<u> Bio – Michael Bennon</u>



Michael Bennon is the Managing Director at the Stanford Global Projects Center, developing new initiatives for the GPC and managing its student programs and industry affiliations. Michael's research areas of interest for the center and work experience are in Project Finance, Public Sector Finance, Project Organization Design, Project Risk Assessment and in institutional design for project procurement organizations. Michael teaches Global Project Finance to graduate students at Stanford University and a weekly Global Projects Seminar showcasing innovative projects and research in the infrastructure development sector.

Prior to starting at Stanford, Michael served as a Captain in the US Army and US Army Corps of Engineers for five years, leading

Engineer units, managing projects, and planning for infrastructure development in the United States, Iraq, Afghanistan, and Thailand. As a Project Manager with the Corps, Michael managed the Hamilton Wetlands Restoration Project, a \$267mm wetland restoration and levee project, coordinating with federal, state and local agencies and the bay area dredging industry. Michael received his MBA and MSc in Engineering from Stanford University and completed his undergraduate degree in Civil Engineering at the United States Military Academy at West Point.

Michael currently sits on the Advisory Board of the West Coast Infrastructure Exchange and is a member of the Technology and Infrastructure subcommittee of San Francisco's Blue Ribbon Panel on Municipal Fiber.

The Stanford Global Projects Center is an interdisciplinary research center on innovation in infrastructure development and institutional investment. The center works with faculty across the university's schools of Engineering, Business, Public Policy, Law and economics to develop research and provide education to Stanford students and executives in the infrastructure finance and development sector. The center currently manages four research initiatives. Its institutional investment program works with a community of the largest global pensions, endowments and sovereign funds to develop research on institutional infrastructure allocations and the process of getting infrastructure allocations invested in assets. The Public Sector Procurement program studies best practices and policies for governments in managing alternative procurements and Public-Private Partnerships for infrastructure. Its Project Governance program studies the management of stakeholder relationships and power in large infrastructure project development. And finally its Digital Cities program studies technological adoption in municipalities and for the built environment, and technological innovation in infrastructure development writ large.

Recent and Current Research

U.S. Infrastructure Gap(s): Federal Policy and Local Public Institutions: Study of U.S. federal spending policy on infrastructure and the ways in which it stymies institutional development and innovation for U.S. state and municipal governments in the sector.

In-Kind Infrastructure for Public Pensions – the Case of Queensland Motorways: Study of direct pension investment program in Australia, brownfield Public-Private Partnerships in the U.S., and the policy and organizational changes necessary for direct pension investments in infrastructure.

Global Urbanization and Challenges Facing Mid-Sized Cities – a Case of Busan, South Korea: A study of new city development including Special Economic Zones, Smart Cities and Connectivity, and Enterprise or Charter Cities.

Sharing the Big Risk: Study of the effectiveness of new revenue risk sharing mechanisms between governments and investors for transportation infrastructure.

Dutch Pensions Paving the Way for Infrastructure Development: Study of a pilot program in the Netherlands to implement direct investment initiatives for local public pension funds.

In Press or In Development

Municipal P3 Programs and Project Structuring Guidelines: Joint initiative with the Living Cities Foundation and the city of Washington D.C. to develop a guideline for U.S. cities in creating municipal Public-Private Partnership programs and in structuring P3s in the Municipal Sector.

When the Cars Don't Come – Demand Risk in Transportation Infrastructure and its Implications: Comparative study of multiple transportation assets in the United States that experienced financial distress and its implications given the financial structure and public or private management of the project.

U.S. Procurement Timelines and Transaction Costs: A study of early project development for U.S. transportation and municipal Public-Private Partnerships to examine the drivers of procurement duration and project cancellation.

Long-Term Partnerships between Governments and Public Pensions for Infrastructure Development: Study of a recent initiative in Quebec to create a long-term infrastructure investment program between the state and CDPQ – the local public pension.

Public-Private Partnership Structures for Municipal Fiber Networks: Study of a relatively new sector in municipal fiber networks and key risks associated with recent projects in the U.S. and internationally.

Risk-Based Flood Protection Infrastructure in the U.S.: A research initiative to study opportunities for risk-based flood protection infrastructure in the United States and policy impediments to innovation in the sector unique to the U.S., in addition to reforms of federal flood insurance policy.

Deferred-Maintenance Research Initiative: Multi-publication research initiative to study the causes and implications of deferred maintenance in public buildings and other infrastructure, in addition to reporting of deferred maintenance balances by city governments.

Cultural Attitudes towards Infrastructure Development - A Comparative study of Eastern and Western Bilateral Investments: A series of case studies and comparative analysis of multilateral and bilateral supported infrastructure, comparing practices by western institutions such as the World Bank with eastern bilateral investments by the China Development Bank and China Export-Import Bank.

Recent Presentations and Education

Stanford Investor Forum: Organizer of an annual gathering of family offices and institutional investors to discuss innovation and collaborative models for the sector and asset-backed investing.

Leadership Academy for Development: Instructor for a joint Stanford University and Johns Hopkins University program to provide executive education for public officials in developing economies on policy reforms to foster economic growth and private sector development in politically charged environments.

Municipal P3 Program Development and Project Structuring: Presentation to the 2017 Living Cities Cohort (Washington D.C., St. Paul, San Francisco, Pittsburgh) on Municipal P3 Program development and new models for municipal infrastructure investment and asset management.

Renewing American Infrastructure: Co-host of a 2017 infrastructure policy roundtable at Stanford University with the Center of Democracy, Development and the Rule of Law.

Cultural Change in Public Infrastructure Agencies: Presentation for the 2017 P3C Infrastructure Conference.

Infrastructure in the United States – Becoming Second to None: Panel presentation for the 2017 National Federation of Municipal Analysts Annual Conference.

State of U.S. Water P3 Investment: Panel presentation for the 2017 Infraamericas Annual Conference.

Public-Private Partnerships for Infrastructure Delivery: Instructor for 2017 Stanford executive education program for the National Training Service of Transport, Brazil.