

**Testimony of Geoffrey S. Yarema
Chair, Infrastructure Practice Group, Nossaman LLP
Member, National Surface Transportation Infrastructure Financing
Commission**

**Before the
United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Highways and Transit**

***Hearing on "National Infrastructure Bank: More Bureaucracy & More Red
Tape"***

October 12, 2011

Chairman Duncan, Ranking Member DeFazio and members of the Subcommittee, thank you for inviting me to testify today. My name is Geoff Yarema. I chair the Infrastructure Practice Group at the law firm, Nossaman LLP. We advise state and regional transportation agencies around the country in the innovative procurement, contracting and financing of large transportation projects in ways that minimize the use of federal gas tax revenues.

Nossaman has assisted in the delivery of many of the signature projects that have utilized the foundational mechanisms provided by the existing surface transportation authorization bill, SAFETEA-LU, helping to build the next generation of transportation infrastructure. I was also privileged to serve, at the behest of former Secretary of Transportation Mary Peters, as a Commissioner on the National Surface Transportation Infrastructure Financing Commission (the "Financing Commission"). My testimony today reflects my experience on the ground advising public agencies and my two years of work on the Commission.

A. The Evolution of Federal Infrastructure Funding.

As the Subcommittee is well aware, the role of the federal government in delivering large transportation infrastructure projects is changing. Historically, the function of the federal government has been to provide both funding and to regulate how that funding is spent.

Today, federal resources for transportation infrastructure fall far short of need and the expectation that the federal government would or could fix the nation's aging surface transportation system with a direct infusion of federal dollars is fading. Compelled by these very real fiscal constraints, the federal government has been moving away from the traditional, apportionment-based funding paradigm and toward a credit assistance and incentives-based model that

leverages fewer federal dollars to maximize local, state and private contributions to finance large transportation projects of regional and national significance.

B. The Evolution Is Already Underway.

This shift in thinking about the federal government's role in financing transportation infrastructure is evidenced by one of the key components of President Obama's proposed Jobs Act: the much-buzzed about national infrastructure bank. The concept, as the President has explained it, would be to use federal dollars to leverage private investment to finance large public works projects. The President has touted the ability of an infrastructure bank to harness substantial private and other non-Federal dollars for capital-intensive projects, including transportation projects that are critical to mobility, goods movement and economic growth. Frankly, I couldn't agree more.

I couldn't agree more because, as far as transportation projects are concerned, we already have a national infrastructure bank – it's called TIFIA. Authorized by the Transportation Infrastructure Finance and Innovation Act, the TIFIA program has been providing federal credit assistance to large-scale highway, transit and rail projects since 1998. In the 12 years that the U.S. Department of Transportation (the "USDOT") has been administering the TIFIA program, we have seen how effective federal offerings of low-cost financing can be in accelerating the delivery of qualified projects – projects that generate significant economic benefits, implement new technologies and attract private and non-Federal investment.

Under TIFIA, the USDOT helps project sponsors, including state departments of transportation, transit operators, local governments and private entities, to assemble project capital by providing long-term financial assistance in the form of secured loans, loan guarantees and letters of credit. Currently, TIFIA credit assistance is available to finance only 33% of the eligible costs of a project, the applicant needing to demonstrate the creditworthy means of repaying the TIFIA loan and funding the remaining two-thirds of eligible project costs from private investment, commercial loans, federal-aid highway or transit grants. In this way, TIFIA loans provide foundational financing that encourages public sponsors to identify and dedicate project funding from non-federal sources. Costs the U.S. Treasury incurs to provide TIFIA credit assistance typically amount to about 10% of the face value of the credit provided.

Therefore, every \$1 of TIFIA credit subsidy creates \$10 in the face amount of a loan, which in turn, helps finance a \$30 project. In terms more proportional to the scale of project eligible for TIFIA assistance, \$100 million in federal credit subsidy can result in \$1 billion in federal loans to support a \$3 billion project. With this unique level of leverage, TIFIA helps build major projects of regional and national significance at a relative bargain price to the federal government.

C. TIFIA Offers Significant Advantages That Can Be Realized Today

While promoting the concept of a national infrastructure bank, the President has rightly noted that "building a world class transportation system is part of what made us an economic superpower." I would suggest, however, that building a new bureaucracy to improve that system is an entirely avoidable diversion of limited federal resources. Instead, we should use the TIFIA program to help restore our nation's transportation infrastructure and regain the competitive advantage of a mobile economy.

1. Use Our Existing Tools

Unlike a newly-conceived national infrastructure bank, TIFIA – and all of the necessary authorizations and organizations required to implement and administer it – already exists. By using TIFIA to help finance improvements to the nation's surface transportation system, we avoid incurring the costs, delays and bureaucratic struggles inherent in creating a brand new governmental institution. The TIFIA program already has in place an established decision-making process, administrative regulations, a dedicated staff, guiding policies and procedures, and a successful 12-year track record as an institution. In a phrase, TIFIA is a proven, valuable and essential commodity.

2. Turn the Backlog Into Blueprints – Now

What the TIFIA program also has, as discussed in more specific detail below, is a backlog of applications for nationally significant projects totaling nearly \$30 billion. Although we do not typically think of an inventory of unrequited demand as an asset, the existing backlog means that the TIFIA program is already positioned to quickly help finance billions of dollars in new projects that might otherwise be delayed or deferred due to their size, complexity or the unpredictability of their revenue streams. These are large projects of regional or national significance that are cleared or are close to obtaining environmental clearance, have project sponsors assembling state, local and private capital to substitute for the diminished availability of federal tax dollars, and provide critical improvements to passenger and freight mobility in this country. With additional resources, TIFIA could get more projects currently stalled at the proposal stage to their groundbreaking ceremonies – and in short order.

3. Focus on Transportation

In addition to transportation infrastructure, the President's proposed national infrastructure bank would entertain applications for financing assistance from projects ranging from dams and levees to energy efficiency enhancements and transmission lines. What we conclude from the breadth of infrastructure classes that would be eligible to apply for the bank's maximum \$10 billion volume

of annual loans and loan guarantees, is that transportation will be fighting for this limited resource in much the same way constituencies of diverse interests and conflicting agendas fight over the General Fund.

TIFIA resources are dedicated to highways and transit projects. With TIFIA serving as the "national infrastructure bank" for transportation projects, the struggle for federal assistance among other forms of infrastructure would be eliminated.

4. Create Jobs

The projects financed through TIFIA will create jobs in enormous numbers – and quickly. According to the FHWA, 28,000 jobs are created for every billion dollars in transportation construction. If TIFIA were funded only to the extent of its existing \$30 billion backlog, it could create nearly one million jobs.

D. Modernize the TIFIA Process

Since the TIFIA program's inception in 1998, the USDOT has provided TIFIA assistance in excess of \$8 billion, supporting projects with a total capital value in excess of \$30 billion for less than \$1 billion in budget authority. We should build off of TIFIA's programmatic success by implementing several improvements to the program. The changes I propose would further induce non-federal public and private investment in our national transportation system and are as follows:

1. Size TIFIA to Meet Demand

As I discussed above, the demand for TIFIA's high-quality federal loans far exceeds the program's existing funding capacity. Currently, the TIFIA program is limited to \$122 million in annual budget authority. For fiscal year 2010, the USDOT received 39 applications, of which only four resulted in TIFIA allocations. On March 1, 2011, the USDOT received letters of interest for FY 2011 funding from 34 potential TIFIA applicants with a total estimated project cost of \$48.2 billion, a total TIFIA request of more than \$14 billion, requiring credit subsidies of roughly \$1.4 billion, more than 10 times the \$122 million available. A list of these applicants is attached.

The USDOT has selected 8 projects from that list to be funded from the FY 2011 TIFIA program, totaling upwards of \$1.8 billion in loans. While these allocations will help finance worthy projects, credit agreements to partially finance these select few fail to make a material dent in the backlog of qualified projects. Moreover, several of the projects that were selected were not invited to apply for the full amount of TIFIA funding that they had originally requested. Georgia's Northwest Corridor project, for example, originally solicited a TIFIA loan in the

amount of \$375 million out of \$1.43 billion in total project costs, but was invited to apply for up to \$270 million in TIFIA funding.

Our firm projects demand for TIFIA loans over the next three years to be well in excess of \$12 Billion per year, or \$1.2 Billion per year in needed credit subsidy. If the role of the federal government is to evolve away from directly funding transportation projects of national importance, it should evolve towards fulfilling the clamoring demand for leverage-making assistance that the federal government, as the "patient investor," is uniquely able to provide. Sizing TIFIA to meet this demand, thereby unleashing TIFIA's ability to mobilize investment from state, local and private sources, only makes sense in today's budgetary climate.

2. Refine TIFIA Based on its 12-Year History

In addition to funding the TIFIA program to meet legitimate demands, I recommend that certain substantive improvements to the TIFIA Program be adopted, summarized as follows:

- First Come, First Serve. The TIFIA program should be converted from a discretionary, competitive project selection process to a first come, first served, non-discretionary review to verify a project meets objective eligibility criteria. With enough resources to meet demand, the TIFIA program would not need to exercise discretion to turn down credit-worthy and legally compliant projects of regional and national significance.
- Funding Source. If TIFIA's budgetary authority is exhausted in any given fiscal year, the USDOT should be directed to give applicants the option to either use other funding sources to pay the credit subsidy amount, including Highway Trust Fund ("HTF") apportionment, or to roll their application into the next fiscal year.
- Expand Eligible Project Costs. The maximum TIFIA loan amount per project should be expanded to an amount equal to 49% of eligible project costs, including costs incurred at any time before application submission. By raising this limit, we can optimize state, local and private investment in major transportation projects.
- Eligibility Criterion. In order to protect against premature application for TIFIA credit assistance, we should add an eligibility criterion that requires the project sponsor have commenced the process for contracting for construction or major equipment acquisition.

- Minimize Delay. The TIFIA program could be improved with the addition of provisions and procedures for the timely processing of applications and credit documents.

- Eliminate the "Springing Lien." Under current law, in the event that the borrower goes bankrupt or insolvent, the TIFIA loan "springs" to parity with any debt senior to TIFIA. This discourages the investment of private capital and decreases the value of TIFIA assistance, undermining the very purpose of the program. Congress should eliminate the "springing lien."

E. TIGER III – Obama's Litmus Test for Transportation Finance

In addition to the limited annual budgetary authority available through TIFIA, the American Recovery and Reinvestment Act of 2009 (ARRA or TIGER I) permitted the USDOT to fund up to \$250 million in TIFIA credit subsidy, but only \$60 million was used. The FY 2010 Appropriations Act (TIGER II) program permitted up to \$150 million in TIFIA credit subsidy, and, despite excellent applications, only \$20 million was used.

On April 15, 2011, the President signed the FY 2011 Continuing Appropriations Act (TIGER III), which appropriated \$526 million to be awarded by the USDOT for national infrastructure investments. As in FY 2010, approximately \$150 million of the total appropriation is permitted – at USDOT's discretion – to provide credit assistance to large-scale transportation projects. The deadline to submit letters of interest for this TIGER III appropriation is October 31, 2011. I strongly suspect that, at the end of this month, the Department will receive requests for assistance that far exceed the available \$150 million TIFIA allocation. If this scenario materializes, the USDOT will have to decide whether to exercise its discretion to maximize the leverage-making power of TIFIA by expending the total allowable allotment of TIGER III money for credit assistance. In making this decision, the USDOT and the Administration will be confronted with a very important policy question: whether a national infrastructure bank is essential to the federal role. If the President is as committed to the concept as his proposed Job's Act suggests, we should expect that all of the available allocation – some \$150 million – will be used to support \$1.5 billion in TIFIA credit assistance. TIGER III TIFIA should be too good an opportunity to pass up.

F. Conclusion

We can all agree that there are very real economic consequences to delaying the delivery of large-scale transportation infrastructure projects in the United States. At a time when federal funding is in scarce supply, we already have the tools to create powerful incentives for state, local and private entities to invest non-federal funds in large-scale transportation infrastructure projects of regional and national significance.

Thank you for the opportunity to offer my recommendations to refine and enhance the TIFIA "transportation bank" in order to help the United States accelerate the delivery of major transportation infrastructure projects and their associated benefits for economic growth. I am pleased to answer any questions and to otherwise assist the Committee in any way.

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
Truth in Testimony Disclosure

Pursuant to clause 2(g)(5) of House Rule XI, in the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include: (1) a curriculum vitae; and (2) a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by an entity represented by the witness. Such statements, with appropriate redaction to protect the privacy of the witness, shall be made publicly available in electronic form not later than one day after the witness appears.

(1) Name:

GEOFFREY S. YAREMA

(2) Other than yourself, name of entity you are representing:

NOSSAMAN .LLP

(3) Are you testifying on behalf of an entity other than a Government (federal, state, local) entity?

YES

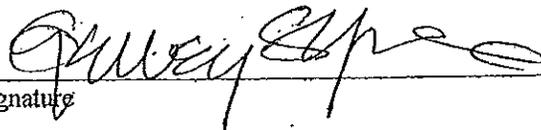
If yes, please provide the information requested below and attach your curriculum vitae.

NO

(4) Please list the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by you or by the entity you are representing:

SEE ATTACHED

Signature



Date

10/7/11

ATTACHMENT

GEOFFREY YAREMA
TRUTH IN TESTIMONY DISCLOSURE
MARCH 11, 2011

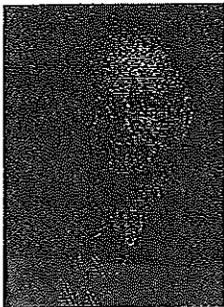
Please list the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by you or by the entity you are representing:

FY 2011 - \$40,500 subcontract with Battelle Memorial Institute, which holds a prime contract with the Federal Highway Administration, Office of Acquisition Management.

FY 2011 – various prime contracts with the Federal Deposit Insurance Corporation.

FY 2011 – \$100,000 subcontract with Parsons Brinckerhoff, which holds a prime contract with the Transportation Research Board that is funded by the Federal Highway Administration through the National Cooperative Research Programs.

FY 2011 - \$20,000 subcontract with Cambridge Systematics, which holds a prime contract with the Transportation Research Board that is funded through the Federal Highway Administration through the National Cooperative Research Programs.



Geoffrey S. Yarema | Partner

Geoffrey S. Yarema, Chair of Nossaman's Infrastructure Practice Group, is a nationally recognized leader in infrastructure development and finance. He has helped pioneer innovative procurement, contracting, and financing structures for large public works projects throughout North America and has proven himself an essential advisor to public agencies seeking to make effective use of innovative forms of contracts including: design-build, design-build-operate-maintain, toll concession, availability payment, pre-development, and other kinds of public-private partnerships.

With three decades of experience in the field, Mr. Yarema has been sought out by more than 25 U.S. state departments of transportation and regional transportation agencies, frequently called upon to act as Special Assistant Attorney General on groundbreaking infrastructure projects with career-betting importance.

Mr. Yarema's work and prominence in the industry have been widely recognized and honored. In 2010, Chambers and Partners recognized him as a leading lawyer nationally in the field of public-private partnerships and described him as one of the "most influential attorneys in the business." He served as a key commissioner, appointed by former U.S. Secretary of Transportation Mary Peters, to the Congressionally mandated National Surface Transportation Infrastructure Financing Commission, which released its final report in 2009. In 2008, the American Road and Transportation Builders Association named Mr. Yarema as the private sector individual who had contributed most significantly, over the last 20 years, to public-private partnerships in the U.S. transportation sector. *Public Works* magazine named him a "2007 Trendsetter" and *California Lawyer* magazine ranked him among the state's top 25 attorneys in 2000.

Practice Areas & Industries

- Infrastructure
- Public Agency
- Transportation
- Construction
- Finance

Representative Work

- **Texas Department of Transportation.** Leads a team serving as Special Counsel on the largest PPP program in U.S. history, structuring procurement and contract documents, negotiating concession agreements and closing innovative financing arrangements (including securing the US Department of Transportation's largest TIFIA loan commitment to date) for a pipeline of projects worth more than \$8 billion. Recent projects include:
 - **State Highway 130, Segments 5&6.** Served as legal advisor on the negotiation of a public-private partnership to design, build, finance and operate a 41-mile toll road between San Antonio and Austin. A consortium of Cintra and Zachry is developing the project under a 50-year comprehensive development agreement, the first toll concession agreement in Texas history that reached financial close on March 6, 2008 with a total project value of \$1.36 billion. The finance package includes \$683 million in commercial debt, \$197 million of private equity, \$430 million TIFIA loan, and smaller contingency facilities. The project was named the 2008 Transportation Deal of the Year by *Project Finance* magazine. The firm continues to assist with the administration of the concession agreement.
 - **North Tarrant Express.** Serving as legal advisor on the procurement of a public-private partnership to design, build, finance and operate managed lanes and upgrade existing facilities along a 36-mile corridor in Dallas and Tarrant counties. The first segment will be developed through a toll concession agreement. Federal credit assistance in the form of a conditional TIFIA loan commitment and reservation of funding, and an allocation of private activity bonds has been secured. A pre-development agreement will cover the potential development of additional segments. Construction costs for the entire project are estimated at more than \$2 billion. Financing includes \$570 million of state funds, \$400 million of senior bond debt, a \$650 million TIFIA loan, and \$420 million of private equity. The project as a whole reached commercial close in June 2009, and financial close for the first segment in December 2009. The project was awarded the 2010 Co-Project of the Year by the American Road & Transportation Builders Association and the *Infrastructure Journal* named it the 2009 Global Transport Deal of the Year.

- **LBJ Express (IH 635).** Serving as legal advisor on the procurement of a public-private partnership to design, build, finance and operate a managed lanes project in Dallas. The 25-mile project includes the construction of new managed lanes and improvement of existing facilities, with expected capital costs of \$1.3 billion. Federal credit assistance in the form of a conditional TIFIA loan commitment and reservation of funding, and an allocation of private activity bonds has been secured. Financing includes \$489 million in public funds, \$664 million in equity, federal credit assistance in the form of a conditional \$850 million TIFIA loan commitment and reservation of funding, as well as \$615 million in private activity bonds. The project is the first to be accepted into the FHWA Express Lanes Demonstration Program. The project was awarded the 2010 Co-Project of the Year by the American Road & Transportation Builders Association.
- **DFW Connector.** Serving as legal advisor on the procurement of a design-build contract to develop a 14.4-mile managed lanes project that will rebuild portions for four highways, two interchanges and five bridges in the Dallas / Fort Worth area at an estimated project cost of over \$1 billion dollars. The project is under construction and is anticipated to be completed by 2014.
- **California Department of Transportation – Presidio Parkway Program.** Assisting Caltrans with policy issues, development of procedures and methodologies for implementation of the contracting program and review of proposed PPP legislation. Initial work included various presentations to governmental agencies and industry stakeholders. Assisting Caltrans in procuring projects including procurement guidance, drafting project contracts, and advising on financial issues.
- **Port of Long Beach, California - Gerald Desmond Bridge.** Serving as lead legal advisor on an estimated \$1 billion plan to replace the Gerald Desmond Bridge using the authority granted by California's design-build demonstration program. As the first cable-stayed bridge ever built in California, the project is expected to be a landmark structure for the Port and surrounding communities. The Bridge will enable post-Panamax ships greater access to the Port of Long Beach and the adjoining Port of Los Angeles.
- **Georgia Department of Transportation – West by Northwest Managed Lanes.** Serves as legal advisor to assist in screening projects for PPP suitability, developing optimal PPP delivery strategies for selected projects, educating public officials and project stakeholders on private sector value, counseling and documenting risk allocations, drafting procurement and contract documents, and supporting requests of USDOT for approvals, funding and financing assistance.
- **Los Angeles County Metropolitan Transportation Authority – PPP Program.** Advising the Authority on the development of its PPP program, as part of a consortium of consultants known as P3LA, and is assisting in screening projects for PPP suitability. Completed an initial screening of 60 potential PPP projects and approved strategic studies for five new PPP projects: Crenshaw/LAX Transit Corridor; SR-710 North Extension; High Desert Corridor; Regional Connector Transit Corridor; and Westside Subway Extension.
- **Virginia Department of Transportation.** Serving as Special Assistant Attorney General assisting with the implementation of its Public-Private Transportation Act, including: negotiating a comprehensive agreement for the \$323 million, 9-mile Pocahontas Parkway and James River Bridge Crossing; and advising on its latest procurement for U.S. Route 460, a 55-mile toll project.
- **Metropolitan Transportation Commission/Bay Area Toll Authority.** Retained as special counsel to advise on negotiation of PPP transactions arising out of a 700-mile network of express toll lanes planned for the 9-county San Francisco Bay Metro area.
- **British Columbia Ministry of Transportation and Partnerships British Columbia – Sea-to-Sky Highway Improvement Project.** Key advisor on the procurement and award of an availability payment contract to reconstruct the 110-kilometer, CDN\$600 million highway critical to the 2010 Winter Olympics.

- **Washington State Department of Transportation – Tacoma Narrows Bridge Span.**
Served as Special Assistant Attorney General, negotiating a PPP to develop a new \$840 million bridge span over Puget Sound, the first major suspension bridge in the United States in 30 years, using the state's first major design-build transportation contract.
- **New Jersey Transit Corporation – Hudson-Bergen Light Rail Transit System.**
Assisted in the preparation of enabling legislation, request for proposals, analysis of applicable federal requirements, drafting of contract documents, support for contract administration and assistance with innovative finance arrangements for the \$1.9 billion light rail transit system, the state's largest public works project and the first DBOM transit contract in the United States.

Professional Affiliations

National Surface Transportation Infrastructure Financing Commission: Member (2007-2009)
Keston Institute for Public Finance and Infrastructure Policy, University of Southern California: Member of the Advisory Board (2006-Present)
National Academies of Science, Transportation Research Board (TRB): Member, Taxation and Finance Committee (2001-2009)
American Road and Transportation Builders' Association: Past Member, Executive Committee and Board of Directors; Design-Build Task Force; Past President and Current Member, Board of Directors, Public-Private Ventures Division; Co-Chair, Finance Working Group, TEA-21 Reauthorization Task Force.
Lecturer, American Association of State Highway and Transportation Officials (AASHTO) Project Finance Institute

Selected Presentations and Publications

- Speaker, "The Future of Transportation Funding - The Continuing Dialogue," Florida Transportation Commissions and TEAMFL Joint Annual Meeting, Orlando, FL, January 21, 2011.
- Speaker, "Applying Innovative Financing Tools to New Highway Construction: A Tale of Two States," and "The Future of Transportation Financing," American Council of Engineering Companies 2010 Fall Conference, Puerto Rico, October 18, 2010.
- Speaker, "Enhancing the Ability of the States to Finance Transportation Projects of National and Regional Significance: the Evolving Role of the Federal Government," AASHTO Center for Excellence in Project Finance Congressional Forum on Funding and Financing Solutions for Surface Transportation, Washington, DC, September 30, 2010.
- Speaker, "Selecting P3s for Procurement: Evolving from Episodic to Programmatic - US Public Sector Decision-Making," Transportation Research Board Conference on Surface Transportation Finance in the U.S., New Orleans, LA, May 20, 2010.
- Speaker, "Leveraging Private Capital for California's Infrastructure Needs," State Bar of California Real Property Law Section 29th Annual Retreat, Napa, CA, May 2, 2010.
- Speaker, "P3 Successes and Lessons Learned," Transportation Research Board 89th Annual Meeting, Washington, DC, January 10, 2010.
- Speaker, "Public-Private Partnerships: Now More Than Ever," American Road & Transportation Builders Association's (ARTBA) 21st Annual Public-Private Ventures Conference, Washington, DC, September 24, 2009.
- Speaker, "The Future of US Transportation Financing," US P3 Infrastructure Finance Forum 2009, New York, NY, June 18, 2009.
- Co-Author, "Paying Our Way: A New Framework for Transportation Finance" *Report of the National Surface Transportation Infrastructure Financing Commission*, Released February 26, 2009.
- Speaker, "Report from the Surface Transportation Infrastructure Finance Commission" and "Funding and Financing Transportation Infrastructure: The Future Role," Transportation Research Board 88th Annual Meeting, Washington, DC, January 11-12, 2009.

- Co-Author (with Barney Allison), "**National Infrastructure Reinvestment Corporation: A Proposed Refinement of the "Bank" Concept to Optimize Economic Benefits and Leverage Federal Investment,**" *Public Works Financing*, December 2008.
- Speaker, "**Owner Led P3 Model,**" Construction Industry Round Table (CIRT) Fall Conference, Santa Barbara, CA, November 12, 2008.
- Speaker, "**Funding and Financing Transportation Infrastructure: The Future Role,**" TRB 47th Annual Workshop on Transportation Law, San Diego, CA, July 7, 2008.
- Speaker, "**Vision: Funding As It Could Be,**" Third Annual Texas Transportation Forum, Austin, TX, April 20, 2008.
- Speaker, "**A Perspective from the National Commission on Surface Transportation Infrastructure Financing, Roundtable Discussion and Feedback Forum,**" TRB's 87th Annual Meeting, Washington, D.C., January 13, 2008.
- Speaker, "**Renewing California's Infrastructure: Finding a Way Forward, Enabling Legislation in California,**" Collaboratory for Research on Global Projects, Stanford University, Palo Alto, CA, October 26, 2007.
- Speaker, "**PPPs: Decisions on Ownership and Project Delivery,**" Oklahoma House Transportation Interim Study. Oklahoma, City, OK, September 18, 2007.
- Speaker, "**How PPPs Can Create Project Efficiencies,**" Third National TRB Conference on Performance Measurement, Irvine, CA, September 12, 2007.
- Co-Author (with Brian Papernik), "**PPPs: Recent Developments in the U.S. Transportation Sector,**" *Privatisation & Public Private Partnership Review 2007/08* (Euromoney Yearbooks), July 2007.
- Speaker, California State Senate Transportation and Housing Committee hearing on **Tolls; User Fees and Public-Private Partnerships: The Future of Transportation Finance**, Sacramento, CA, January 17, 2007.
- Speaker, "**State DOT Considerations in Concession Decisions,**" AASHTO Annual Meeting, Portland, OR, October 29, 2006.
- Speaker, "**Public-Private Partnerships: Public Sponsor Decisions on Ownership and Project Delivery,**" WASHTO 2006 Annual Conference, Honolulu, HI, August 30, 2006.
- Co-Author (with Fred Kessler), "**Public-Private Partnerships: A Sea Change in the U.S. Transportation Sector,**" *Privatisation & Public Private Partnership Review 2006/07* (Euromoney Yearbooks), July 2006.
- Keynote Speaker, "**Market Overview: How the US P3 Toll Road Market Developing and Thoughts on Issues Facing the Market,**" U.S. PPP Forum 06, presented by P3 Americas, New York, NY, June 6, 2006.
- Speaker, "**Strategic Growth: Building Infrastructure Through PPPs,**" Presentation to Governor Schwarzenegger's Council of Economic Advisors, Sacramento, CA, February 2, 2006.
- Speaker, "**Capturing Equity Value Through PPP Procurements**" and "**Recent Trends and Innovations,**" TRB 85th Annual Meeting, Washington, D.C., January 23, 2006.
- Speaker, "**Projects of the Year**" and "**PPP Initiatives at the Federal and State Levels,**" 17th Annual ARTBA Conference on Public-Private Ventures in Transportation, Washington, D.C., October 7, 2005.
- Speaker, "**Concessions: A New Frontier,**" TRB 44th Annual Workshop on Transportation Law, Portland, OR, July 18, 2005.
- Lecturer, "**Assembling a Plan of Finance: Legal and Institutional Framework,**" AASHTO Project Finance Institute, Park City, UT, July 22, 2004.
- Speaker, "**Risk Allocation and Performance Outcomes in Highway Procurements: A Comparison of the UK and US Experience,**" Owner's International Construction Superconference, London, England, May 18, 2004.
- Keynote Paper Presenter, "**Meeting the TEA-21 Reauthorization Challenge: Will System Performance Continue to be Gone with the Wind?**", TRB's 3rd National Conference on Transportation Finance, Chicago, IL, October 2002.

Education

J.D., University of Virginia School of Law, 1978
Articles Editor, Virginia Journal of International Law
Recipient, Hardy Cross Dillard Prize on International Law
B.S., University of Florida, 1975, Phi Beta Kappa (Environmental Sciences)

Admitted

California