

Expanding Infrastructure through Innovative Financing and the Build America Investment Initiative

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- **▶** Infrastructure Investment and Our Economy
- Build America Investment Initiative
- U.S. Market for Infrastructure Financing
- **▶** Innovative Infrastructure Financing and PPPs
- Creating Conditions for a More Robust PPP Market

Infrastructure Investment and Our Economy

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High quality and reliable infrastructure is indispensable to a modern economy

Surface Transportation: Gets workers to jobs and goods to market.

▶ Yet, U.S. drivers spend 5.5B hours in traffic annually costing \$120B in extra fuel and lost time. Poor road conditions impose \$27B in extra yearly freight costs on U.S. businesses.

Electricity: Powers factories and offices, and lights homes and streets.

Yet, low resilience to weather-related outages cost the U.S. economy between \$18B and \$33B, on average, each year.

Water: Provides essential services for public health; prevents floods.

▶ Yet, due to system deterioration throughout the U.S., roughly 240,000 water main breaks occur each year, resulting in property damage and expensive service interruptions.

U.S. Infrastructure Investment: Economic Gains

- Maintaining our existing infrastructure
- ▶ **Short-term job creation**: In an economy below full potential, infrastructure-related jobs represent a net increase in employment.
- ▶ Long-term economic growth: Consider economic returns when selecting our investments and prioritize those with high returns, e.g.
 - Increasing capacity on routes with persistent congestion
 - Surface connections to international ports and airports
 - Commuter corridors into our cities

Publicly- and privately-owned infrastructure coexist in the US today

Sectors where infrastructure assets predominately publicly-owned:

- Surface transportation (roads and transit)
- Water (drinking water and waste water)

Sectors where infrastructure assets predominately privately-owned:

- Electricity
- Telecommunications (landline and cellular)
- Oil and natural gas pipelines
- Freight railroads

Ownership of Infrastructure Assets Outside the U.S.

UK:

- All urban water supply infrastructure is privately-owned.
- ▶ Three major London airports Heathrow, Gatwick, and City Airport are all privately owned and managed.

Hong Kong:

The transit system is privately managed.

Canada, Europe, and parts of Latin America:

Privately managed highways are common.

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President Obama's Build America Investment Initiative

Designed to increase infrastructure investment and economic growth by expanding the market for infrastructure PPPs and putting federal credit programs to greater use.

Presidential Memorandum directs federal agencies to:

- 1. "[E]ncourage awareness and understanding... of the diverse opportunities for collaboration in developing, maintaining, upgrading, and financing infrastructure."
- 2. "[F]acilitate, as appropriate, greater public and private partnership and collaboration... to develop, improve, and maintain infrastructure across the country..."

Build America Investment Initiative: 3 Prongs

1. DOT's Transportation Investment Center

- One-stop shop for state and local governments, public and private developers, and investors seeking to use innovative financing strategies for transportation infrastructure projects.
- Provides navigator services for all types of projects and sponsors.

2. Build America Working Group

- Co-chaired by Treasury and Transportation Secretaries with participation from 12 agencies and White House offices.
- ▶ Delivered recommendations to the White House on how to promote innovative finance and public-private collaboration in infrastructure development.

3. Infrastructure Investment Summit on September 9, 2014

Infrastructure Investment Summit: Key Themes

- ▶ Following years of underinvestment, we should consider the economic returns when selecting our infrastructure investments and prioritize high return investments.
- While private investment is not a substitute for government spending on infrastructure, we can better achieve a state-of-the-art infrastructure network by expanding the sources of investment.
 - Generating a steady pipeline of investment opportunities
 - Expanding predevelopment funding
 - Increasing efficiency and certainty around the permitting process
 - Harmonizing deal processes and documentation
 - Maximizing the use of federal credit and technical assistance programs.

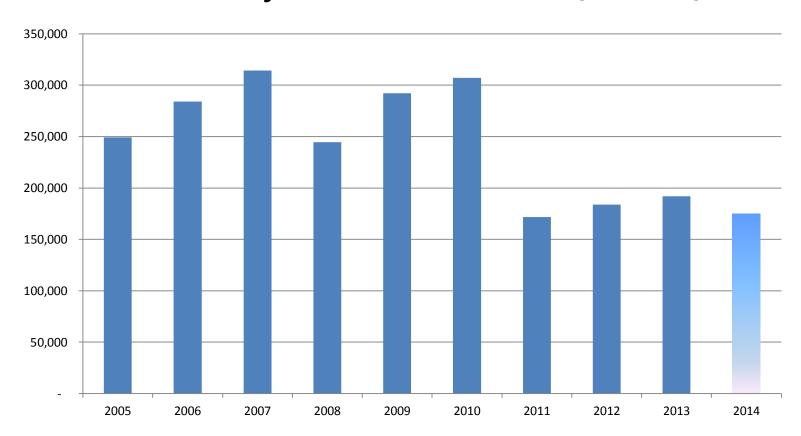
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U.S. Infrastructure Finance Today

- ▶ The federal government funds 80 percent of the costs for Interstate and non-Interstate highway projects primarily with grants; states cover the remaining costs.
- ▶ State and local governments use municipal bonds in combination with grants and state/local expenditures to finance infrastructure.
- ▶ U.S. municipal bond market is by far the most developed of its kind in the world, with \$3.7 trillion debt outstanding.
- ▶ Because the interest is exempt from federal income tax and state and local tax where issued, the municipal bond investor base is generally limited to investors with U.S. tax liabilities.

Municipal financing of new projects has been down for several years

New Money Bond Issuance Volume (\$ million)



Source: www.bondbuyer.com

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Innovative Infrastructure Financing

Innovative financing for infrastructure investment is becoming increasingly important as public budgets continue to tighten at all levels of government.

▶ Innovative Federal Programs and Tax-Exempt Bonds

- Transportation Infrastructure Finance and Innovation Act (TIFIA):
 Provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional importance.
- Railroad Rehabilitation and Improvement Financing Program (RRIF):
 Provides direct loans or loan guarantees for the acquisition, improvement, rehabilitation, or development of intermodal, freight, or passenger rail equipment or facilities.
- Qualified Private Activity Bonds (PABs):

Tax-exempt bonds issued by or on behalf of local or state government for the purpose of financing the project of a private user not otherwise eligible to tax-exempt municipal bond financing. Qualified uses are limited by statute and include surface transportation and water facilities.

Public-Private Partnerships: Examples

- Denver FasTracks Eagle P3
- North Tarrant Express Segments 1&2
- Bayonne New Jersey Municipal Authority

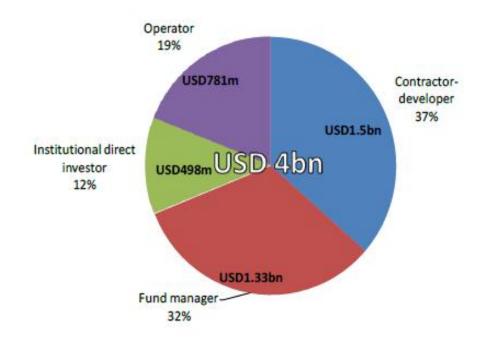
Public-Private Partnership (PPPs)

Public-private partnerships combine public and private resources and capabilities to bolster infrastructure investment.

- Private equity investors fund a project, in whole or in part, in exchange for a return, while also taking on some of the project's risk and responsibilities.
- ▶ PPP contracts allow governments to introduce private sector capital, management and technical expertise into the project.
- When a PPP transfers risks to the private sector that it can manage more costeffectively, it creates value for taxpayers by lowering long-term project costs.
- In a PPP, private partners form a project company to manage some combination of the infrastructure asset's design, construction, financing, operations, and maintenance. The company receives equity investment from one or more of its members, private equity infrastructure funds, or institutional investors; it may also obtain debt financing.
- ▶ While the *financing* used by a PPP-provided infrastructure project differs from that of a conventionally procured project, the *funding* for both is ultimately provided by a combination of tax revenue and user fees.

PPPs remain a small part of U.S. infrastructure financing

U.S. PPP Market, Equity Committed by Investor Type



Combined public <u>and</u> private investment in U.S. transportation PPPs represents 2% of total transportation investment (2007-13)

Public-Private Partnerships: Potential Benefits

- ▶ PPPs benefit taxpayers when the private partner is able to manage project risks so much more cost-effectively than the public sector that the cost savings more than offset the higher cost of private finance, compared to traditional tax-exempt debt.
- A well-designed PPP contract incentivizes the private partner to take actions that lower long-term project costs, therefore creating value for taxpayers. Benefits may include:
 - Risk transfer: Shifting risks and responsibilities to private partner that it can better bear, possibly through more skillful management or greater technical expertise; i.e.
 - The risks of design flaws and construction cost overruns, high refinancing costs, and failure to meet performance standards should be borne by the private partner.
 - Risks associated with site availability, changes in regulatory environment, or natural or man-made events should be retained by the public sector.
 - Bundling: Capturing cost savings from coordinated development of different project phases.
 - Quality and timing: Depending on the form of its contract, a PPP can also enhance service quality and accelerate project delivery.

Public-Private Partnerships: Risks

There is some level of risk associated with <u>any</u> investment project simply because the future is uncertain. This is true whether a corporation is building a factory to produce automobiles or a public-private partnership is investing in a new toll road.

Two challenges for public-private partnerships are:

- ▶ **Risk allocation**: A given risk should be allocated to the party better able to effectively manage it. For example, the risk of construction cost overruns should be assigned to the private partner because it will have the expertise and incentive to hold down costs. Having the public partner assume this risk increases the chances of making the project more costly and reducing value for taxpayers.
- ▶ **Public perception**: Public concern about the temporary transfer of asset control to a private entity can delay the start of a project. This risk can be mitigated by reaching out to stakeholders early and effectively communicating the benefits and realistic risks of the project in order to achieve constituent buy-in.

PPP vs. Conventional Procurement

- Although well-designed PPP projects can deliver benefits that are greater than project risks, PPPs may not be the best choice for all projects.
- Project sponsors must evaluate whether a PPP can deliver a project at lower total cost over the entire lifecycle of the project than is possible through conventional procurement.
- Projects that are especially large and complex tend to be suitable for PPP delivery because the private sector may be better at dealing with difficult technical and managerial challenges.
- ▶ For these projects, the long run benefits of using private sector expertise can more than offset the higher cost of using private financing as compared to traditional tax exempt municipal bonds.

Public-Private Partnerships: Contract Structures

No two PPPs are identical. They can vary in the amount of risk transferred from the public to the private sector, and extent of potential efficiency gains. Common arrangements include:

- ▶ <u>Design-Build (DB)</u>: Government transfers project design and construction responsibilities to a private partner, which then has an incentive to make the design as robust as possible because it assumes the risk of cost overruns.
- Design-Build-Operate-Maintain (DBOM): Adds operations and maintenance responsibilities, providing the added incentive to use high quality construction methods and materials to lower future maintenance expenses.
- ▶ <u>Design-Build-Finance-Operate-Maintain (DBFOM)</u>: Assigns financing responsibility to the private partner, therefore maximizing the incentive to be cost- and schedule-efficient so that cash flows begin as quickly as possible for servicing debt and providing adequate returns to equity investors.

Public-Private Partnerships: Payment Mechanisms

A financially viable PPP requires dedicated revenue, whether from users or the government.

- <u>User fees</u> are collected directly from consumers of the infrastructure service, e.g. highway or bridge tolls, or water service bills.
- ▶ <u>Availability payments</u> are fixed periodic payments made to the private partner by the government sponsor as long as the service meets contracted service quality standards.
- ▶ <u>Other options</u>: Some PPP contracts balance private and public sector interests, by incorporating measures to protect consumers from sharp rate or toll increases while providing market-based returns and predictability to equity investors.
 - Alternative arrangements include revenue caps or rate schedules and revenue- and profit-sharing arrangements

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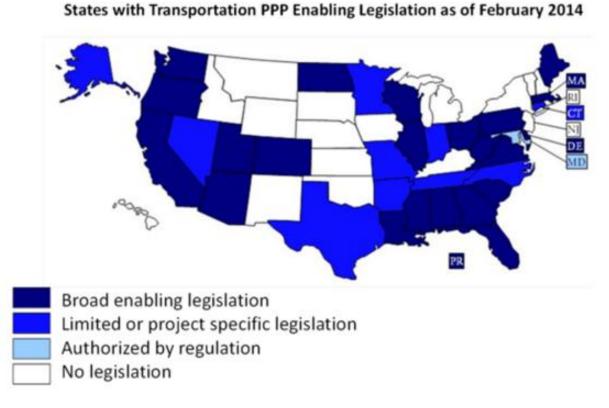
Modernizing Infrastructure Permitting

- ▶ Project sponsors and investors often cite federal permitting processes as a source of delay and uncertainty in planning for the delivery and financing of infrastructure projects. Predictability in permitting requirements is essential to mitigating risk.
- ▶ Federal agencies have developed a plan* to accelerate and expand permitting reform government-wide, focusing on:
 - Improving interagency coordination to increase decision-making speed
 - Synchronizing reviews
 - Increasing transparency and accountability
 - Implementing more comprehensive environmental analysis and approaches to mitigation.

^{*} http://www.permits.performance.gov/pm-implementation-plan-2014.pdf

PPP-Enabling Legislation

As of February 2014, 33 states and Puerto Rico had laws authorizing publicprivate partnerships (PPPs) for highway and bridge projects.



Source: National Conference of State Legislatures

PPP-Enabling Legislation (Continued)

- Provisions vary among states with PPP enabling legislation. The broadest statues authorize PPPs for the design, development, operation, and/or maintenance of facilities across diverse sectors, including transportation systems such as ports, transit-oriented development and related infrastructure.
- States considering PPP legislation should weigh a number of issues in order to formulate laws most conducive to PPPs, including:
 - Is prior legislative approval required each time a PPP proposal is received?
 - Who has rate-setting authority to impose user fees, is legislative approval required?
 - Is the number of PPP projects limited to a few pilot or demonstration projects?
 - Are there geographic or infrastructure sector restrictions imposed on PPP projects?
 - Does the law allow adequate time for the preparation and submission of proposals?
 - o Is the public sector required to maintain non-toll routes when it establishes toll roads?
 - Does authority to enter into PPP contracts extend to regional or local entities?

Conclusion

- ▶ The economic case for expanding infrastructure investment is clear, yet public investment has been declining as part of a long-term trend toward fiscal consolidation and lower public investment.
- Innovation in financing, technology, and management can help speed the modernization of our infrastructure networks.
- Innovative financing mechanisms can help attract private investment from new sources to invest in U.S. infrastructure.
- ▶ PPPs can introduce private capital, management, and expertise into infrastructure investment projects, exploiting untapped efficiencies in infrastructure provision and increasing value for taxpayers.
- Public funding will continue to be a critical infrastructure resource.



Thank you.