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PUBLIC PRIVATE PARTNERSHIPS

Balancing the needs of the public and private sectors to finance the nation's infrastructure

FINDINGS AND RECOMMENDATIONS
OF THE SPECIAL PANEL ON PUBLIC-PRIVATE PARTNERSHIPS

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PREFACE



Chairman Bill Shuster and Ranking Member Nick J. Rahall, II, of the Committee on Transportation and Infrastructure of the House of Representatives, created the Panel on Public-Private Partnerships in January 2014 to examine the current state of public-private partnerships (P3s) across all modes of transportation, economic development, public buildings, water, and maritime infrastructure and equipment, and make recommendations for how to balance the needs of the public and private sectors when considering, developing, and implementing P3 projects to finance the Nation’s infrastructure.

The Panel was constituted under Rule XVIII of the Rules of the Committee on Transportation and Infrastructure to examine issues regarding public-private partnerships across all aspects of the Committee’s jurisdiction. The Panel was led by Chairman John J. Duncan, Jr. and Ranking Member Michael E. Capuano. Also appointed to the Panel were Congresswoman Candice S. Miller, Congressman Peter A. DeFazio, Congressman Lou Barletta, Congresswoman Eleanor Holmes Norton, Congressman Tom Rice, Congressman Rick Larsen, Congressman Mark Meadows, Congressman Sean Patrick Maloney, and Congressman Scott Perry.

The Panel investigated the use of public-private partnerships in the United States and internationally to identify: 1) the role such partnerships play in the development and delivery of transportation and infrastructure projects; 2) whether public-private partnerships enhance the delivery and management of infrastructure projects beyond the capabilities of government agencies or the private sector acting independently; and 3) how to balance the needs of the public and private sectors when identifying, developing, and implementing public-private partnership projects.

To carry out its charge, the Panel held two hearings and seven policy roundtable discussions, including one in New York, New York. In addition, the Panel and staff held numerous briefings with stakeholders from federal, state, and local government agencies, private sector officials, and academia. This report reflects the Panel’s findings and recommendations that it reached as a result of its work.

EXECUTIVE SUMMARY



The Panel on Public-Private Partnerships held roundtables, hearings, and meetings to examine the current state of public-private partnerships (P3s) across all modes of transportation, economic development, public buildings, water and maritime infrastructure and equipment. The Panel found that P3 procurements have the potential to deliver certain high-cost, technically complex projects more quickly or in a different manner than would otherwise occur under traditional procurement and financing mechanisms. However, given the limited number of high-cost, complex projects, P3 projects have the potential to address only a small portion of the Nation's infrastructure needs.

One consistent theme throughout the Panel's work was that P3s are not a source of funding and should not be thought of as the solution to overall infrastructure funding challenges. Adequate federal investment in transportation and infrastructure is a necessary precondition to modernize our Nation's highways, bridges, rail and transit systems, airports, ports, waterways, and public buildings – regardless of whether individual projects are carried out as P3s or not.

P3s are a financing and procurement tool, which in certain circumstances can accelerate the delivery of high-cost, technically complex projects and leverage private sector resources and expertise while mitigating construction and/or operations risk for the public sector.

However, regardless of the method of delivery or the source of financing, the cost of infrastructure projects are borne by the public – there is no free lunch. The Panel learned that a clear and transparent understanding of the relative costs and benefits of traditional and P3 project procurements to the public sector is a critical element to ensuring accountability.

The Panel's work analyzed whether, and under what circumstances, public sector investment can be targeted to harness the efficiencies generated by the competitive market and commercial incentives of the private sector. At the same time, the Panel recognized that P3 procurements require higher financing costs and significant

additional legal and consultant costs to structure a successful P3 agreement. The Panel found that not all infrastructure projects are suited for a P3, and the cost and benefits of a P3 procurement approach must be carefully assessed.

Around the world, P3s play a significant role in the development and delivery of transportation and infrastructure projects. Internationally, P3s have had a mixed record of success and failure. The Panel found that successful P3s have several common elements, including leveraging the strengths of the public and private sectors, appropriate risk transfer, transparent and flexible contracts, and alignment of policy goals.

Unlike most other countries, the United States possesses a robust municipal bond market of approximately \$3.7 trillion, of which a significant portion is for infrastructure financing. The Panel found that this is one major reason why the U.S. P3 market has not grown as quickly as in other countries (which do not offer tax-exempt municipal bonds) and why the potential for P3s in the United States is limited.

Despite the robust U.S. municipal bond market, there remain billions of dollars in infrastructure needs in the United States that are in search of funding. The Panel's work concluded that, in certain circumstances, a well-executed P3 can enhance the delivery and management of transportation and infrastructure projects beyond the capabilities of government agencies or the private sector acting independently. The Panel's work highlighted that the participation of the private sector in financing a project can bring discipline and efficiency to project delivery, which is too often lacking in the traditional public procurement process. Innovative solutions to complex infrastructure challenges, as well as injecting greater discipline and accountability into project delivery and performance, should be the standard for all infrastructure projects, regardless of how they are procured.

In certain circumstances, P3 projects can bring innovative solutions to infrastructure challenges as the private sector can bring a broad array of interested and invested parties to the project, often with substantial experience in the particular type of project being procured. In a P3 project, the oversight of investors and bondholders provides additional rigor and financial incentive to deliver a project on-time and on-budget. Furthermore, this focus on efficiency can also generate innovation. In many long-term concession agreements, the private partner is responsible for operations and maintenance of the asset. As a result, during design and construction of the project, the private partner will consider life-cycle costs to meet these long-term goals. The Panel found that traditional project delivery processes (i.e., design-bid-build methods) are not appropriately incentivized to focus on the long-term sustainability of the asset, and Congress should address this issue.

The Panel found that P3 agreements often involve significant federal assistance through credit and tax programs, such as the Transportation Infrastructure Finance and Innovation Act (TIFIA) program and Private Activity Bonds (PABs). The Panel found that TIFIA and PABs are often critical elements of P3 project financing. The important role that TIFIA and other federal credit programs play in lowering the cost of capital for infrastructure projects makes these projects more feasible for private sector investment.

Finally, the Panel found that state and locally elected officials are reluctant to raise infrastructure fees, such as highway tolls or water rates, which can lead to a lack of necessary funding for long-term capital infrastructure improvements. A well-structured P3 agreement may address this issue. However, such agreements, which often last 30 years or more, also circumscribe the ability of legislators to manage public assets in the future. It is critically important that P3 agreements protect the public interest because they often affect both current and future generations.

As a result of these findings, the Panel recommends a series of actions to balance the needs of public and private sectors when considering, developing, and implementing P3s to finance important infrastructure projects across

the United States. These recommendations include:

- **Improving Public Sector Capacity.** P3 procurements are complex undertakings, and can differ significantly from traditional project delivery and procurement procedures. P3s are most successful when there is a synergy between the policy goals of the public sector and the needs of private sector financing and expertise. The Panel identified the need for increased accountability in the highway and transit procurement process generally, including P3s. The Panel recommends several ways to improve the traditional design-bid-build procurement process and better structure P3 processes and agreements to maximize benefits to both public and private sector participants and to improve the capacity of the public sector to negotiate good agreements that result in benefits to the public.
- **Breaking Down Barriers to Consideration.** The federal government can do more to ensure that our Nation's most pressing infrastructure needs are addressed through projects that expend taxpayer dollars more effectively. P3s, when carried out through well-designed contracts that ensure appropriate risk transfer and public benefit, may be an effective approach for certain types of projects. The Panel recommends several changes to federal programs to ensure fair consideration of P3 projects, where appropriate, and that the federal oversight processes take the realities of P3 procurements into account.
- **Ensuring Transparency and Accountability.** P3s are long-term agreements that have been utilized to deliver and finance high-cost, complex infrastructure projects that involve multiple parties. Transparency is critically important to holding both the public and private partners accountable, and ensuring that the agreement is in the long-term interest of the public and all parties are meeting the terms of the agreement. The Panel recommends several ways to expand the use of analytical best practices, provide enhanced transparency, and ensure that the parties are held accountable. The Panel also recommends ways to ensure that there is an accurate accounting of the costs and benefits of the agreement and the total federal investment.

RECOMMENDATIONS: IMPROVING PUBLIC SECTOR CAPACITY

- Direct the U.S. Department of Transportation (U.S. DOT) to establish a Transportation Procurement Office to work with the modal agencies, states, and other grant recipients on implementing design-bid-build, design-build, and P3 procurement best practices, including P3 model contracts. In addition, the Office should issue best practices on standardizing state P3 authorities and practices, including fair and balanced assumptions made in the calculations, consistency on unsolicited bids, non-compete clauses, and other major elements.
- To curtail cost overruns and project delays and ensure more accountable expenditure of taxpayer dollars over the life cycle of the project, direct the Transportation Procurement Office to develop and institute project delivery performance standards for design-bid-build, design-build, and P3 procurements of infrastructure projects across the jurisdiction of the Committee.
- Direct U.S. DOT to require State Departments of Transportation (State DOTs) to compile and submit an annual report on project procurement performance (compared to project delivery performance standards developed by the Transportation Procurement Office) for projects receiving federal funds. Direct U.S. DOT to make the State DOT annual reports available to the public and provide Congress with information on project performance aggregate data and national trends.
- Direct U.S. DOT to continue to build upon the direction in the Moving Ahead for Progress in the 21st Century Act (MAP-21) (P.L. 112-141) to encourage the simplification and standardization of P3 contracts, to ensure greater understanding of the contract terms for the public and private sector. Parties to a P3 agreement should attempt to maintain flexibility in the contract to ensure that terms can be modified as necessary without negating the entire agreement.
- Encourage U.S. DOT to partner with and provide support to other federal agencies and state and local governments to share lessons learned relative to P3s.
- Encourage states interested in enacting P3 authorizing legislation and pursuing P3 procurements to coordinate with other states to share lessons learned by early adopters and consider establishing stand-alone state P3 offices that look beyond only transportation and develop regional partnerships to achieve common infrastructure objectives.
- P3 partnerships should be established early in the project delivery process to conduct stakeholder outreach to build community consensus.

Developing a P3 requires a true partnership with a shared vision and goals for both the public and private sector. Traditionally, these parties have come to the table with diametrically opposed goals. Reaching that common agreement requires many hours of deliberation, collaboration, and negotiation.

At the same time, the federal highway and transit project delivery and procurement process is in need of serious improvement. The Panel heard from many states and project sponsors that the traditional design-bid-build project delivery methods do not always deliver an efficient and innovative highway or transit project, or the best value for the taxpayer. The Panel's work uncovered the need for increased accountability in the procurement processes for delivery of traditional highway and transit projects.

In traditional surface transportation project procurements, the vast majority of the work is carried out by the private sector. State Departments of Transportation (State DOTs) and transit agencies contract out most design work and all project construction. Therefore, traditional procurements are public-private partnerships already. What is often missing in design-bid-build procurements is the incentive for State DOTs and transit agencies to prevent delays and cost overruns. Requiring such incentives in traditional State DOT and transit agency procurements can help attain some of the benefits that some P3s have shown without requiring the financing, legal, and oversight costs that P3s generate.

Encouraging the public sector to incorporate best practices of the private sector could inject greater discipline and accountability into the development, procurement, and delivery of infrastructure projects, shortening the time required to deliver the project and saving money for both the initial construction and life-cycle costs of the facility. The Panel recommends that U.S. DOT establish a Transportation Procurement Office that would help states with procurements of all types, and ensure that best practices in the P3 delivery are also available to traditional design-bid-build project delivery. This Office would also be directed to issue best practices on standardizing P3 authorities and practices, including fair and balanced assumptions made in the calculations.

The need for better performance standards to measure success is important, not just for P3s, but for all high-cost capital projects. A Value for Money (VfM) analysis, as well as other P3 evaluation tools, requires metrics to compare the relative merits of the traditional public sector process and P3 procurement. To ensure greater transparency and accountability in the delivery of infrastructure projects, regardless of the procurement method utilized, the Panel recommends that the Transportation Procurement Office develop and institute performance metrics for all high-cost or technically complex projects. In addition, the Panel recommends that State DOTs be required to send annual reports to U.S. DOT on project performance and that U.S. DOT make that information publicly available. The Panel also recommends that U.S. DOT provide Congress with information on project performance aggregate data and national trends.

With regard to P3s, such procurements often involve design, build, finance, operate, and/or maintain (DBFOM) elements as part of a long-term concession contract. These agreements are extremely complex and must anticipate numerous future contingencies, decades into the future. Developing a good contract that is understood by all parties, protects both the public and the private sector, and is flexible enough to accommodate unforeseen circumstances is important to successful P3 procurement. Moreover, the public sector project sponsor must ensure that it has the capacity to effectively negotiate a good agreement that will protect the public interest. To help project sponsors develop this capacity, the Panel recommends that U.S. DOT continue to implement the provisions in MAP-21 that were designed to simplify and standardize surface transportation P3 contracts.

In addition, U.S. DOT has participated in many P3 agreements, and its lessons learned could be helpful to other federal agencies, states, and local governments as they explore entering into P3s. The Panel recommends that

U.S. DOT become a clearinghouse for lessons learned and best practices regarding P3s.

The Panel also heard from many stakeholders about the importance of getting P3 enabling legislation “right” as a critical first step for states to begin to utilize P3s. Many states have passed P3 enabling legislation, and the Panel recommends those who have had early successes with P3s coordinate with other states to ensure that the legislation that is adopted provides the state with all of the tools it needs to ensure that any P3s are in the public interest.

RECOMMENDATIONS: BREAKING DOWN BARRIERS TO CONSIDERATION

- Continue the TIFIA program to provide credit assistance to projects of national and regional significance.
- Encourage Congress to review PAB eligibility to support infrastructure P3s across the jurisdiction of the Committee.
- Direct U.S. DOT to report to Congress on the approval process for innovative financing tools at DOT and recommend ways to achieve efficiencies in the processes without diminishing federal oversight.
- Clarify statutory authority to allow states to use federal-aid highway funds to ensure robust competition in P3 procurements.
- Direct the Federal Transit Administration (FTA) to report to Congress on the differences between traditional and P3 procurements for new fixed guideway transit projects, and identify whether and how, in the case of P3 procurements, the Capital Investment Grants (New Starts) review and approval process should be modified to better suit the unique nature of such procurements.
- Encourage the U.S. Army Corps of Engineers and the Environmental Protection Agency (EPA) to work with U.S. DOT, the U.S. Department of Treasury, and appropriate non-federal interests as they implement the Water Infrastructure Finance and Innovation Act (WIFIA) program authorized in the Water Resources Reform and Development Act of 2014 (WRRDA). Encourage U.S. DOT and other agencies to share lessons learned regarding innovative financing programs with the Corps of Engineers and EPA as they implement WIFIA.
- Review and modify budgetary scoring rules for commercially-leased office space to enable operating lease treatment of long-term leases and fixed-priced, below market purchase options.
- Fully utilize existing lease authorities and Office of Management and Budget (OMB) budgetary scoring procedures to proceed with long-term ground lease/lease back arrangements where the federal government retains ownership of leasehold improvements at the end of the ground-lease term.

Throughout the Panel's discussions, a common theme heard was that traditional federal program procurement practices are very different from the P3 procurement process. Given the often unique nature of P3 transactions, the Panel recommends changes to federal programs to ensure fair consideration of P3 projects, where

appropriate, and that the federal oversight process takes the realities of P3 procurements into account.

U.S. DOT maintains a number of programs that are critical to P3s in the United States, including the TIFIA loan program, the RRIF loan program, PABs, and the Transit New Starts grant program. The Panel heard from many interested parties that the approval processes for these programs lack transparency, and are slow, and often not coordinated.

Therefore, the Panel recommends that U.S. DOT study and report to Congress on ways to improve and synchronize the approval processes without diminishing federal oversight. In addition, the Panel recommends that FTA report to Congress on the differences between traditional and P3 procurements for new fixed guideway transit projects, and identify whether and how, in the case of P3 procurements, the Capital Investment Grants (New Starts) review and approval process should be modified to better suit the unique nature of such procurements.

Ensuring a competitive procurement with multiple bidders is one way to ensure public sector sponsors are getting a good value in a P3 procurement. Given that a bid can cost a private sector bidder several million dollars, some project sponsors offer stipends to partially cover the cost of bid preparation and compensate unsuccessful bidders. It also ensures that the public sector owns any design concepts or other work product developed by winning and unsuccessful bid proposals. The Federal Highway Administration (FHWA) has determined that such stipends are an eligible use of Federal-Aid Highway funding, but it is not explicitly listed as an eligible use in highway statutes. The Panel recommends that the existing statutory authority be clarified so that all states are aware of this eligibility.

The Panel heard from the Corps of Engineers about its plans to implement innovative financing provisions, especially the Water Infrastructure Finance and Innovation Act (WIFIA), of the recently enacted Water Resources Reform and Development Act (WRRDA) (P.L. 113-121). The WIFIA program is modeled after the TIFIA program, and the Panel encourages other federal agencies to share lessons learned regarding innovative financing programs with the Corps of Engineers and the Environmental Protection Agency as they implement this new credit program.

Internationally, P3s are used extensively for social infrastructure (e.g., hospitals and schools) and public buildings, but have very rarely been used by federal, state, or local governments in the United States for such projects. The Panel heard that for federal public buildings, the existing scoring rules deter lower-cost, long-term leases and discounted purchase options. Both of these lower-cost options were eliminated by the scoring rule changes enacted through the Budget Enforcement Act of 1990. The Panel recommends the Committee review whether such scoring rules should be modified to allow more innovative financing solutions to be used to tackle federal real estate challenges. Similarly, the Panel recommends that the General Services Administration (GSA) work within the limits of the current scoring rules to develop office space on federal property and retain ownership of leasehold improvements.

RECOMMENDATIONS: ENSURING TRANSPARENCY AND ACCOUNTABILITY

- Direct DOT to require sponsors of any P3 project that includes federal investment (grants, loans, or tax incentives) to conduct and make publicly available a detailed Value for Money (VfM) or similar comparative analysis prior to deciding to advance the project using P3 procurement.
- Require that the key terms and conditions of a proposed P3 agreement that includes federal investment (grants, loans, or tax incentives) be made available to the public at an appropriate time in the decision-making process.
- Require project sponsors to conduct a review (within three years of construction completion or revenue service of the project) of any project procured through a P3 that includes federal investment (grants, loans, or tax incentives), and make publicly available information regarding whether the private partner is meeting the goals and terms of the P3 agreement for that project.
- Direct federal agencies within the jurisdiction of the Committee to provide, at the time of the commitment of federal funds to any project procured as a P3, a detailed summary of the total federal investment (grants, loans, or tax incentives) in the project.

Giving the public more transparency into the P3 development process is important because of the long-term nature of these agreements. Transparency is also critically important to holding both the public and private partners accountable, ensuring that the agreement is in the long-term interest of the public and all parties are meeting the terms of the agreement. The Panel heard that for a P3 to be successful there must be transparency, combined with detailed information on the costs and benefits of the agreement. Public trust and political buy-in can only be achieved if P3s are implemented and managed in an open, transparent fashion. When federal funds are proposed to be included in a P3 agreement, the federal government should ensure that the project sponsor develops the agreement through a transparent process, the parties are held accountable, and there is an accurate accounting of the total federal investment.

Conducting a detailed VfM analysis is an important tool to help evaluate whether a P3 procurement is in the best interests of the public and a project sponsor should move ahead with a project as a P3. This analysis provides a comparison of the cost and completion time for a project if procured directly by the project sponsor (known as the Public Sector Comparator) versus through a P3. The financial modeling contained in the VfM analysis details the cost to the public sector of a P3, including the financing costs, and outlines the schedule on which the project will be completed. It can also show how long it will take for the public sector to pay for the P3 project, particularly if a project involves availability payments, where the public partner assumes the long-term obligation of making payments to the private partner in exchange for the design, build, operation, and/or maintenance of the facility at a certain performance level. The VfM analysis also reveals what the public

sector assumes the cost and schedule would be for the project if it does not move forward as a P3. The Federal Highway Administration has resources available on P3 analytical tools on its website at <http://www.fhwa.dot.gov/ipd/p3/>.

In its review, the Panel found significant differences in the quality and content of VfM analyses and questioned assumptions of certain analyses. To ensure an informed decision by the public sector, such analyses must fairly weigh all of the costs and benefits of different procurement options. The Panel also found significant differences on whether public sector project sponsors made the VfM analysis available to the public. It is important for the VfM analysis to be made available to the public to allow an independent evaluation of the VfM by citizens of the community and achieve public support of the decision-making process.

Given the importance of the VfM analysis, the Panel recommends that, for a P3 project involving federal investment, a VfM or similar comparative analysis is completed prior to entering into the procurement. Such analysis shall, at a minimum, include an evaluation of: the life-cycle cost and project delivery timeframes; the costs of using public financing versus private financing for the project; a description of the key assumptions made in developing the analysis (and choosing Public Sector Comparator options), including an analysis of likely federal grants and subsidies (including tax depreciation costs), the key terms of the proposed P3 agreement (including likely rate of return for private debt and equity) and a discussion of the benefits and costs associated with the allocation of risk and the determination of risk premiums assigned to various project delivery scenarios. Such analysis shall be made available to the public at an appropriate time in the decision-making process to allow for full consideration of whether the use of a P3 is appropriate.

The Panel has also heard concerns regarding the lack of transparency and accountability regarding P3 agreements. Concerns have been raised that the public is not fully aware of the factors used to determine the cost and benefits of utilizing a P3 delivery method, the amount of risk assigned to the partners, or major terms of the P3 contract. Transparency with P3 agreements is particularly important because the agreements are complex and long-term commitments, often 30 years or more. Moreover, the Panel heard that ensuring that small businesses have opportunities to compete for parts of these large P3 projects is important.

Therefore, the Panel recommends that, for a P3 project involving federal investment, the key terms and conditions of a proposed P3 agreement be made available to the public at an appropriate time in the decision-making process. In addition, the Panel recommends that a project sponsor be required to conduct a review of the project (within three years of construction completion or revenue service of the project) and make publicly available information regarding whether the private partner is meeting the goals and terms of the P3 agreement for that project.

Federal contributions to P3 agreements – through the lower cost of capital provided by investment contributions from TIFIA, the Railroad Rehabilitation and Improvement Financing (RRIF) program, and PABs – are often critical to making these projects more feasible for private sector investment. The federal government and federal taxpayers are often the largest single contributor to surface transportation P3 agreements. The federal role is increasing because states pursuing P3 agreements appear to be moving away from P3 revenue-risk agreements, and instead are increasingly relying on P3 availability payment agreements. The increased reliance on federal credit lowers the private partner's cost of capital at the expense of federal taxpayers and increases the amount of the federal government's implicit equity and risk.

Financial viability (i.e., the creditworthiness of the project) is the primary factor that U.S. DOT reviews in determining whether a project is sufficiently creditworthy to receive a TIFIA loan. However, TIFIA is often only one component of a P3 transaction, and such projects often involve federal grants and PABs. Given the multiple

forms of federal investment that are included in P3 projects, the federal government has the opportunity to play a unique oversight role in P3s by taking a comprehensive look at the total federal support in these projects, and the public benefits to be derived.

The Panel recommends that federal agencies provide, at the time of commitment of federal funds to any project procured as a P3, a detailed project summary of federal investment in the project, including loans, grants, PABs, and tax incentives. The tax incentive data should include an estimate of the benefits of depreciation allowances to the private sector and the corresponding reduction in income tax revenue to the U.S. Treasury. The summary should also include the projected public benefits and improvements the project would contribute toward the overall safety, efficiency, and interconnectedness of the national and regional transportation network, as well as the impact of the project on the national and regional economy.

THE ROLE OF PUBLIC-PRIVATE PARTNERSHIPS IN INFRASTRUCTURE SURFACE TRANSPORTATION

Points of Discussion¹

- ◇ TIFIA has participated in most of the P3s in the United States, and federal support for TIFIA and PABs are important elements to the continued use of public-private partnerships in the United States.
- ◇ State-level offices dedicated to P3s, such as in Virginia, have contributed to the promotion and execution of public-private partnerships.
- ◇ Developing partnerships with the private sector at an early stage in the planning for the project is critical to developing a coalition to help move a P3 project forward and helps with transparency with the community.
- ◇ Conducting a VfM analysis before the P3 project moves forward is an important part of the evaluation process and may promote transparency. Updating the analysis after the project is completed helps to gauge the success or failure of a project compared to predicted outcomes.
- ◇ Maintenance of infrastructure is often not a priority when state and local budgets are constrained. Shortchanging the long-term maintenance can lead to an asset not performing as intended.
- ◇ P3s have allowed states to complete projects on a more expedited timeline than they would otherwise have been able to do under constrained budget environments.
- ◇ P3 procurements may generate innovation by allowing the private sector to propose alternative technical concepts to meet the public sector's transportation needs.
- ◇ The advantage to the public sector of transferring the risk and control of a project to the private sector may have a downside: it may limit the government's ability to respond to changing conditions or to achieve objectives that might improve the welfare of citizens but reduce the private partner's profits.
- ◇ From 1989 to 2013, 98 highway P3 projects totaling \$61 billion were completed. These projects equal 1.5 percent of approximately \$4 trillion spent on highways during that period by all levels of government.
- ◇ P3s are unlikely to constitute more than a small portion of highway and transit investments, and provide the most value for high-cost, complex projects that governments have not had extensive experience in constructing.

1. The Points of Discussion represent statements by P3 Panel hearing witnesses and roundtable participants. These Points do not necessarily reflect the views of Members of the Panel.

- ◇ Projects under construction rely less on tolls for revenues; now, private partners are compensated through a state's general revenues, limiting their risk of not being repaid. P3s have also increasingly replaced the funds obtained through private means (at market rates) with tax-exempt bonds or TIFIA loans. In doing so, newer projects may have diminished incentives associated with private financing to control costs and be completed quickly.
- ◇ In a traditional surface transportation procurement, states are required to select the lowest cost responsive bidder, often preventing project sponsors from adequately considering long-term maintenance and operational issues as part of the decision-making process.
- ◇ Highway and transit project sponsors expressed a clear preference to the Panel for robust levels of federal funding to fund infrastructure projects compared to the complexity and cost associated with P3 procurements.

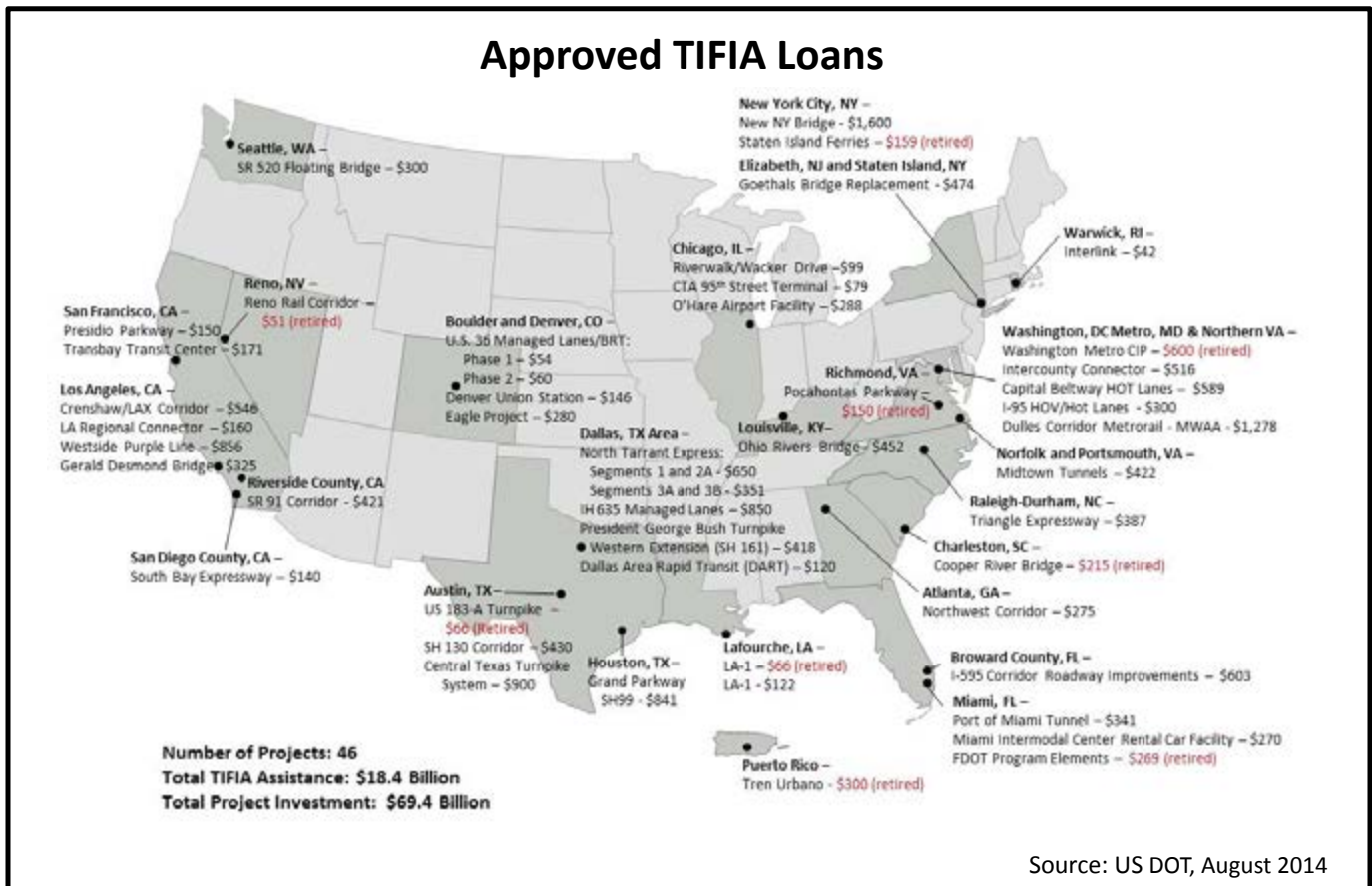
Background

Utilizing P3s for the delivery of surface transportation projects in the United States is a fairly recent trend, so the universe of projects and the performance history is limited. However, there are several common components to P3 projects that have been used for a variety of highway and transit projects.

In the United States, there are currently 33 states and one territory with enabling legislation authorizing the use of P3s for transportation projects. Such enabling legislation varies, including the types of projects authorized (e.g., surface transportation versus public buildings), the governance structures, and the degree of project-by-project legislative approval required by the state. The placement of P3 staff within the state government also varies considerably; some states have created separate offices, while others operate within the existing state departments of transportation.

TIFIA Loans

Created under the Transportation Equity Act for the 21st Century (TEA-21) (P.L. 105-178), the TIFIA program provides federal credit assistance, in the form of a loan, loan guarantee, or line of credit, to eligible surface transportation projects. State governments, local governments, toll authorities, and public-private partnerships are eligible to apply for TIFIA credit assistance. TIFIA loans are made at the interest rate paid on Treasury securities, significantly less than the rate that the private sector could receive from the private capital market.



The Panel heard that the TIFIA loan program is a critical component to P3 procurements in the United States, and has participated in most P3s in the U.S. MAP-21 provided a significant increase to the TIFIA program and increased the funding level from \$122 million annually to \$1 billion in fiscal year 2014. The Panel recommends continuing the TIFIA program to provide credit assistance to projects of national and regional significance.

TIFIA is designed to leverage federal funding to attract non-federal investment in surface transportation projects by providing supplemental or subordinate debt. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments.

The U.S. DOT estimates that TIFIA's leverage ratio is more than 30:1, which means that every one dollar in TIFIA funding supports more than \$30 in surface transportation infrastructure investment. TIFIA credit assistance must be repaid, and repayment sources can include toll revenue, user fees, or other dedicated payments. To date, TIFIA has committed more than \$15 billion in credit assistance to help finance 48 loans. Of

these TIFIA loan commitments, less than one-half of the loans are currently in repayment or retired.

Private Activity Bonds

Tax-exempt PABs are debt instruments issued by state or local governments whose proceeds are used to construct projects with significant private involvement. Surface transportation projects became eligible for PABs with passage of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (P.L. 109-59). PABs help encourage additional investment in transportation by lowering the cost of capital for private sector investment through tax-exempt, low-interest borrowing. PABs for transportation projects are capped at \$15 billion and subject to approval by the U.S. DOT. PABs are often credited with growing the public-private partnerships market in the United States. Today, virtually all major surface transportation P3s utilize PABs as part of their financing package.

Private Activity Bond Issues and Allocations	
Project	PAB Allocation (\$ in thousands)
Bonds Issued	
Capital Beltway HOT Lanes, Northern Virginia	\$589,000
North Tarrant Expressway, Fort Worth, Texas	\$400,000
IH 635 (LBJ Freeway), Dallas, Texas	\$615,000
RTD Eagle Project (East Corridor& Gold Line), Denver Colorado	\$397,835
CenterPoint Intermodal Center, Joliet, Illinois	\$150,000
CenterPoint Intermodal Center, Joliet, Illinois	\$75,000
Downtown Tunnel/Midtown Tunnel, Norfolk, Virginia	\$675,004
I-95 HOT/HOV Project, Northern Virginia	\$252,648
East End Crossing, Ohio River Bridges, Louisville, Kentucky	\$676,805
North Tarrant Expressway 3A & 3B, Fort Worth, Texas	\$274,030
Goethals Bridge, Staten Island, New York	\$460,915
U.S.36 Managed Lanes/BRT Phase 2, Denver Metro Area,	\$20,360
Subtotal	\$4,586,597
Allocations	
Knik Arm Crossing, Anchorage, Alaska	\$600,000
CenterPoint Intermodal Center, Joliet, Illinois	\$700,000
I-77 Managed Lanes, Charlotte, North Carolina	\$350,000
I-4 Ultimate Project, Orlando, Florida	\$2,000,000
I-69 Section 5, Bloomington and Martinsville, Indiana	\$400,000
Portsmouth Bypass, Portsmouth, Ohio	\$610,000
SH-288, Houston Metro Area, Texas	\$600,000
Rapid Bridge Replacement Program, Pennsylvania	\$1,200,000
Subtotal	\$6,460,000
Grand Total	\$11,046,597

Source: USDOT; as of June 18, 2014

MAP-21 Provisions

In addition to changes to the TIFIA program, MAP-21 requires U.S. DOT to publish best practices on how states, public transit agencies, and other public officials can work with the private sector regarding P3s. MAP-21 also authorizes U.S. DOT to provide technical assistance to states and other project sponsors on how to analyze the benefits and costs of P3s compared to traditional procurement methods.

Finally, MAP-21 requires DOT to develop standard model contracts for P3 projects, and to encourage project sponsors to use such contracts as a template for P3 project agreements. On September 10, 2014, FHWA published a final Core Toll Concession Model Contract Guide. FHWA is also developing a model contract for P3 availability payment contracts, which it expects to issue later this year.

AVIATION

Points of Discussion²

- ◇ Undertaking a complex multi-year infrastructure project requires significant oversight and expertise.
- ◇ Airport terminals could be more efficient to better meet the needs of the traveling public and changing needs of airlines with greater use of technology.
- ◇ Private investment can leverage the funds collected by the airport as well as federal, state, local, and private sources.
- ◇ There is a substantial need for investment in U.S. airports' terminals, runways, and other infrastructure to ensure that the U.S. aviation system remains globally competitive and ready for future challenges, and to improve the quality of passengers' traveling experience in the United States.
- ◇ Airport authorities in the United States have successfully partnered with airlines to construct new terminal facilities, while retaining ownership and in some cases operations.
- ◇ Given the private sector's higher cost of capital, airport P3s will only work in certain circumstances, usually involving budget constraints or airports that have historically not been well managed.

Background

The Nation's aviation sector is a complex system, supported by a large infrastructure footprint, and involving many stakeholders, from private sector airlines to all levels of government. Like other sectors, aviation ground infrastructure, particularly airport terminals, have traditionally been developed with a combination of federal, state, local, and airport funding. Recently, airport authorities have begun to turn to partnerships with the private sector to modernize, and in some cases, operate terminals.

Traditional Airport Funding Mechanisms

Day-to-day operating revenue for an airport comes from a variety of sources, including airline rents, usage fees and charges, and concessions. Funds for airport construction projects also come from a variety of sources including the Federal Airport Improvement Program (AIP), passenger facility charges (PFCs), bonds, and state and local funds.

AIP was created in the Airport and Airway Improvement Act of 1982 (P.L. 97-248), and since then has been a major source of funding for airport development and planning. Eligible uses of AIP funds include runways, taxiways, signage, noise abatement, lighting, land purchase, and safety or emergency equipment. The Federal Aviation Administration (FAA) distributes grants to airports to increase capacity, safety, or security, or to reduce noise. Most of the money is distributed by formula, based on an airport's passenger and cargo traffic.

2. The Points of Discussion represent statements by P3 Panel hearing witnesses and roundtable participants. These Points do not necessarily reflect the views of Members of the Panel.

PFCs are collected by individual airports to support its airport capital investments. The PFC ceiling is currently \$4.50 and has not been raised in many years. Many organizations have advocated for an increase in the PFC to support airport infrastructure.

FAA Airport Privatization Pilot Program

In 1996, Congress authorized the FAA to establish a pilot program that would help airports gain access to private capital for improvements and development (49 U.S.C. 47134). Initially, Congress authorized five slots for the program, but increased the number to 10 slots in the FAA Modernization and Reform Act of 2012 (P.L. 112-95).

The FAA approval of an application to participate in the program is based upon a number of conditions, including the private operator's ability to assume the public operator's grant obligations and ensure continued access to the airport on reasonable terms. The private operator must operate the airport safely, maintain and improve the airport, provide security, mitigate noise and environmental impacts, and honor any existing collective bargaining agreements covering airport employees. The lease agreement must provide a plan for continued operation of the airport in case of bankruptcy of the private operator.

The major constraint on full airport privatizations is the general statutory requirement that airport revenues must be applied to airport capital and operating costs. The privatization pilot program provides an exception from this general requirement, in view of the private partner's need to make a rate of return on its airport investments. This exemption is only permitted if 65 percent of the airlines serving an airport approve of the arrangement.

Another element of the pilot program designed to encourage private sector investment is the ability of the FAA to exempt the public airport authority from having to repay federal grants or property acquired with federal funding if the airport is leased or sold. The private sector entity may also receive AIP grants, collect PFCs, and charge reasonable fees. Any increase in fees that exceed the Consumer Price Index rate of inflation requires approval of 65 percent of the airlines serving the airport. Finally, private operators of general aviation airports can receive AIP discretionary grants.

The pilot program has had limited success since its creation in 1996. Although several airports sought and received FAA approval to enter into public-private partnerships, only the Luis Muñoz Marín International Airport, in San Juan, Puerto Rico, has completed the process and remains in the program. Other privatization projects have been proposed, but subsequently withdrawn by the local authority. In 2013, the government of Puerto Rico signed a \$2.6 billion, 40-year concessionaire agreement with Aerostar Airport Holdings to maintain and operate Puerto Rico's largest airport. Under the arrangement, Aerostar made an initial payment of \$650 million to Puerto Rico, and will make \$2.5 million in annual payments for the next five years. After those initial years, the concessionaire is required to pay five percent of airport revenues for 25 years, and then 10 percent for the final 10 years of the agreement. Over 10 years, Aerostar has indicated it plans to spend \$1.4 billion on upgrades to the airport.

Private Sector Funding

The public-private partnership in Puerto Rico is the only example of a full airport privatization (e.g., a long-

term concessionaire with a private sector entity to operate and maintain a terminal over a contract period) currently in effect in the United States. Outside of the United States, airport privatizations have been more common. Although not full airport privatizations, public airport authorities in the United States have partnered with the private sector and airlines for individual airport terminal modernizations. Examples of these include:

- John F. Kennedy International Airport, Terminal 4. Completed in 2001, this \$1.4 billion terminal project consisted of replacing a dated, 1950s terminal with a new 1.5-million square foot facility consisting of 144 check-in counter spaces, 10 gates, seven baggage carousels, and space for 70 customs and immigration positions. The new terminal was financed, developed, and constructed by a private sector consortium, which was selected by the Port Authority of New York and New Jersey. It was financed with tax-exempt debt, public funding, and private equity.
- Detroit Metropolitan Airport, McNamara Terminal. Completed in 2002, this \$1.2 billion terminal included 97 gates, 18 luggage carousels, 11,500 space parking garage, an indoor tram, and 80 shops and restaurants. The building was delivered through a public-private partnership between Northwest Airlines (now Delta Airlines) and Wayne County, Michigan. Northwest/Delta acted as the developer and general contractor of the project, and continues to operate it today. Wayne County retains ownership rights.
- Dallas Love Field, Terminal Modernization. This \$519 million project includes the construction of a new 20-gate concourse and major renovations to the existing terminal building. This project was developed through a public-private partnership between the City of Dallas and Southwest Airlines.
- LaGuardia Airport, Central Terminal. The central terminal at LaGuardia opened in 1964, and consists of 835,000 square feet with 35 gates. The current facilities are congested, and its design no longer adequately supports the passenger demand at the airport. The Port Authority of New York and New Jersey is currently undertaking a competitive solicitation process to select a private sector entity to build, operate, maintain, and partially finance the redevelopment of the terminal. Specifically, this \$3.6 billion project will involve demolition of the existing terminal, the construction of a new 1.3-million square foot, 35-gate terminal, and reconstruction of roadways serving the terminal site. The Port Authority expects to select a consortium in the near future.

PUBLIC BUILDINGS AND ECONOMIC DEVELOPMENT

Points of Discussion³

- ◇ The public sector and private sector have existing relationships and currently work together to provide public buildings through the use of commercial office space and warehouse leases.
- ◇ The lack of dedicated private activity bonds for social infrastructure buildings has been a barrier to enticing private sector investment in such projects.
- ◇ Including the maintenance of a public building in the contract ensures that the building is maintained and returned to the public sector in good working condition.
- ◇ P3s for federal facilities are complicated by the government-wide rules for budgetary scoring and treatment.

Background

The management of federal real estate has been labeled as a “high risk” area by the Government Accountability Office (GAO) since 2003. The basis of this determination is due to a series of factors, including the amount of excess and underutilized properties, deteriorating and aging facilities, and the use of successive operating leases for long-term space needs that can be more costly than options that lead to ownership.

As a result, GSA now leases more space than it owns. GSA’s inventory includes more than 375 million rentable square feet of space, including 194 million square feet of leased space and 181 million square feet of owned space. The rental payments of tenant federal agencies in GSA’s owned space fund the Federal Buildings Fund, which in turn provide the capital needed to manage, maintain, and acquire new space. The shift to more leased space without an ownership interest results in less funding being available for reinvestment in GSA’s owned inventory.

Compounding this problem has been the decrease in appropriated funds for new construction, acquisition, and renovation of owned properties; yet, federal space needs continue, and there is a growing need to provide more efficient and less costly office space.

3. The Points of Discussion represent statements by P3 Panel hearing witnesses and roundtable participants. These Points do not necessarily reflect the views of Members of the Panel.

State and Local Government Experience

While some states and local government agencies are considering P3 arrangements to build and operate public buildings, only one project has been completed, the Long Beach, California state courthouse. Advocates for more P3s point to the lack of dedicated Private Activity Bonds (PABs) as one of the primary reasons public-private partnerships have not been utilized more extensively to construct public buildings.

Unlike the transportation, solid waste, or water sectors, public buildings are not eligible for exempt facility bonds, resulting in an increased cost of financing. As a result, state and local governments are less likely to utilize P3s.

Long Beach Courthouse

California has estimated that approximately 90 percent of the state's courthouses require significant renovation, repair, or maintenance. The California Judicial Council, through the Administrative Office of the Courts (AOC), is conducting a performance-based infrastructure pilot program, under which the state engages with a private consortium to finance, design, build, operate, and maintain a new courthouse under detailed guidelines from the state.

California selected the Long Beach courthouse as the first building to go through such a process. The original courthouse was constructed in 1956 and was in need of replacement. California competitively selected Long Beach Judicial Partners, a private sector consortium, for the \$492 million project. Construction began in mid-2011 and was completed in fall 2013, ahead of schedule. The concessionaire will operate and maintain the Long Beach facility under a 35-year lease-leaseback contract. Under the Long Beach courthouse P3 agreement, the state made no payments until the court occupied the building. The state will pay an annual availability payment for service based on building performance with deductions if court space is unavailable or performance criteria are not met. The state will deduct for any outage or failure that prevents use of the facility.

Although the courthouse was delivered ahead of schedule, the Legislative Analyst Office (LAO) of the State of California outlined concerns with the P3 process and agreement. The LAO questioned assumptions of the VfM analysis and found that the process under which the P3 procurement option was selected could have been more transparent.

WATER SYSTEMS AND WATER TREATMENT

Points of Discussion⁴

- ◇ Utilizing public-private partnerships can accelerate project delivery compared to publicly financed projects.
- ◇ Many large water systems are well run by public sector authorities, and some water systems currently use the private sector to help with operations and maintenance without entering into long-term concession arrangements.
- ◇ Public-private partnerships can include operations and maintenance of the water system, as well as capital planning; however, personnel issues may arise when switching from a publicly operated and maintained utility to a privately operated and maintained utility.
- ◇ Appropriately charging for the full cost of water is complicated and, as a result, communities often undercharge, leading to deferred maintenance of the water system.
- ◇ Locally elected officials are traditionally reluctant to raise water rates, which can lead to a lack of funding for long-term capital improvements.
- ◇ Water authorities typically include some locally elected officials who may be opposed to raising water rates that exceed their term of office and which would tie the hands of future officials.

Background

Clean drinking water and public wastewater services are national priorities which are necessary to sustain public health, support our economy, and protect the environment. Significant amounts of public resources, including funding and technical assistance, have been devoted to the planning, design, construction, and management of water infrastructure in American communities over the last 40 years to meet these priorities.

The Nation's wastewater infrastructure includes more than 16,000 publicly owned wastewater treatment plants, 100,000 major pumping stations, 600,000 miles of sanitary sewers, and 200,000 miles of storm sewers.

However, the Nation's ability to provide clean and safe water is being challenged, as existing wastewater infrastructure is aging, deteriorating, and in need of repair, replacement, and upgrading. The needs of municipalities to address water and wastewater infrastructure are substantial. According to studies by the Environmental Protection Agency, the Congressional Budget Office, and the Water Infrastructure Network, the cost of addressing our Nation's clean water infrastructure needs over the next 20 years could exceed \$400 billion, roughly twice the current level of investment by all levels of government. The needs for drinking water infrastructure drive this figure even higher. As a result, many communities are seeking new ways to increase funding for water infrastructure.

4. The Points of Discussion represent statements by P3 Panel hearing witnesses and roundtable participants. These Points do not necessarily reflect the views of Members of the Panel.

Traditional Financing Methods for Water Systems

The principal financing tool that local governments use is issuance of tax-exempt municipal bonds – at least 70 percent of United States water utilities rely on municipal bonds and other debt vehicles to some degree to finance capital investments. In 2011, bonds issued for water, sewer, and sanitation projects totaled \$29.6 billion, of which \$14.2 billion was new-money financing.

The federal government has also contributed significant federal resources to fund wastewater infrastructure over the past few decades – first through federal construction grants, and later through the capitalization of revolving loan programs. From 1972 to 1990, the federal government provided more than \$60 billion of direct project grants for Clean Water Act wastewater treatment capital improvements.

Since 1987, most of the federal government’s assistance has been in the form of capitalizing Clean Water State Revolving Funds (SRFs). Each state’s SRF operates much like a specialized water infrastructure bank, by making loans for wastewater infrastructure and nonpoint source projects (often at interest rates that are less than current market rates), refinancing existing local debt, and providing guarantees of or bond insurance for local debt. As financial constraints have emerged, many state financing authorities have developed and implemented innovative debt financing techniques to help make adequate and economical funding for water infrastructure available and accessible.

Small, rural, and disadvantaged communities continue to face a shrinking pool of financing resources, and are especially at a disadvantage in financing water and wastewater infrastructure. Rural community assistance programs, such as those sponsored through the United States Department of Agriculture’s Water and Environmental Program in the Rural Utilities Service, provide some assistance (including direct loans, grants, and loan guarantees) for projects in unincorporated rural areas and small towns to develop and rehabilitate water and waste facilities. However, the amount of available assistance does not meet the needs of these small, rural, and disadvantaged communities. At the same time, the smaller scale and lower socio-economic demographics of small, rural, and disadvantaged communities can complicate the ability of private financing to meet the needs of these communities.

Private Sector Investment in Water Systems

Private sector capital is a potential source of financing for water and wastewater infrastructure. For a variety of reasons, municipally owned water and wastewater utilities traditionally have not taken advantage of private sector investment capital outside the traditional municipal bond market. Accordingly, there is little empirical data on the successes or challenges of financing water infrastructure projects or services through private sector capital, such as a P3 agreement

Concessionaire-type partnerships for water systems are rare in the United States. However, in the past several years, some communities have elected to enter into such agreements to manage their water systems. Two examples include:

- Rialto, California: In 2012, the City of Rialto signed a 30-year concession agreement with Rialto Water Services LLC, in which the City of Rialto retains asset ownership, while the private entity oversees a \$41 million investment in capital improvements and provides operation and maintenance of the

water facility. All construction, operations, and customer service are performed by Veolia Water North America.

- Bayonne, New Jersey: In 2012, the Bayonne Municipal Utilities Authority (BMUA) signed a 40-year concession agreement with United Water (and investment firm KKR) for its water and wastewater systems. In this concession agreement, the BMUA retains ownership of assets and responsibility for setting rates, while the private entity operates the system, invests \$107 million, and retires \$130 million of debt.

PORTS AND INLAND WATERWAYS

Points of Discussion⁵

- ◇ Ports are investing in their facilities to stay competitive with other ports and to accommodate larger ships as a result of the expansion of the Panama Canal.
- ◇ The inland waterways are in urgent need of infrastructure improvements, but the users of the system are opposed to tolls, so pursuing a P3 may be challenging without a revenue source.
- ◇ The Corps of Engineers has a growing infrastructure backlog, and delayed appropriations increases the cost of the project; thus, bringing a project to market sooner is attractive.

Background

The United States enjoys an extensive network of ports and inland waterways that support a significant portion of the Nation's trade corridors. Forty-one states are served by ports and inland waterways, including all states east of the Mississippi River. Seaports of the Western Hemisphere combined handle about 7.8 billion tons of cargo each year and generate nearly \$8.6 trillion of total economic activity. Each state relies on at least 15 seaports to handle its imports and exports, which total more than \$3.8 billion worth of goods moving in and out of U.S. seaports each day. More than 13 million people are employed by the Nation's seaports, and seaport-related jobs account for \$650 billion in personal income.

With the recovery of the import and export trade volumes after reductions in 2008 and 2009, many ports in the Americas are revisiting plans to expand and upgrade their ports. Port authorities in North America are looking to plan, finance, and construct new projects, adjust and expand their ports for larger vessels, and modernize their road and intermodal connections. Various ports intend to expand capacity to stay competitive with ports in Canada and to accommodate the anticipated increase in volume and size of ships as a result of the expansion of the Panama Canal and the changing commodity dynamics occurring globally.

The United States also maintains an extensive inland waterway system that is critical to the Nation's movement of agricultural and other commodities. There are 12,000 miles of commercial inland channels operated and maintained by the Army Corps, which if lined up, would stretch halfway around the world. This network includes 707 dams owned and operated by the Corps of Engineers. There are 139 lock chambers in operation that are more than 50 years old; the average age of all locks is 59.1 years. More than 60 percent of America's grain exports move by barge along the Nation's inland waterways, accounting for \$8.5 billion in exports. Barges carry 20 percent of the Nation's coal, enough to produce 10 percent of all U.S. electricity used annually, and barges also move an estimated five percent of the Nation's ethanol. The Corps of Engineers also provides funding for dredging of 300 deep draft commercial harbors and 600 shallow coastal and inland harbors.

5. The Points of Discussion represent statements by P3 Panel hearing witnesses and roundtable participants. These Points do not necessarily reflect the views of Members of the Panel.

Traditional Financing Methods for Port Investments

Typically, port authorities consider two alternatives to finance their new port expansion plans: (1) securing public sector grants and bond proceeds; or (2) inducing the private sector to make investments through long-term concessions or full privatization of terminals within port facilities. When local governments have limited fiscal resources, public financing of capital expenditure projects can become more limited.

Public port authorities have a long and successful track record working with the private sector. In the United States it is very common for port authorities to grant private operators concessions to build and operate container and bulk terminals under long-term lease contracts or to operate existing container and bulk terminals under long-term leases. However, this model does not solve the need to finance the expansion and improvements of common user facilities (non-terminal assets) and port expansion projects. Private operators tend to resist investment in common user facilities and new terminal capacity that create extra costs and can make their investment uneconomical.

At the same time, port authorities have concerns with private sector involvement in that they could lose operational control and influence on future development. Despite these concerns, the need to consider alternative financing mechanisms is great given the needs of the infrastructure.

Congress appropriates approximately \$2 billion per year to fund Corps of Engineers' capital projects. However, the Corps of Engineers is currently engaged on projects that are estimated to require an additional \$23 billion to complete. In addition, a 2013 review found that the Corps of Engineers faces a total backlog of more than \$60 billion of authorized capital projects.

Public-Private Partnership Potential

Port authorities have a long and successful track record working with the private sector when it comes to leasing out the construction and operation of individual terminals. Although there are a number of private ports in Europe, they are rare in the United States.

However, during the past several years, a number of private entities have invested in marine terminals at public ports. American International Group purchased terminal leases in six U.S. ports from DP World, as well as the operations of Marine Terminals Corporation. A Deutsche Bank subsidiary also purchased Maher Terminals, the Port of New York and New Jersey's largest container volume terminal. Goldman Sachs purchased a 49 percent stake in Carrix Incorporated, parent of SSA Marine. The Ontario Teachers' Pension Plan purchased two marine container terminal leases in the New York area.

The Port of Baltimore is one of the few examples in the United States of a port authority entering into a concessionaire agreement with the private sector. In January 2010, the Maryland Port Administration (MPA) and Ports America Chesapeake, LLC entered into a 50-year agreement for the improvement, operations, and maintenance of the Seagirt Marine terminal at the Port of Baltimore. This \$1.3 billion project included dredging a channel to 50-foot depth to enable the Port of Baltimore to serve Post-Panamax cargo ships. Over the agreement period, the concessionaire is required to provide \$378 million in fixed annual payments and \$699 million in variable payments to the MPA. The Maryland Transportation Authority also received an upfront payment of \$140 million, to be used for highway and bridge improvements.

The recently enacted WRRDA includes several provisions designed to address private sector participation

in water resources projects. WRRDA establishes a Water Infrastructure Public-Private Partnership Program, including the establishment of innovative financing mechanisms to carry out and manage the design and construction of Corps projects by involving the private sector. WRRDA also expands opportunities for non-federal interests with new options for locals to carry out feasibility studies and projects.

WRRDA also establishes a WIFIA program to provide credit assistance for drinking water, wastewater, and water resources infrastructure projects. This program is modeled after the TIFIA program for surface transportation.

THE INTERNATIONAL EXPERIENCE

Points of Discussion⁶

- ◇ Establishing a central office to handle P3s is important for the private sector because it helps to create consistency, certainty, and dependability of P3 review. Establishing a partnership early in the process helps with planning, discipline, and project delivery.
- ◇ Public-private partnerships in Canada are embraced at many levels of government.
- ◇ Risks should be anticipated and should be transferred to those best equipped to manage the risk.
- ◇ P3s are not a funding strategy but a finance strategy.
- ◇ Transparency is important to build support for P3 projects.
- ◇ Partnerships British Columbia (Partnerships BC) and Infrastructure Ontario have provided technical assistance to several states interested in P3s.

Background

Around the world, there have been thousands of P3s in public infrastructure.

Between 2008 and October 2013, governments signed approximately 158 P3 agreements, with a total project value of \$160 billion. Most of these agreements represent the design, build, finance, and operate model, which has been limited in the United States compared to other countries. Only 15 of the 158 P3s were in the United States. According to the Brookings Institution, between 1985 and 2011, only nine percent of the total nominal costs of P3s were funded in the United States.⁷

As noted earlier, unlike most other countries, the United States possesses a robust municipal bond market of approximately \$3.7 trillion, of which a significant portion is for infrastructure financing. The Panel found that this is one major reason why the U.S. P3 market has not grown as quickly as in other countries (which do not offer tax-exempt municipal bonds) and why the potential for P3s in the United States is limited.

A recent report from Fitch Ratings, titled *Global PPP Lessons Learned*, concludes that P3s can provide public value but need to be carefully crafted to address all stakeholder concerns.⁸ Fitch's report identifies many of the

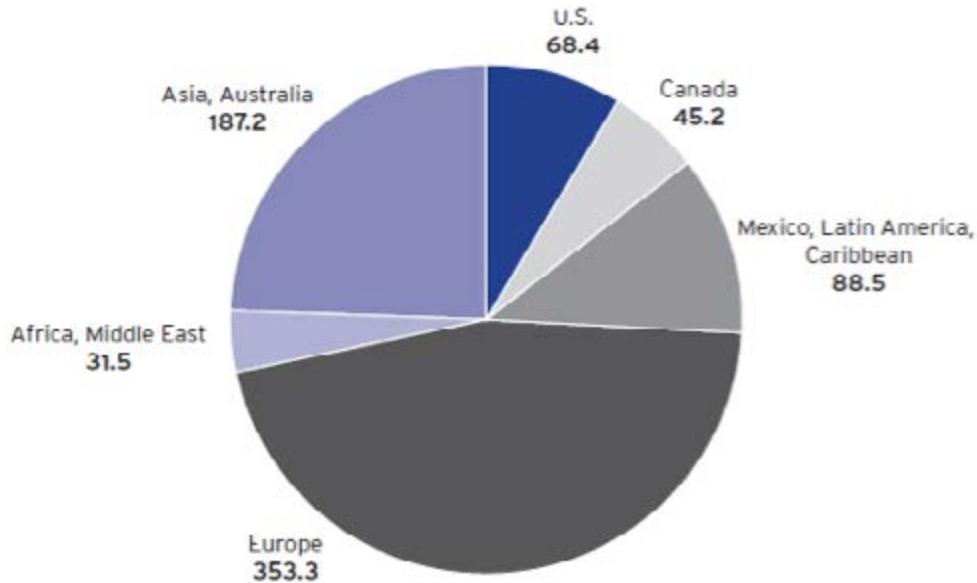
6. The Points of Discussion represent statements by P3 Panel hearing witnesses and roundtable participants. These Points do not necessarily reflect the views of Members of the Panel.

7. Emilia Istrate & Robert Puentes, *Moving Forward on Public Private Partnerships: U.S. and International Experience with PPP Units*, Brookings Institution, December 2011, http://www.brookings.edu/~media/research/files/papers/2011/12/08%20transportation%20istrate%20puentes/1208_transportation_istrate_puentes.pdf

8. Cherian George, Nicolas Painvin, & Thomas McCormick, *Global PPP Lessons Learned*, Fitch Ratings, October 7, 2013, <http://ibttta.org/sites/default/files/documents/IBTTA%20Publications/Fitch%20Ratings%20Global%20PPP%20Lessons%20Learned%202013.pdf>

challenges in designing a concession agreement. Some key issues include: transferring risk associated with the financing, construction, operation, and life-cycle maintenance of an asset or service while maintaining flexibility; forecasting demand; and anticipating possible concession renegotiation. One critical issue is ensuring that risks are allocated properly between the public and private sectors, with one possible guiding principle

Figure 1. Public/Private Partnerships (PPPs) Worldwide, Nominal Total Costs (in billions \$USD), 1985-2011



Note: Includes funded road, rail, buildings, and water projects through October 2011 in nominal dollars converted into U.S. dollars at the time of financial close. Excludes U.S. design-build projects.

Source: PWF, 2011

being that risks should be allocated to the entity that can best manage them. Non-effective risk transfer can lead to renegotiated deals, partners walking away from a deal, a public asset falling into disrepair, and the public sector absorbing cost overruns and delays. Experts in the field have commented that Canada has a strong risk-transfer model and has been able to avoid extensive disagreements with private partners.

Because P3s are complicated transactions that involve extensive negotiations and detailed contracts, many foreign countries have set up national or sub-national P3 entities to act as the leader in negotiating, closing, and implementing P3 agreements. Examples include Partnerships BC, Infrastructure Ontario, Infrastructure United Kingdom, and Infrastructure Australia. These entities play a key role in consolidating the process of P3 actions.

Despite the fact that these transactions can be complex, evaluations by other governments have shown that P3s can achieve construction efficiencies compared to traditional procurement. The National Audit Office of the United Kingdom found that 65 percent of P3 projects were completed on-budget, compared to 54 percent

of public construction projects delivered to the contracted price. Canada's provincial procurement agencies estimate approximately \$9.9 billion in savings realized from 121 P3 projects that reached financial close between 2003 and 2012.⁹ These cost savings were estimated based on VfM economic analyses of each of these projects, or studies conducted by the public sector to demonstrate whether a P3 can deliver a project at a lower life-cycle cost.

The Canadian province of Ontario systematically releases its VfM analyses to the public as part of an effort to ensure transparency in the P3 process.

Canadian Models

Over the last several decades, Canada has increasingly utilized P3s to procure infrastructure projects. The Canadian P3 market is seen as a stable investment for pension funds and asset management companies. Canada has been successful in maintaining a consistent and predictable procurement process, which is highly desirable for the private sector. In particular, the provinces of British Columbia and Ontario have set up formal organizations to guide the development, procurement, and execution of public-private partnerships for transportation, housing, energy, and other projects.

Partnerships BC

Created in 2002 by the Province of British Columbia, the mission of Partnerships BC is to: 1) develop partnership proposals for projects that can achieve value for money; 2) implement such partnerships via best practices in procurement and market development; and 3) become a self-sufficient organization that provides support across different infrastructure sectors. It provides these services via a negotiated consulting contract based on a fee-for-service structure. Partnerships BC is wholly owned by the Provincial Government and Partnerships BC's sole shareholder is the British Columbia Ministry of Finance. Its clients include public sector agencies at all levels of government.

Since its creation, Partnerships BC has participated in more than 35 projects with a total investment value of \$12.5 billion, which includes \$5 billion in private sector contributions. These projects have produced 242 miles of new highway lanes, 19 miles of new transit lines, and six new bridges.

Infrastructure Ontario

Established in 2004, Infrastructure Ontario is a corporation wholly owned by the Province of Ontario, and is charged with managing and delivering projects beyond the traditional design-bid-build method of infrastructure project delivery. Ontario's Ministry of Infrastructure assesses the Province's overall infrastructure renewal program and budget and determines which projects will be assigned to Infrastructure Ontario for public-private partnerships (referred to as Alternative Financing and Procurement (AFP)).

9. InterVISTAS Consulting Inc., *10-Year Economic Impact of Public-Private Partnerships in Canada (2003-2012)*, December 24, 2013, <http://www.p3canada.ca/~media/english/resources%20library/files/10-year%20economic%20impact%20assessment%20of%20public-private%20partnerships%20in%20canada.pdf>

After a contract is approved, Infrastructure Ontario manages the project, in coordination with the client ministry, and is responsible for negotiating and signing project agreements. A key step in the process is the requirement to conduct a VfM analysis, which compares the costs using traditional delivery methods and the public-private partnership or AFP model. Projects will proceed only if a third-party accounting firm verifies that the value of the alternative delivery method outweighs the traditional method.

Eighty-three projects have been assigned to Infrastructure Ontario, representing a total construction value of \$5.5 billion. These projects include billion-dollar highway expansions, the construction of a large light rail system, and various courthouse and hospital projects.



**Committee on Transportation and Infrastructure
U.S. House of Representatives**

Bill Shuster
Chairman

Washington, DC 20515

Nick J. Rahall, III
Ranking Member

Christopher P. Bertram, Staff Director

January 16, 2014

James H. Zola, Democrat Staff Director

Dear Panel Member:

We write to notify you that you have been selected to serve on a panel on public-private partnerships (P3s) constituted under the Rules of the Committee on Transportation and Infrastructure.

The panel has been tasked to examine the current state of P3s across all modes of transportation, economic development, public buildings, water, and maritime infrastructure and equipment. The panel will report its findings, including any recommendations for possible legislation, to the Full Committee.

Panel Name:

Panel on Public-Private Partnerships

Panel Members:

John J. Duncan, Jr. TN, Chairman
Candice S. Miller, MI
Lou Barletta, PA
Tom Rice, SC
Mark Meadows, NC
Scott Perry, PA

Michael E. Capuano, MA, Ranking Member
Peter A. DeFazio, OR
Eleanor Holmes Norton, DC
Rick Larsen, WA
Sean Patrick Maloney, NY

Rules and Procedures:

The panel is constituted under Rule XVIII of the Rules of the Committee on Transportation and Infrastructure to serve for a period of six months beginning on the date of its organization, February 11, 2014.

The panel will follow the rules and procedures of the Committee on Transportation and Infrastructure, as adopted by the Committee for the 113th Congress, in all of its meetings,

hearings, and other activities. These rules and procedures include the meeting, hearing, quorum, and record vote requirements of Committee rules.

Staffing:

The panel will be assisted by staff of the Committee on Transportation and Infrastructure designated by the Chairman and Ranking Member of the Committee for this purpose.

Work Plan:

The panel will examine the current state of P3s in the United States to identify: (1) the role P3s play in development and delivery of transportation and infrastructure projects in the United States, and on the U.S. economy; (2) whether P3s enhance the delivery and management of transportation and infrastructure projects beyond the capabilities of government agencies or the private sector acting independently; and (3) how to balance the needs of the public and private sectors when considering, developing, and implementing P3 projects.

In examining the Nation’s P3 opportunities, the panel will focus on three primary areas:

- The role P3s play in the development and delivery of transportation and infrastructure projects in the U.S., and on the U.S. economy—
 - How are P3s currently being utilized in the United States?
 - What are the benefits and costs associated with the use of P3s?
 - What are the impacts of P3s on the transportation network and system users?
 - What types of projects are well suited to P3s? What types of projects are not?
 - What lessons and best practices can be learned from previous P3s?
 - What can be learned from other countries’ use of P3s?
 - Within surface transportation, aviation, economic development, public buildings, water, and maritime infrastructure and equipment, are there opportunities to expand the use of P3s that are in the public interest?

- Do P3s enhance the delivery and management of transportation and infrastructure projects beyond the capabilities of government agencies or the private sector acting independently—
 - What are the differences in project delivery between P3s and traditional project delivery approaches?
 - What are the differences in long-term project management between P3s and traditional project management approaches, and potential benefits or costs of the different approaches?
 - Do P3s enable more innovative solutions to infrastructure challenges?
 - How is risk allocated across different P3 models?
 - Do P3s enable the public sector to better evaluate the long-term economic value of an asset?
 - Do P3s have an impact on surrounding infrastructure assets?
 - What role do federal credit programs play in P3 deals?

- How to balance the needs of the public and private sectors when considering, developing, and implementing P3 projects—
 - What makes a P3 successful from the public and private sectors' perspectives?
 - What role should the private sector play in funding or financing projects?
 - What factors should be considered by the public sector to evaluate whether P3s are a good deal for the taxpayer?
 - Are states and local governments well positioned to negotiate P3s?
 - What is the role of the federal government as it relates to P3s? What is the role of Congress and federal legislation? What type of congressional approval is appropriate when Executive Branch agencies engage in P3s?

In addition to these matters, the panel may examine other issues related to P3s at the request of the Committee's Chairman with the concurrence of the Committee's Ranking Member.

If you or your staff have any questions or need further information, please contact the Committee office at (202) 225-9446.

Sincerely,



Bill Shuster
Chairman



Nick J. Rahall, II
Ranking Member

Appendix B – Panel Activities

DATE	TITLE	PARTICIPANTS
February 11, 2014	Roundtable Policy Discussion – “Case Studies in Public-Private Partnerships”	<p>Greg Kelly, Global Chief Operating Officer, Parsons Brinckerhoff</p> <p>Jennifer Aument, Group General Manager, North America Transurban</p> <p>The Honorable Terri Austin, State Representative, General Assembly of the State of Indiana</p>
March 5, 2014	Hearing – “Overview of Public-Private Partnerships in Highway and Transit Projects”	<p>Joseph Kile, Assistant Director for Microeconomic Studie, Congressional Budget Office</p> <p>James M. Bass, Interim Executive Director and Chief Financial Officer, Texas Department of Transportation</p> <p>Phillip Washington, General Manager, Regional Transportation District</p> <p>Richard A. Fierce, Senior Vice President, Fluor on behalf of Associated General Contractors of America</p>

Appendix B – Panel Activities, Continued

DATE	TITLE	PARTICIPANTS
March 25, 2014	Roundtable Policy Discussion – “Overview of Public-Private Partnerships for Water Supply and Treatment”	<p>The Honorable Deborah Robertson, Mayor, City of Rialto, California</p> <p>Bruce Tobey, Partner, Pannone Lopes Devereaux & West LLC</p> <p>Dan Sugarman, Vice President, United Water</p> <p>Sandra Sullivan, President-Elect, National Center for Public-Private Partnerships</p> <p>Mitch Jones, Program Director, Food & Water Watch</p>
April 8, 2014	Hearing – “The International Experience with Public-Private Partnerships”	<p>The Honorable John Delaney, Member of Congress, Maryland</p> <p>Dr. Larry Blain, Chairman of the Board of Directors, Partnerships British Columbia</p> <p>David Morley, Vice President, Business and Government Strategy, Infrastructure Ontario</p> <p>Cherian George, Managing Director -- Americas, Global Infrastructure & Project Finance Fitch Ratings</p> <p>Matti Siemiatycki, Associate Professor, Geography and Program in Planning, University of Toronto</p>

Appendix B – Panel Activities, Continued

DATE	TITLE	PARTICIPANTS
April 30, 2014	Roundtable Policy Discussion – “The State Experience with Public-Private Partnerships”	<p>Douglas Koelemay, Director, Office of Transportation Public-Private Partnerships, Commonwealth of Virginia</p> <p>Leif A. Dormsjo, Deputy Secretary, Planning & Project Management, Maryland Department of Transportation</p> <p>Bryan A. Kendro Director, Office of Policy & Public Private Partnerships, Pennsylvania Department of Transportation</p> <p>Leon Corbett, Project Finance Manager, Florida Department of Transportation</p>
May 20, 2014	Roundtable Policy Discussion – “Public-Private Partnerships in Aviation”	<p>Emmett McCann, Partner, HighStar Capital</p> <p>Bob Montgomery, Vice President of Airport Affairs, Southwest Airlines</p> <p>Christopher Voyce, Senior Managing Director, Macquarie Capital (USA) Inc.</p> <p>Andrew (Gil) Morgan, Co-Founder, Propeller Investments</p>

<p>June 10, 2014</p>	<p>Roundtable Policy Discussion – “Innovative Approaches to Delivering Public Buildings”</p>	<p>David Winstead, Counsel, Ballard Spahr</p> <p>Samara Barend, Senior Vice President, AECOM Capital</p> <p>Michael Pikiel, Partner, Norton Rose Fulbright</p> <p>Shahrazad Habibi, Research and Policy Director, In The Public Interest</p>
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Appendix B – Panel Activities, Continued

DATE	TITLE	PARTICIPANTS
June 16, 2014	Roundtable Policy Discussion - “Ways the Financial Community Can Invest in Infrastructure by Using Public-Private Partnerships”	<p>Jamison Feheley, Managing Director, J.P. Morgan</p> <p>Karl Kuchel, Chief Operating Officer, Macquarie Infrastructure Partners</p> <p>Thomas Osborne, Executive Director of Infrastructure, IFM Investors</p> <p>Elliot D. Sclar, Professor of Urban Planning and International Affairs, Columbia University</p>
July 10, 2014	Roundtable Policy Discussion – “Public-Private Partnerships for America’s Waterways and Ports”	<p>Jim Hannon, Chief of Operations and Regulatory Division, U.S. Army Corps of Engineers</p> <p>John Crowley, Executive Director, National Association of Waterfront Employers</p> <p>Mike Toohey, President and Chief Executive Officer, Waterways Council, Incorporated</p> <p>Dave Kronsteiner, President of the Board of Commissioners, Port of Coos Bay, Oregon</p>

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
PANEL ON PUBLIC-PRIVATE PARTNERSHIPS

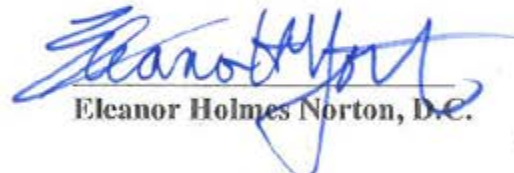

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