



# Shalini Vajjhala, PhD

Executive Director

## Education

Ph.D. in Engineering & Public Policy—Carnegie Mellon University, Pittsburgh, PA, 2005

M.S. in Engineering & Public Policy, 2001—Carnegie Mellon University, Pittsburgh, PA, 2001

B.Arch in Architecture, 2001—Carnegie Mellon University, Pittsburgh, PA, 2001

## Experience

### **Executive Director, PRE Collective, San Diego, CA — 2022-present**

PRE Collective is a national non-profit that aims to change how public infrastructure design, planning, and funding processes serve communities' deepest needs and highest ambitions. We are building the field of predevelopment practitioners who can implement and scale sustainable, equitable infrastructure projects. By engaging early and often, and connecting the building blocks needed, we bond ambitious ideas, teams, and resources together to create space for transformational infrastructure and enduring impact.

### **Founder & CEO, re:focus partners, San Diego, CA — 2012-present**

#### **Co-founder, The Atlas, San Diego, CA — 2016-2020**

re:focus partners, llc is a design firm dedicated to developing integrated resilience solutions and creative public-private partnerships for communities around the world. Through multi-year programs like the RE.invest Initiative and the RE.bound Program and spin-off companies like The Atlas, the re:focus team identifies systemic opportunities for design, finance, and procurement innovation to create public value and private investment potential through infrastructure projects with economic, social, and environmental integrity for the communities they serve. More at: [www.refocuspartners.com](http://www.refocuspartners.com) and [www.the-atlas.com](http://www.the-atlas.com).

### **Visiting Associate Professor of Environmental Policy, Johns Hopkins University, School of Advanced International Studies (SAIS), Washington, DC — 2013-2014**

Designed and taught courses in the Energy, Resources & Environment program on International Environmental Diplomacy (Spring 2013) and Case Studies in Sustainable Development (Spring & Fall 2013, Spring 2014) and developed an online case study series (30 published cases via University of Washington).

### **Special Representative, Office of the Administrator, U.S. EPA — 2011-2012**

Appointed to the position of Special Representative in the Office of Administrator Lisa Jackson to lead the US-Brazil Joint Initiative on Urban Sustainability (JIUS), a bilateral partnership announced by President Obama and Brazilian President Dilma Rousseff in March 2011. The JIUS was charged with catalyzing investment in green and smart infrastructure, technology and services, especially for poor and underserved urban communities, and demonstrating how environmental protection can serve as a driver for economic growth and job creation in building the greener economies and smarter cities of the future.

**Deputy Assistant Administrator, Office of International & Tribal Affairs**

**U.S. EPA, Washington, DC — 2009-2011**

Managed ~90 staff and a ~\$100 million budget focused on developing and implementing innovative technical and policy programs to advance US interests in cooperation with Tribal and foreign governments. Helped develop and lead multiple interagency initiatives and partnerships to show how environmental protection can serve as a driver for economic growth, including the [US-Brazil Joint Initiative on Urban Sustainability](#), the [National Strategy on Electronics Stewardship](#), and the [EPA Tribal Ambassadors Program](#).

**Deputy Associate Director for Energy & Climate, White House**

**Council on Environmental Quality, Washington, DC — 2009**

Coordinated early Obama Administration energy and environmental initiatives with key Federal agencies, including transmission grid policy and the launch of an interagency climate change adaptation task force.

**Fellow, Resources for the Future, Washington, DC — 2005-2009**

Conducted research focused on novel applications of spatial analysis tools and methods to evaluate cross-cutting public policy issues, including siting major energy facilities, implementing environmental justice policies, managing carbon sequestration, facilitating community-based natural resource management, and adapting to climate change. Awarded a patent for development of the Adaptation Atlas (March 2013).

**Consultant, World Bank, Lesotho — 2005**

Co-led a World Bank field team working with rural villagers in Lesotho to identify gender differences in mobility and access and evaluate opportunities for participatory planning of transport infrastructure and health service-delivery using hand-drawn mapping and GIS.

**Project Manager, Community Partners Institute, Pittsburgh, PA — 2001-2003**

Designed a series of participatory mapping workshops to integrate local maps with city-plans as part of an initiative to reconnect low-income neighborhoods with historically industrialized urban riverfronts.

**Adjunct Instructor, Carnegie Mellon University School of Architecture, Pittsburgh, PA — 2002-2003**

Member of the design studio faculty in the 5th-year Urban Lab; developed and taught a class focused on the links between architecture, community, and design in a local urban context.

**Intern Architect, Loysen + Associates Architects, Pittsburgh, PA — 1999-2001**

Project design-team member; developed construction documents and presentations; built physical and CAD models; coordinated projects with clients, contractors, and communities.

## **Publications**

### ***Peer-Reviewed Articles and Academic Publications***

Vajjhala, S.P., ed. (2015). Case Studies in Sustainable Development. University of Washington Electronic Hallway: <http://hallway.evans.washington.edu/cases/search/partnership/3546>

Bandza, A. J. and Vajjhala, S. P. (2013), Modeling the Transition from Enhanced Oil Recovery to Geologic Carbon Sequestration. *Managerial and Decision Economics*. doi: 10.1002/mde.2603

Vajjhala, S.P. (2012). Public Participation and Spatial Information. In S. Emerman, J.S. Schneiderman, M. Bjornerud, and S.A. Levy (eds.), *Liberation Science: Putting Science to Work for Social and Environmental Justice*. Lulu Press (ISBN 978-1-300-43792-5)

Stephens, J. C., Hansson, A., Liu, Y., Coninck, H. d., and Vajjhala, S. (2011). Characterizing the International Carbon Capture and Storage Community. *Global Environmental Change* 21(2): 379-390.

Pollak, M., Phillips, S.J., and Vajjhala, S. (2011). Carbon capture and storage policy in the United States: A new coalition endeavors to change existing policy. *Global Environmental Change* 21(2): 313-323.

Vajjhala, S.P. and Walker, W.M. (2010). Roads to Participatory Planning: Integrating Cognitive Mapping and GIS for Transport Prioritization in Rural Lesotho, *Journal of Maps: Special Issue on Cognitive Mapping and Participatory Research* v2010: 488-504. 10.4113/jom.2010.1086

Walker, W.M. and S.P. Vajjhala (2010). Gender and GIS: Mapping the Links between Spatial Exclusion, Transport Access, and the Millennium Development Goals in Lesotho, Ethiopia, and Ghana. *Journal of Community Informatics*. Double Issue: Gender and Community Informatics. Vol. 5 No. 3 & Vol. 6 No. 1.

Vajjhala, S.P. (2010). Building community capacity? Mapping the scope and impacts of EPA'S environmental justice small grants program. In Dorceta E. Taylor (ed.), *Environment and Social Justice: An International Perspective*, *Research in Social Problems and Public Policy*, Emerald Group Publishing Limited, Volume 18, pp.353-381.

Wilson, E.J., M. Granger Morgan, J. Apt, M. Bonner, C. Bunting, M. de Figueiredo, J. Gode, C. Jaeger, D. Keith, S. McCoy, R. S. Haszeldine, M. Pollak, D. Reiner, E. Rubin, A. Torvanger, C. Ulardic, S. Vajjhala, D. Victor, I. Wright (2008). Regulating the Geological Sequestration of Carbon Dioxide. *Environmental Science & Technology* 42(8): 2718–2722.

Vajjhala, S. P. and P. S. Fischbeck (2007). Quantifying Siting Difficulty: A Case Study of U.S. Transmission Line Siting. *Energy Policy* 35(1): 650-671.

## **Major Reports**

For a complete list of re:focus partners' reports see: [www.refocuspartners.com/library](http://www.refocuspartners.com/library)

Shalini Vajjhala, 2020. "Mobilizing Capital for Natural Infrastructure in Canada: A guide for project champions and funders." IISD, November 2020 (with contributions by Dimple Roy).

Lloyd's of London, 2018. "Innovative Finance for Resilient Infrastructure." London, U.K., Innovation Report Series: Understanding Risk, October 2018 1-56. (contributing author).

Shalini Vajjhala and Ellory Monks, 2018. "A Toolkit for Procuring Resilience." re:focus partners (69pp.), September, 2018.

Resilient by Design, 2017. "Finance Guide: Resilient by Design Bay Area Challenge." San Francisco, CA, December 2017, NHA Advisors 1-54. (contributing author).

Shalini Vajjhala and James Rhodes, 2017. "A Guide for Public-Sector Resilience Bond Sponsorship." re:focus partners (35pp.), September, 2017.

Shalini Vajjhala and Ellory Monks, 2017. "A Field Guide to CSO+: Unlocking Resources for Managing Combined Sewer Overflows." re:focus partners (30pp.), March 2017.

Shalini Vajjhala and James Rhodes, 2015. "Leveraging Catastrophe Bonds as a Mechanism for Resilient Infrastructure Project Finance." re:focus partners (70pp.), December 2015.

Shalini Vajjhala and Elle Hemen, 2015. "A Roadmap for Resilience." re:focus partners (98pp.), March 2015.

National Commission on Energy Policy, 2006. "Siting Critical Energy Infrastructure: An Overview of Needs and Challenges." Washington, D.C., NCEP 1-42. (contributing author).

## **Short Articles and Discussion Papers**

For a complete list of see: [www.refocuspartners.com/library](http://www.refocuspartners.com/library) and <https://www.brookings.edu/author/shalini-vajjhala/>

E. Monks and S. Vajjhala, 2022. Transformative infrastructure funding is here. The application process for getting it still needs work. The Brookings Institution, July 11, 2022.

Vajjhala, S. 2021. Texas has lessons for all of us on infrastructure resilience. The Hill. Opinion: Energy & Environment. March 8, 2021.

Kane, J.W., J. Schuetz, S. Vajjhala, and A. Tomer, 2021. How a federal Climate Planning Unit can manage built environment risks and costs. The Brookings Institution, March 1, 2021.



Vajjhala, S. and J.W. Kane, 2020. Four steps to undo the harms of legacy infrastructure in the COVID-19 recovery. The Brookings Institution, December 17, 2020.

Kane, J.W. and S. Vajjhala, 2020. Prioritize people, not projects: Addressing the harms of legacy infrastructure in the COVID-19 recovery. The Brookings Institution, December 17, 2020.

Vajjhala, S. and J.S. Rhodes, 2019. Insurance Innovation and Community-Based Adaptation Finance. Federal Reserve Bank of San Francisco, Community Development Innovation Review 2019-1. Available at <https://doi.org/10.24148/cdir2019-01>

Vajjhala, S., 2019. How a scrappy federal IT program can be a model for US climate action. The Brookings Institution, September 24, 2019.

Vajjhala, S., 2019. The danger of a \$2 trillion infrastructure promise. The Brookings Institution, May 28, 2019.

Vajjhala, S., 2018. On Procurement Innovation. CitySpeak (Medium), March 29, 2018.

Vajjhala, S. and E. Monks, 2018. Better procurement tools can improve urban resilience. The Brookings Institution, December 3, 2018.

Vajjhala, S. and E. Monks, 2018. Investing in better procurement processes can enable better infrastructure outcomes. The Brookings Institution, November 26, 2018.

Vajjhala, S. and E. Monks, 2017. A road map to tackle America's infrastructure maintenance crisis. The Brookings Institution, November 9, 2017.

Vajjhala, S., 2017. Making the leap from disaster relief to resilience. The Brookings Institution, October 4, 2017.

Vajjhala, S., 2017. Setting a new high water mark for federal disaster funding. The Brookings Institution, August 31, 2017.

Vajjhala, S. and A. Seville, 2017. Legacy infrastructure and the challenge of procuring urban resilience. The Brookings Institution, June 5, 2017.

Vajjhala, S., 2017. An Open Letter to Infrastructure Funders and Investors. April 12, 2017.

Vajjhala, S. and E. Hempen, 2017. Innovative Financing and the Myth of the Shovel-Ready Project. Meeting of the Minds, April, 11, 2017.

Vajjhala, S., 2015. A Roadmap for Resilient Infrastructure Investment. Huffington Post, March 25, 2015.

Vajjhala, S., 2014. Prevention Is Key to Building Resilient Cities. Huffington Post, October 22, 2014.

Vajjhala, S., 2014. Funneling Funding in to Resilience. Huffington Post, May 30, 2014.

Vajjhala, S., 2014. Data is Information, Not an Answer. Huffington Post, April 29, 2014.

Vajjhala, S., 2013. What Cities Can Do to Prepare Themselves for Increasingly Severe Weather. Huffington Post, December 12, 2013.

Vajjhala, S., 2012. The Next 20 Years of Sustainable Development. American Chamber of Commerce. Brazilian Business Edição 274: 24-25.

Vajjhala, S. and J. Nackoney, 2008. The New Cartography of Climate Change, Resources, RFF Fall 2008 (167).

Vajjhala, S.P. Siting Difficulty and Transmission Investment. IAEE Energy Forum. 2nd Quarter 2008, pp. 5-7.

Blonz, J.A., Vajjhala, S.P. and E. Safirova, 2008. Growing Complexities: A Cross-Sector Review of U.S. Biofuels Policies and Their Interactions. RFF Discussion Paper 08-47. December 2008.

Vajjhala, S. P., Van Epps, A. and S. Szambelan, 2008. Integrating EJ into Federal Policies and Programs: Examining the Role of Regulatory Impact Analyses and Environmental Impact Statements. RFF Discussion Paper 08-45. October 2008.

National Commission on Energy Policy, 2006. Siting Critical Energy Infrastructure: An Overview of Needs and Challenges. Washington, D.C., NCEP 1-42. (contributing author).

Vajjhala, S., 2006. Where do we put all those windmills? Denver Post, Guest Commentary (April 2), p. 3E.

Vajjhala, S.P. "Ground Truthing" Policy: Using Participatory Map-Making to Connect Citizens and Decision Makers. Resources, RFF Summer 2006 (162).

Walker, W. M., S. P. Vajjhala, et al., 2005. Ground-Truthing: Mapping Mobility and Access in Rural Lesotho. Washington, DC, The World Bank: 1-52.

Vajjhala, S. P., 2005. Integrating GIS and Participatory Mapping in Community Development Planning. ESRI International User Conference Proceedings, San Diego, CA, ESRI.

## **Selected Academic Presentations**

"Finance Perspectives on Climate and Infrastructure." Arthur L. Irving Institute for Energy and Society Energy Seminars. Dartmouth University, March 2021.

"A Conversation about Climate Change Mitigation and Resilience." Part 6: Brookings Blueprints for American Renewal & Prosperity Event Series. The Brookings Institution, March 2021.

"Sustainable Capitalism: Actually Building Things (Part 2). Water: Sea Level Rise, Flooding and Drought" Harvard Business School, March 2021.

"Building Community Resilience: A Career in Architecture, Engineering, Policy and Entrepreneurship." 6th Annual Sternberg Family Lecture in Public Scholarship, The City College of New York, October 2019.

"Innovative Funding Strategies and Opportunities for Community Resilience." Houston Advanced Research Center, September 2018.

"Designing, Planning & Paying for Resilience." Rice University Kinder Institute for Urban Research, June 2018.

"Capturing Value for Resilient Infrastructure Project Finance." AB2800 Climate Safe Infrastructure Working Group Webinar, May 2018.

"Setting a Trillion Dollar Policy Agenda: Challenges and Opportunities for Resilient Infrastructure Design and Finance." Carnegie Mellon University Center for Climate and Energy Decision-Making, April 2018.

"Capturing Insurance Benefits from Resilient Infrastructure Projects." Stanford University Urban Resilience Initiative, Innovative Finance for Resilience Workshop, April 2017.

"Investing in Resilience, Reinvesting in Communities." University of California Berkeley BERG Energy Summit, October 2014.

"What's Next After Rebuilding? Making Resilience Happen" Lincoln Institute of Land Policy Symposium. Rutgers University Bloustein School of Planning & Policy, October 2014.

"Catalyzing Investment in Urban Sustainability." Georgetown University Mortara Center for International Studies, November 2013.

"Building Sustainable Cities: New Models for Public-Private Partnerships." Indiana University School of Environment and Public Affairs, September 2013.

"Brazil's Long To-Do List: The Prospects for Urban Sustainability in the Run-Up to the 2014 World Cup and 2016 Olympics." Johns Hopkins University School of Advanced International Studies (SAIS) Western Hemisphere Studies (WHS) Seminar Series, November 2012.

"Building a Global Adaptation Atlas: Setting Geographic Priorities for Funding Adaptation to Climate Change." ESRI Annual User Conference, San Diego, CA, July 2009; University of Gothenburg, Sweden, May 2009; Fondazione Enrico Eni Mattei, Venice, Italy, April 2009; and International Scientific Congress on Climate Change, Copenhagen, Denmark, March 2009.

"Mapping Global Adaptation Hotspots" University of Minnesota, Minneapolis, MN, February 2009 & Association of American Geographers Conference, Boston, MA, April 2008

"Examining the Role of RIAs and EISs in Integrating EJ into Federal Policies and Programs" Howard University School of Law, May 2008 & APPAM, Los Angeles, CA, November 2008.

"Can We Green the Grid? Linking Transmission and Renewable Energy Policies" Public Utility Research Center Conference, University of Florida, Gainesville, FL, February 2008

"Long-term Risks and Short-term Regulations: Making the Transition from Enhanced Oil Recovery to Carbon Sequestration" (with A. Bandza) 7th Annual CCS Conference, Pittsburgh, PA, May 6, 2008.

“Regulating Environmental Justice: Mapping the Scope and Impact of EPA EJ Small Grants Program” University of Michigan, Ann Arbor, MI, June 2007.

“Mapping Environmental Preferences for Ambiguous Natural Resources” Johns Hopkins University, Baltimore, MD, September 2007.

“Mapping the Millennium Development Goals: DHS, GIS, and the Transport Sector” (with W. Walker) Urban & Regional Information Systems Association, Washington, DC, August 2007.

“Rising to the Challenge: Integrating Social Sciences into NSF Environmental Observatories” Co-leader of a two-day RFF-NSF workshop, Arlington, VA, January 2007.

“Mapping Spatial Risks: Using Participatory Mapping and GIS as a Tool for Risk Communication” Society for Risk Analysis Annual Meeting, Baltimore, MD, December 2006.

“Siting Difficulty & Renewable Energy Development” INFORMS, Pittsburgh, PA, Nov. 2006.

“Participatory Spatial Decision Making” Institute for Resources, Environment and Sustainability, University of British Columbia, Vancouver, Canada, September 2006.

“Extending Participation: Do Participatory GIS Maps Communicate?” Royal Geographic Society of London Annual International Conference, London, UK, August 2006.

## **Fellowships, Grants and Awards**

Vajjhala, S. Global Adaptation Atlas. Patent No. 8392349. Awarded March 5, 2013.

Andrew W. Mellon Foundation. \$108,000 Mellon Fellowship in Environmental Regulatory Implementation to document federal and state environmental justice regulation and its impacts, June 2006 – May 2008.

Charles A. and Anne Morrow Lindbergh Fellowship. Awarded a \$10,580 grant for applied environmental research that promotes a sustainable balance between technology and nature, June 2003 – June 2004.

Information Week Fellowship. Awarded a \$10,000 grant from Information Week Magazine and the CMU Software Industry Center to study social applications of information technology, May 2001 – Sept. 2001.

National Science Foundation Undergraduate Research and Education Grant. Received a grant to design and conduct participatory mapping studies with six Pittsburgh communities, July 2001.

AIA Honor Award. Awarded the American Institute of Architects Pittsburgh Chapter’s highest honor for excellence in design as a member of the Loysen + Associates McN project design team, October 2000.

Stephen Omer Lee Outstanding Project Award. Awarded an Engineering and Public Policy departmental award for overall excellence in project course implementation, May 1999.

Andrew Carnegie Scholarship. Carnegie Mellon University, 1996-2001.



## Professional Activities

Testimony, Senate Banking, Housing, and Urban Affairs Committee, August 4, 2022.

Board Member, Smart Growth America, 2022-present.

Non-Resident Senior Fellow, The Brookings Institution, 2015—2021, 2023—present.

Term Member, Council on Foreign Relations (CFR), 2012-2017 (5-year term).

External Advisory Board Member (I2C2), World Bank Sustainable Development Network, 2012-2015.

Technical Grant Review Panel Member, Charles A. and Anne Morrow Lindbergh Foundation, 2005–2009.

Assessor, World Bank Development Marketplace, 2006–2007.

Media Interviews with the New York Times, Washington Post, CNN, NPR, San Francisco Chronicle, BBC Radio, Bloomberg, Reuters, Politico, National Journal, CSPAN, Congressional Quarterly, and the Chicago Tribune (more at <http://www.refocuspartners.com/library/>).

## Languages

Fluent in English and Telegu; Conversational in Hindi, Spanish, and French.

