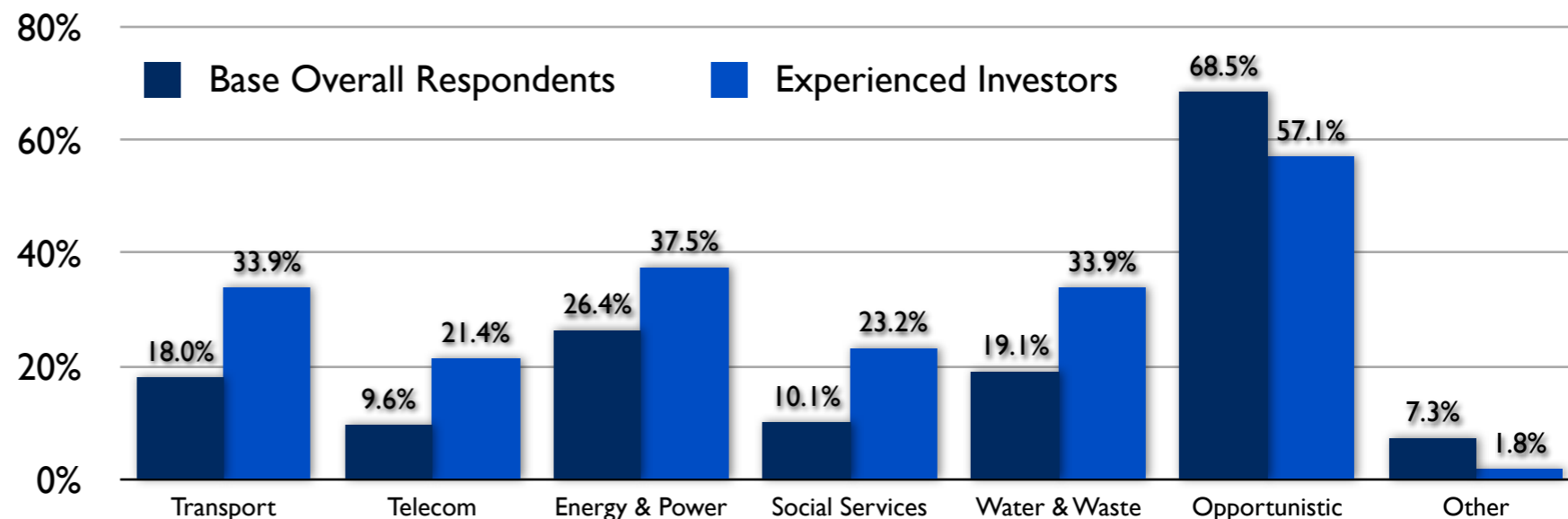
During the first half of September 2008, Probitas Partners conducted a survey to gauge investor interest, opinions, and perspectives on investing in infrastructure funds. The survey was completed just as the current turmoil in the capital markets began, reflects investor opinion in what the beginning of a difficult market.

### Plans for Infrastructure Investing...



## There is Particular Interest in the US Market and Across All Sectors

Investors in the Probitas Partners survey were asked if they had a preference for a particular geographic area. The vast majority of the respondents to the survey were from North America and Western Europe, and the results reflect this bias. A majority of respondent favored Global Infrastructure funds, followed by strong interest in North America. The interest in North America was quite strong even among non-North American respondents, most of whom were from Western Europe, through unsurprisingly, Europeans have a strong interest in their home markets as well.



Source: Probitas Partners

# Government Partnership through TIFIA financing

The Transportation Infrastructure Finance and Innovation Act (TIFIA) is a key source of financing for public or private highway, transit, rail and port projects of regional or national significance and has played a key role in some of the largest transportation projects of 2009 such as the North Tarrant Express in Texas, The Port of Miami Tunnel, and I-595 Corridor Roadway Improvements.

## TIFIA has been an integral source of financing

- **Three types of financial assistance are available under the program**
  - Direct Federal Loans: Flexible repayment terms can provide combined construction and permanent financing of capital costs
  - Loan Guarantees: Full faith and credit guarantees by the Federal government to a lender
  - Standby Lines of Credit: Contingent Federal loans that may be drawn upon to supplement project revenues, if needed, during the first 10 years of project operations
- **Interest rates for TIFIA are pegged to Treasury rates (SLGs plus 1 basis point) and the flexibility of TIFIA makes it a highly attractive source of financing**
  - Subordination
  - Flexible amortization
  - Debt service deferral until project completion
- **Major requirements**
  - Project costs of greater than \$50 million
  - TIFIA contribution limited to 33% of eligible project costs
  - Senior debt rated investment grade
  - Dedicated revenues for repayment
  - Applicable Federal requirements (Civil Rights, NEPA, Uniform Relocation, Titles 23/49)

Each dollar of Federal funds can provide up to \$10 in TIFIA credit assistance - and leverage \$30 in transportation infrastructure investment.

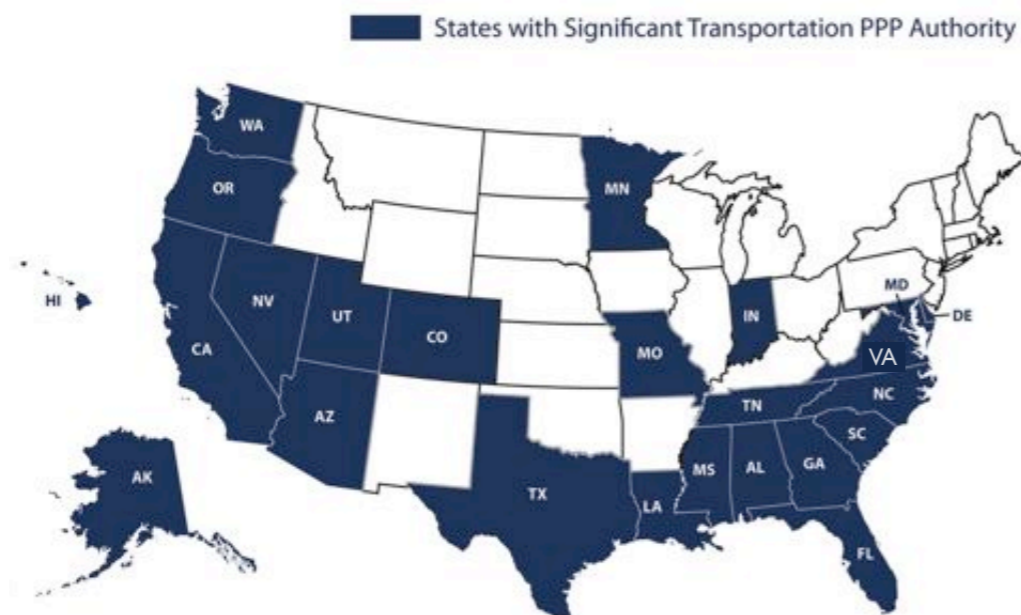
# Public Private Partnership (PPP or P3) in the US

There must be a review of how private capital and public pension funds can be put to work in making every federal dollar greater when leveraged, which will result in more jobs with less pressure on tax increases and debt.

## Public Private Partnerships

- A public private partnership, broadly defined, is a contractual arrangement between a public agency and a private-sector entity to deliver a public service. These partnerships, which have been successful in other states and around the world, provide an infusion of private-sector capital as well as best practices in maintenance and operations, and improvement and expansion of roads, bridges and other infrastructure.
- To combat growing deficits in state transportation budgets and increasing maintenance and construction costs, many policy experts and government officials see the benefit in exploring relationships with private partners on certain projects.
- PPPs shift key risks from the public agency to private investors, such as construction cost, traffic, financial cost, O&M cost, direct taxation, and changes in general legislation and regulations.
- Given current market conditions, granting private investors greater access to tax-exempt market for brownfield projects would accelerate private investment in P3s.

## States with Public Private Partnership Authority



- Today, over 20 states allow for some form of public private partnership.
- Since 1985, approximately 83 transportation public private partnership projects have been contracted or completed in the United States.

Source: The Journal of Private Equity, Spring 2008

# Benefits of Private Investment with Gov't Oversight

States and Municipalities Have a lot to Gain

## How Public Private Partnerships Work for States and Municipalities

### Ownership / Control



#### Public Sector Maintains Ownership

- Through the contract, or a “Concession Agreement,” the public sector sets rate schemes, Operating Standards, and other legal requirements to which the Private Operator must adhere.
- Existing public sector collective agreements are honored and any transfer of employees respects their union representation and terms of employment.
- Public authority is entitled to terminate Concession Agreement upon specified default events:
  - Failure to mobilize construction by a specified deadline.
  - Failure to complete construction by a specified deadline.
  - Insolvency / bankruptcy of Concessionaire.
  - Failure to maintain required availability and performance levels.
  - Material breach of the Concession Agreement.

### Payment



#### Government receives direct revenue (upfront payment / portion of future revenue) and/or investment through project delivery

- Public private partnerships are the only option currently being discussed that provides new money through a large cash infusion, which can then be reinvested in infrastructure or other public goods providing long-term economic benefits to the public sector. In addition, public private partnerships provide additional funds through construction investment.

### Risk Transfer



#### Financial, Construction, Operation, and Revenue risks Are Shifted to the Private Partner

- Allocates each risk to the party best placed to manage it.
- Transferred risk decreases the risk profile of taxpayers and users.
- Transfer of both construction and operations risk to private sector.
- More efficient contract administration.
- Transfer of funding risk, due diligence and monitoring responsibility: Funds provided on a “limited recourse” basis, funders depend on the project’s success, extensive due diligence and monitoring by independent technical experts.

## Additional Benefits to Asset Users

### Supplies

Private expertise  
and operational  
efficiencies

### Accelerates

High priority  
projects

### Promotes

Entrepreneurial  
development and  
innovation

### Transfers

New technologies  
and global best  
practices

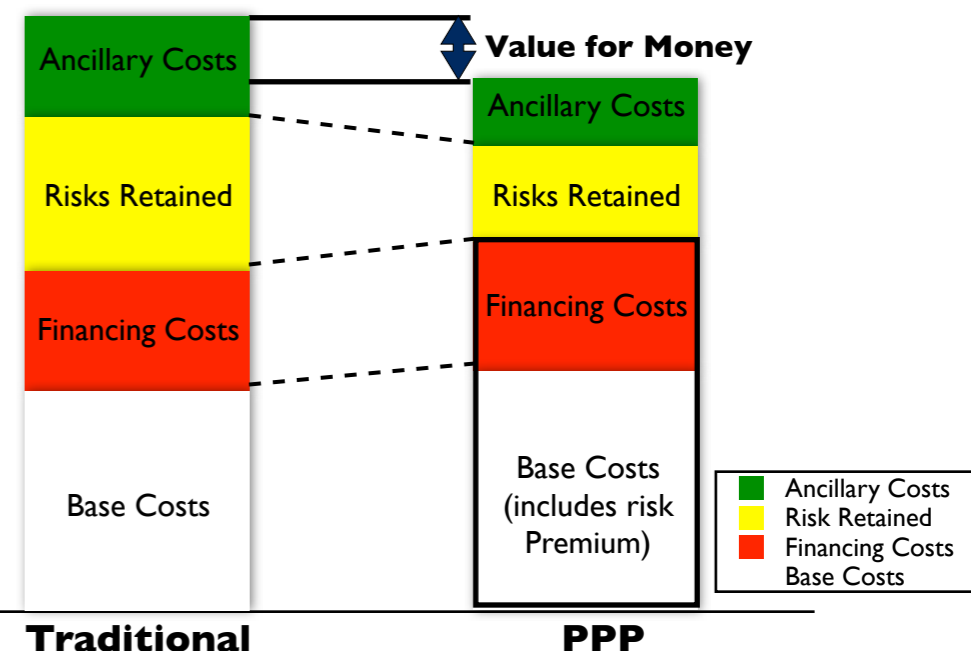
# Long-term Benefits

## Value for Money: Private Capital Increases Value

- Value for Money: The cost difference between Traditional Procurements and Public Private Partnerships (PPPs) as illustrated in the adjacent chart.
- Key benefit to PPP is the transfer of risk to the party that is best equipped to manage it.
- The savings achieved through risk transfer more than offset additional PPP costs.

Traditional Procurement	Public Private Partnership
The estimated total project costs that would be realized with the traditional procurement model.	The estimated total costs expected with the alternative PPP model.

## PROJECT DELIVERY COSTS



## Life Cycle Maintenance and Development

### Continued Long-Term Investment in Public Infrastructure

- A public authority, by using private sector resources and focusing on a life cycle project delivery, can implement long-term capital projects regardless of short-term peaks and troughs of public agency budgets.
- Such an approach incentivizes the partner to design and construct for the lowest life cycle cost.



The life cycle delivery approach produces a single contract for design, construction, operation, and maintenance whereby public and private partners' incentives are aligned, focusing on whole-life costs of project.

RESULT

Ensures the project's long-term affordability.

Promotes long-term value through competitive bidding process.

Ensures appropriate cost-effective design and construction that accounts for maintenance and other future costs.

Enhances customer service.

Allows the setting of clear performance standards and maintenance requirements for the full life of the project - significant financial incentive for proper maintenance and consistent service to the public.

Permits long-term budgeting.

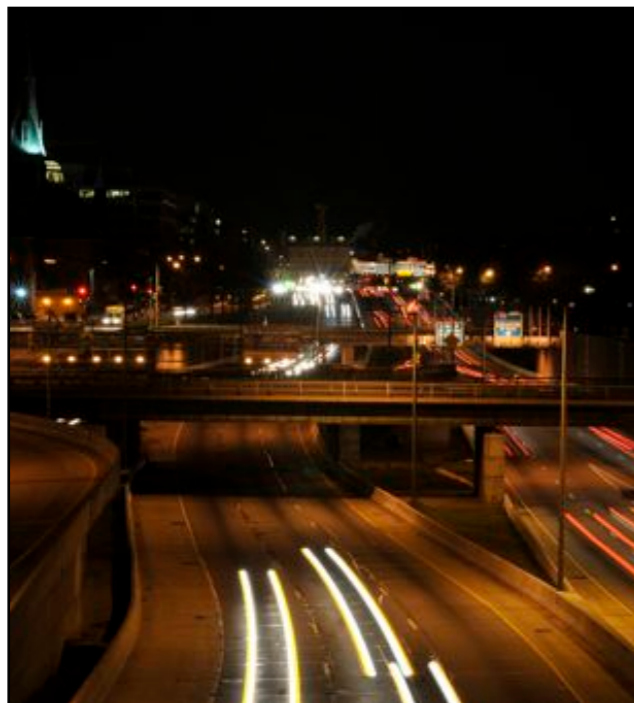
# Select Projects Benefited by Private Capital

## Toll Roads PR-22 and PR-5 leasing, Puerto Rico, 2011 *\$1.5 billion total project cost*



- A private-sector consortium of Goldman Sachs Infrastructure Group and Spanish toll road operator Abertis signed a \$1.5 billion lease for Puerto Rico's PR-22 and PR-5 toll roads.
- The U.S-Spanish partnership beat out three short-listed teams involving international consortiums of private operators and financiers.
- PPP Act approved in June 2009 in Puerto Rico provides a clear and strong legislative framework for PPP deals.
  - Establishes a clear public policy to promote public-private partnerships.
  - Names the PPP Authority (PPPA) as the sole Government Entity responsible for implementing such policy.
  - Sets a foundation for a clear procurement process.
- Puerto Rico faced a \$3.3 billion deficit in 2009, the worst deficit proportionally among the 50 states and Puerto Rico:
  - The PPP lease provides much needed capital to meet Puerto Rico's current budgetary obligations.
- The private consortium entered into a 40-year concession lease with the Puerto Rico PPP Authority.

## I-495, Capital Beltway HOT Lanes, Fairfax County, VA, 2008 *\$1.9 billion total project cost*



- Corridor is second worst congested region in the US.
- Minimal to no ability to build out existing corridor due to physical constraints and social impacts.
- Private developer was selected through a DBFOM procurement process to construct 14 miles of electronically tolled HOT lanes, providing two new lanes in each direction and upgrades to 11 interchanges.
- Private consortium facilitated access to multiple sources of capital not available under traditional financing methods:
  - State grants; TIFIA loan; tax-exempt Private Activity Bonds; Private equity.
- Dynamic toll pricing will be implemented to manage traffic and maintain free-flow conditions
- HOT Lanes will provide:
  - Trip time reliability; Travel time savings; Enhanced corridor mobility; Increased customer choice.
- Project debt is secured by toll revenues.
- Revenue sharing arrangement with the Virginia DOT provides a percentage of gross revenues once return hurdles are met and participation in refinancing benefits.

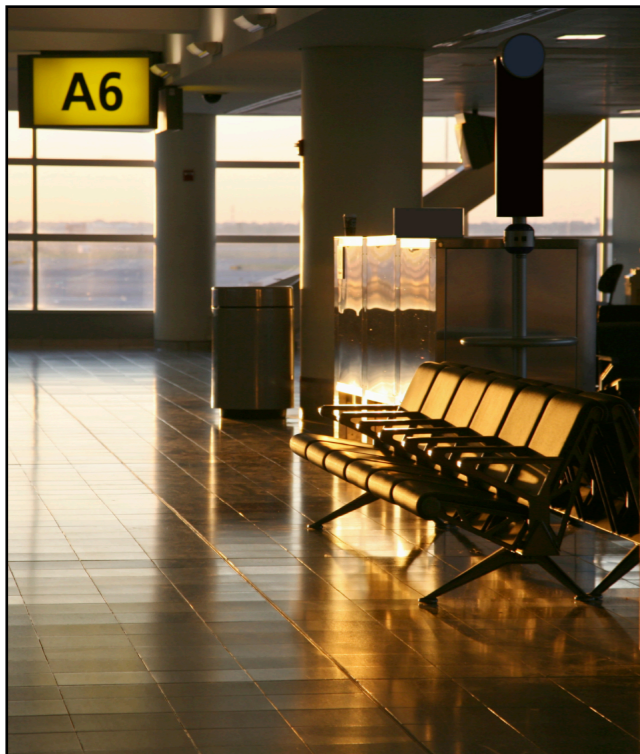
# Select Projects Benefited by Private Capital

## Sanef Acquisition, Northwest France, 2005-06 5.3 billion euros, initial investment



- One of three large French Highway concessions of which the French Government decided to transfer its shares through a competitive bid process in 2005.
- Bid structured as a P3 monetization, which was competitively awarded based upon size of the upfront payment and qualitative considerations.
- Bidding required submission of a business plan detailing traffic, toll rates, operating and capital expenditures and financial structure along with an industrial plan that detailed strategic, management, labor and operational commitments.
- The acquisition consideration represented a total of 5.35 bln Euros, of which 3.35 bln Euros were financed through a senior secured debt (The Facility) and the balance through equity contribution by the Sponsors. The Facility was reduced to 2.6 bln Euros after a buyback and amortization of Sanef shares by Sanef itself, for an amount of 750 mn Euros.
- Project debt was secured by Concessionaire revenues.
- Annual toll rates were legally set at 70% of CPI. Additional increases in toll rates are established based on a five-year CAPEX plan to be agreed with government authorities.

## John F. Kennedy Airport International Terminal, New York, NY, 1999 \$1.2 billion total project cost



- Largest airport Public Private Partnership project undertaken and largest airport revenue bond issue brought to market in the United States at that time.
- Competitive solicitation involving international consortiums of private developers, operators and financiers.
- DBFOM concession arrangement best addressed the existing challenges faced by the Port Authority of New York and New Jersey.
  - Limited debt capacity to finance necessary improvements.
  - Traditional procurement practices would cause significant delays.
  - Reconstruction during on-going airport operations posed substantial construction and operational challenges.
- The terminal redevelopment project consisted of:
  - Design and construction of a new 16-gate, 1.5 million square foot facility.
  - Two flight concourses connected by a three-level terminal.
- The private consortium entered into a 28-year concession lease with the Port Authority.
- Project debt was secured by lease payments from the private concessionaire, payable from terminal

# Successful Use of Private Capital Around the World

There are many ways this private money can be tapped as it has been around the world



## The European Union: Establishment of European Investment Bank (EIB) in 1958

- The EIB was created in 1958 as the primary financing bank for the European Union, it exists to serve the interest of the EU, both locally and abroad.
- EIB provides financing and investment incentives to various infrastructure projects that helps in achieving social and economic integration within the European Union.
- The EIB is owned by the 27 EU member states.

## The United Kingdom: Establishment of the Private Finance Initiative (PFI) in 1992

- Since the introduction of the Private Finance Initiative (PFI) in 1992 the UK has used the Public Private Partnership model to procure projects involving the construction of assets needed to deliver public services.
- As of March 2008, over 625 PFI projects had been signed with a total capital value of \$90.4Bn.
- PFI contracts have been used across a wide range of sectors: transport, hospitals, schools, defense, leisure, culture, housing and waste.

## Canada: Establishment of Partnerships British Columbia (Partnerships BC) in 2002

- Entry point for the private sector to bring forward ideas and solutions. Have invested over \$12.5Bn in more than 25 PPP projects in BC.
- Imposed institutional discipline on the Public Private Partnership analysis (rigorous market sounding, in-depth feasibility studies, development of business cases, careful analysis of value for money and risk allocation).
- Developed standardized transaction documents and processes, thus reducing transaction costs and duration for the benefit of both the public and private sectors.

# The UK Experience Highlighted

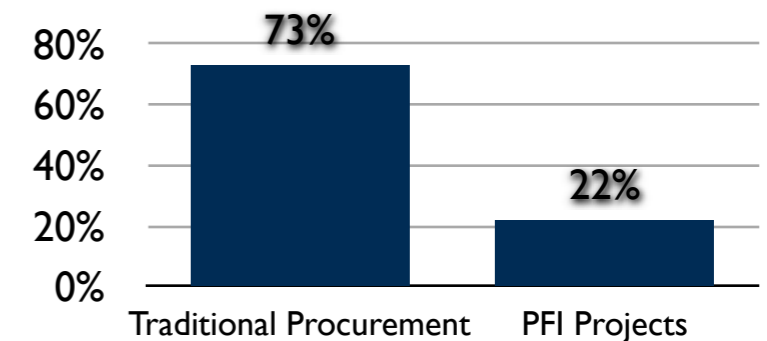
P3s have successfully “deliver[ed] some of the government’s most complex and significant public sector infrastructure projects and programmes” over and above what traditional methods can accomplish.

~ UK Treasury

## Successful Track Record of PPP Delivery in the UK

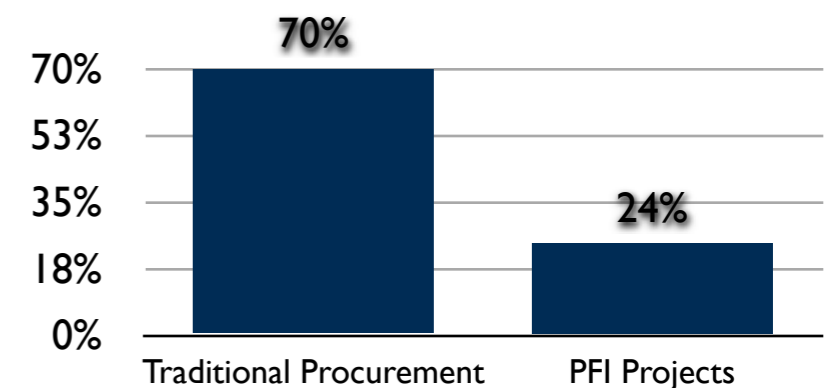
- In 2003, a study by the UK National Audit Office found that PFI have consistently demonstrated good value for money.
  - PFI delivers projects on time and on budget more effectively than traditional procurement.
  - The whole-life cost approach under PFI encourages good quality design and construction.
- Furthermore, a 2006 report by Partnerships UK (Report on Operational PFI Projects) showed 96% of public sector managers surveyed believed operational performance was satisfactory or better, with 66% believing it to be good or very good.
- Following its success in the UK, the PFI model and guidance has been used as a reference globally (e.g. EU, Canada).

Construction projects where cost to the public sector exceeds the price agreed at contract



Note:  
In only 8% of PFI projects surveyed was the delay more than two months

Construction projects delivered late to the public sector



Source: National Audit Office (“PFI: Construction Performance”, Feb 2003)



# The Benefits of Private Investment in Infrastructure



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This summary of information was created by Sphere Consulting in coordination with Abertis, Allen & Overy LLP, Bank of New York Mellon, Barclays Capital, Carlyle Infrastructure Partners, CH2M Hill, Chadbourne & Parke LLP, Citi Infrastructure Investors (CII), Credit Suisse, Debevoise & Plimpton, Freshfields Bruckhaus Deringer, Fulbright & Jaworski, Greenhill & Co., Heritage Oak Capital, Kirkland & Ellis, Mayer Brown, McKenna Long & Aldridge LLP, Merrill Lynch, Morgan Stanley, RBC Capital Markets, Scotia Capital, Skanska, and UBS.