# Carlos Eduardo Martín, PhD

### @carlosonhousing

Trained as an architect, construction engineer, and historian of technology, Dr. Martín connects the bricks and mortar of housing to social and economic outcomes of occupants, especially at the intersections of environmental and construction quality in housing with racial equity and income disparity.

For over 20 years, he has led evaluation, research, and policy analysis for federal, state, and civil-sector entities in the fields of energy efficiency, housing construction and design, climate mitigation and adaptation, disaster management, and energy and environmental justice. Recent publications include: *Public Funding of Coastal Adaptation: A Review of US Public Sources—and the Case for More; Understanding the Pace of HUD's Disaster Housing Recovery Efforts; Understanding US Housing Data in Relation to the 2017 Disasters; Housing Recovery on the Gulf Coast; Climate Change Mitigation & Adaptation through Publicly Assisted Housing, The Silence Before the Storm: Advocacy Groups' Current Perceptions of Future Climate Vulnerability; Insult to Injury: Natural Disasters and Residents' Financial Health;* and *Institutionalizing Urban Resilience*.

Currently, Dr. Martín is a David M. Rubenstein Fellow at the Brookings Institution's Metropolitan Policy Program and is the Director of the Remodeling Futures Program at Harvard University's Joint Center for Housing Studies. Dr. Martín previously led the Urban Institute's Built Environment practice area, leading all research on energy efficiency, climate adaptation, environmental governance, the housing industry, and construction regulations. Before Urban, Dr. Martín was assistant staff vice president for construction codes and standards at the National Association of Home Builders, SRP professor for energy and the environment at Arizona State University, and coordinator for the US Department of Housing and Urban Development's Partnership for Advancing Technology in Housing.

Carlos received his BSAD in architecture from the Massachusetts Institute of Technology and his MEng and PhD degrees in civil and environmental engineering from Stanford University.

# **EDUCATION**

PhD, Civil and Environmental Engineering, Stanford University, 1999
MEng, Civil and Environmental Engineering, Stanford University, 1995
Studies towards MArch (Architecture) and MS (Civil Engineering), University of Michigan, 1993
BSAD, Architecture with Building Technology Emphasis, MIT, 1992

#### PROFESSIONAL BACKGROUND

#### Long-Term Positions

September 2021 – Present	
David M. Rubenstein Fellow	
Brookings Institution, Metropolitan Policy Program	Washington, DC
July 2021 – Present	
Director of the Remodeling Futures Program (on leave)	
Harvard University Joint Center for Housing Studies	Cambridge, MA

#### January 2016 - July 2021

#### **Senior Fellow**

Urban Institute, Metropolitan Housing and Communities Policy Center Washington, DC Primary research lead on disaster resilience, the construction workforce, and physical housing conditions in the Metropolitan Housing and Communities Policy Center. Funded research and project summaries:

- Equitable Investments in Resilience: A Review of Benefit-Cost Analysis In Federal Flood Mitigation Infrastructure: 2021, \$55,51 Sponsor: The Miami Foundation Role: Principal Investigator
- Cities and Migration-Learning and Monitoring of the MMC Theory of Change: 2021, \$104,445 Sponsor: Mayors' Migration Council

Role: Co-Principal Investigator

- State Flood Planning and Plans Census and Best Practices: 2021, \$105,774 Sponsor: Pew Charitable Trusts and American Flood Coalition Role: Co-Principal Investigator
- Summit on Federal Policy in Climate Displacement, Relocation, and Migration: 2020, \$48,000
   Sponsor: Kresge Foundation. Role: Principal Investigator
- Articulating a Program for Resilience: 2019-2020, \$79,695
   Sponsor: Atlantic Council's Adrienne Arsht-Rockefeller Foundation Center for Resilience Role: Principal Investigator
- Climate Migrant Receiving Communities: 2019-2022, \$2,978,552 Sponsor: National Academy of Sciences' Gulf Research Program Role: Principal Investigator
- Housing Resilience in Greater New Orleans: 2017-2020, \$2,265,985 Sponsor: National Academy of Sciences' Gulf Research Program Role: Principal Investigator
- Strategies for Promoting Innovation in Home Building: 2017-2018, \$245,643 Sponsor: US Department of Housing and Urban Development Role: Co-Principal Investigator

- 100 Resilient Cities Phase 2 Evaluation: 2016-2022, \$5,130,000 Sponsor: Rockefeller Foundation Role: Global Principal Investigator
- The Speed of Housing Recovery Program Launch after Severe Disaster: 2016-2019, \$500,000

Sponsor: US Department of Housing and Urban Development Role: Co-Principal Investigator

- Local Disaster Response and Preparedness: A Survey: 2017, \$100,000 Sponsor: Margaret A. Cargill Philanthropies Role: Principal Investigator
- Global Housing Research Initiative-Phase 1: 2016, \$100,000
   Sponsor: Habitat for Humanity International Role: Principal Investigator
- National Disaster Resilience Competition's Resilience Academies Preliminary Outcome Evaluation: 2016, \$460,000
   Sponsor: Rockefeller Foundation Role: Principal Investigator

#### July 2013 – December 2015

#### **Senior Research Associate**

Urban Institute, Metropolitan Housing and Communities Policy Center Washington, DC Research lead on housing industry, green housing, disaster resilience, the construction workforce, and physical housing conditions in the Metropolitan Housing and Communities Policy Center.

- 100 Resilient Cities Phase 1 Monitoring: 2014-2016, \$1,000,000 Sponsor: Rockefeller Foundation Role: Global Principal Investigator
- Resilience Equity: 2015, \$35,000
   Sponsor: Urban Institute Fleishman Innovation Funds Role: Principal Investigator
- Formative Evaluation of Rebuild by Design: 2014, \$350,000 Sponsor: Rockefeller Foundation and HUD Role: Principal Investigator
- Affirmatively Furthering Fair Housing Technical Assistance Planning: 2013-2014, \$60,000 Sponsor: Abt Associates for HUD Role: Principal Investigator
- Alaska Native Science and Engineering Program Evaluation: 2013-2014, \$500,000 Sponsor: University of Alaska Role: Co-Principal Investigator

#### April 2010–June 2013

Senior Associate Abt Associates, Social and Economic Policy Division

Practice lead between Social and Economic Policy and Environmental Divisions. US DOL Workforce Innovation Fund Evaluation TA, Rockefeller Green Economy and American Workforce Evaluations, and US HUD Sustainable Communities Research Grant. Task lead for US DOL Green Jobs Impact Evaluation and HUD Alternative Disaster Housing Pilot Evaluations.

#### January 2008–June 2009

Assistant Staff Vice President

National Association of Home Builders, Construction Codes & Standards Division Washington, DC Oversight of the National Green Building Program, including media, advocacy, evaluation, and strategic planning. Managed Construction, Codes, & Standards staff.

#### December 2006–January 2008

Technical Director for Housing

Development Innovations Group

Bethesda, MD

Coordinator of two Gates Foundation special initiative grants on global housing finance for the poor and urban NGO capacity building. Responsible for monitoring of an international housing microfinance portfolio in Mexico, Peru, Brazil, South Africa, India, and Indonesia.

#### April 2000–December 2006

Research Engineer

US Department of Housing and Urban Development Washington DC Coordinated public-private partnership within the Office of Policy Development and Research on sustainable housing design and construction with the Partnership for Advancing Technology in Housing (PATH) team. Responsible for research agenda, policy, and industry/consumer outreach.

#### June 2003–June 2004

SRP Professor of Energy and Environment

Arizona State University, Del E. Webb School of Construction & School of Architecture Tempe, AZ Joint appointment. Coursework in construction business practices and the history of building technology. Research in the management of housing innovation, labor, and industry. Founding associate for the ASU Stardust Center for Affordable Homes and the Family.

#### Consulting, Teaching, and Other Short-Term Positions

#### August-September 2021

Robert Wood Johnson Foundation, Washington DC Capacity landscape review of environmental justice organizations

#### July-August 2021

US Environmental Protection Agency, Washington DC Environmental justice grant reviewer

#### January-March 2021

Network for Energy, Water, and Health in Affordable Buildings (NEWHAB) Strategic Guidance Group member

#### May 2020 – Present

Climate Justice Resilience Fund, Washington DC

Advisor and policy strategy consultant (pro bono)

### June-July 2019, December 2020-January 2021

UCLA Latino Politics and Policy Initiative, Los Angeles CA Strategic planning advisor

#### May–October 2013

Inter-American Development Bank, Washington DC Housing construction and climate change mitigation and adaptation consultant

#### October 2009–April 2010 and April-July 2012

World Bank, Washington DC Coordinator and policy author for sustainable cities project with Brazil's Caixa Econômica Federal.

#### October 2009–April 2010

YouthBuild USA, Cambridge MA Green Jobs and Green Business Development Specialist

#### July 2009–July 2011

Delmar Cengage, New York NY Publications Reviewer and Co-Author

#### July–December 2009

National Center for Healthy Housing, Washington DC Technical Advisor

#### July–November 2009

Home Builders Institute. Washington DC Green Jobs and Job Training Specialist

#### December 2007–June 2009

International Code Council, Washington DC Foreign Building Code Specialist

#### August–October 2006

Comisión Nacional de Vivienda (CONAVI, National Commission on Housing), Mexico City, México Americas Fellow

#### **PUBLICATIONS**

#### Peer-Reviewed

JOURNAL ARTICLES (PEER-REVIEWED)

- Teles, D., C. Martín, N DuBois. (2021). "Understanding the Pace of HUD's Disaster Housing Recovery Efforts," *Housing Policy Debate*.
- Ratcliffe, C., W. Congdon, D. Teles, A. Stanczyk, & C. Martin. (2020). "From Bad to Worse: Natural Disasters and Financial Health," *Journal of Housing Research*, 29:sup1, S25-S53
- Martín, C. (2019). "Understanding Housing Data from the 2017 Disaster Season." *Natural Hazards Review* Vol. 20, Issue 3 (August).

- Martin, C. (2014). "The Policy, Economics, and Society around Residential Building Construction," in "Residential Building Construction: State-of-the-Art Review" with Memari, Huelman, Iulo, Laquatra, McCoy, Nahmens, and Williamson, *Journal of Architectural Engineering* Residential Building Construction: State-of-the-Art Review (10:1061) September.
- Martín, C. (2011). "Home Purchase Counseling: The Untapped Green Financing Tool." Draft paper presented at Strengthening the Green Foundation conference sponsored by the Federal Reserve Bank of Atlanta and Tulane University, New Orleans. *Journal of Sustainable Real Estate,* March 11.
- Martín, C (2005). "Response to 'Building Codes and Housing'." *Cityscape: A Journal of Policy Development and Research*, Volume 8, Number 1.
- Martín, C. (2001). "Mechanization and 'Mexicanization': Racialization and California's Agricultural Technology." *Science as Culture*, Fall.
- Martín, C (2004). "Building the Discipline: Developing Programs for Housing Science Research." *Housing and Society*, Volume 31, Number 1.

### BOOK CHAPTERS (PEER-REVIEWED)

- Martín, C (2021). "Public Funding of Coastal Adaptation: A Review of Public Sources—and the Case for More." In *Adaptation Blueprint*, Island Press.
- Martin, C. (2019). "The Silence Before the Storm: Advocacy Groups' Current Perceptions of Future Climate Vulnerability." In *Disaster Research and the Second Environmental Crisis*, pp. 71-104. Springer.
- Martin, C. (2015). "The Policy Context for Adopting and Diffusing U.S. Homebuilding Technology". Chapter in McCoy, Sanderford, and Koebel (eds), *Housing Innovation: The Policies, Programs and People that shaped Innovation in Housing, 1990-2013* (Momentum Press).
- Martin, C. (2007). "Global Constructions, or Why Guadalajara Wants a Home Depot While Los Angeles Wants Construction Workers," in Tanzer, Kim and Rafael Longoria, *The Green Braid: Towards an Architecture of Ecology, Economy and Equity*, Routledge.

# Project Reports, Policy Briefs, and Other Publications

- Junod, A., C. Martín, R. Marx, A. Rogin. (2021). "Equitable Investments in Resilience." Miami Foundation. June.
- Martín, C. and A. Williams. (2021). "A Federal Policy and Climate Migration Briefing for Federal Executive and Legislative Officials." Kresge Foundation. March.
- Martín, C, Sara McTarnaghan, James Ladi Williams, Kimberly Burrowes, Jorge González, Jorge Morales-Burnett, Wilton Oliver, Clare Salerno. (2020). "Articulating a Program for Resilience: The Landscape of Evidence, Actions, and Geographies." Adrienne Arsht-Rockefeller Foundation Center for Resilience at the Atlantic Council. June.
- Martín, C with Brett Theodos, Brandi Gilbert, and Dan Teles. (2021). "Housing Recovery and CDBG-DR," US Department of Housing and Urban Development. January.

- Martín, C and J. Lewis. (2019). "The State of Equity Measurement: A background review for energy-efficiency programs." Energy Trust of Oregon. September.
- Martín, C. with A. McCoy. (2019). "Building Even Better Homes: Strategies for Promoting Innovation in Home Building," US Department of Housing and Urban Development, June.
- Martín, C. and O. Arena. (2019). "Next50 Catalyst Brief: Climate Adaptation." Urban Institute. April.
- Martín, Carlos with Caroline Ratcliffe, William J. Congdon, Alexandra Stanczyk, Daniel Teles, Bapuchandra Kotapati. (2019). "Insult to Injury: Natural Disasters and Residents' Financial Health," Urban Institute, April.
- Martín, Carlos et al. (2018)."100 Resilient Cities: Midterm Evaluation Report." Rockefeller Foundation, October.
- Sara McTarnaghan, Carlos Martín, Tanaya Srini, Juan Collazo, (2016). "Literature Review of Housing in Latin America and the Caribbean: Phase I: Global Housing Research Initiative," Habitat for Humanity International and Cities Alliance, October.
- Martin, Carlos with Brandi Gilbert, Eric Burnstein, Shiva Kooragayala, Tanaya Srini, and Somala Diby (2016) "The National Disaster Resilience Competition's Resilience Academies: Preliminary Outcome Evaluation." Rockefeller Foundation, August.
- Martin, Carlos with Pamela Lee and Elizabeth Oo. (2014) "Evaluation: Rebuild by Design Phase I." Rockefeller Foundation, June.
- Hamutal Bernstein, Carlos Martín, Lauren Eyster, Theresa Anderson, Stephanie Owen, Ananda Martin-Caughey "(2015). "Evaluation of the Alaska Native Science and Engineering Program (ANSEP)." University of Alaska, January.
- "The Campaign for American Workers Initiative: Evaluation Final Report." Rockefeller Foundation, July 2013.
- "The Sustainable Employment in a Green US Economy: Evaluation Final Report." Rockefeller Foundation, February 2013.
- with N. Von Meyer, "The Feasibility of Developing a National Parcel Database: County Data Records Project Final Report." US Department of Housing and Urban Development. January 2013.
- "The State of the Residential Construction Industry." A Background Paper for the Bipartisan Policy Center's Housing Commission. September 2012.
- with L. Buron et al, "Assessing Quality of Life in FEMA's Alternative Housing Pilot Program." US Department of Housing and Urban Development. Forthcoming (HUD).
- "Sustainable Low-Income Housing in Brazil: Green Initiatives in the Civil Construction Sector." A Briefing for the World Bank and the Brazilian Ministry of the Environment. June, 2012.
- with J. Turnham, et al. "Housing Recovery on the Gulf Coast, Phase II: Results of Property Owner Survey in Louisiana, Mississippi, and Texas." US Department of Housing and Urban Development, November 2011.
- "Green Cities: Sustainable Low-Income Housing in Brazil." A Briefing for the Sustainable Development Department of the Latin America and the Caribbean Region in the World Bank Group. May, 2011

- "Green Cities: Sustainable Low-Income Housing in Brazil." Policy Note for the Sustainable Development Department, Latin America and the Caribbean Region. The World Bank Group, May 2011.
- with K. Burnett, "A Methodological Review of the Center for Neighborhood Technology's "Housing + Transportation Affordability Index." National Association of Home Builders. November, 2010.
- "Going to Scale with Housing Microfinance: The Role of Commercial Banks—microREPORT #92." US Agency for International Development. March, 2008.

# **Curricular and Trade Publications**

- Martin, Carlos (forthcoming). *Green Building. Residential Construction Academy Series*: Delmar Cengage.
- Martin, Carlos. (2015). "Rebuild by Design." Natural Hazards Observer, January.
- Martin, Carlos. (2014). "The Most Common of Buildings: The Design and Construction of U.S. Homes and the Households That Occupy Them." *Cityscape* (16:2) August.
- Martin, Carlos (2007). "Mobile Foundations: US-Mexico Constructions." *Thresholds-MIT Journal of Architecture*, Dec.
- Martin, Carlos (2006). "Muffled Conversations: The City, the Citizens, & Affordable Housing Design." *Affordable Housing Design: Convening the Conversation: Proceedings of the Association of Collegiate Schools of Architecture/Fannie Mae Foundation Workshop.* (Washington, DC: ACSA).
- Martin, Carlos and Asa Foss. (2006). "All that Glitters Isn't Green... and Other Thoughts on Sustainable Building." *Blueprints*. Volume 24, Number 4. Fall.

# **Commentaries and Media Mentions**

Blog posts and other online commentaries

- Martín, C. and A. Clark-Ginsburg. "How COVID-19 Sheds Light on Disaster Policy's Need to Prepare for Multiple, Sequential Emergencies." UrbanWire, August 10, 2020.
- Solari, C. and C. Martín. "What can Disaster Managers Learn from Homeless Assistance Providers During COVID-19?" UrbanWire, August 6, 2020.
- Marx, R., C. Salerno, and C. Martín. "Without Robust Requirements That Sellers Disclose a Home's Flooding History, Buyers Are More at Risk." UrbanWire, July 21, 2020.
- Oliver, W., M. Reed, and C. Martín. "Louisiana Grassroots Organizations Can Be Key Partners during COVID-19 Recovery." UrbanWire, July 8, 2020.
- Arena, O., M. Cohen, and C. Martín. "Disparities in Disaster Mitigation Resources and Information Can Leave Households Unprepared for Climate Threats." UrbanWire, July 6, 2020.
- Burnstein, E., W. Oliver, and C. Martín. "Communities' Disaster Risk Depends on More Than Just Physical Exposure." UrbanWire, June 2, 2020.

- Martín, C. "Essential Construction Work during the Pandemic Needs to Prioritize Worker Safety." UrbanWire, April 24, 2020.
- Martín, C. "Earth Day amid a Pandemic: How Our Public Health and the Environment Are Connected." UrbanWire, April 22, 2020.
- Martín, C. "Families Need More Help to Keep the Lights On and the Water Running during the Pandemic." UrbanWire, April 15, 2020.
- Martín, C. "What Do "Stay-at-Home" Orders Mean for Families in Unsafe or Unrepaired Homes? ." UrbanWire, April 8, 2020.
- Martín, C. "Who Are America's "Climate Migrants," and Where Will They Go? ." UrbanWire, October 22, 2019.
- Martín, C. "Six Ways to Prioritize Equity in Energy Efficiency and Climate Policy." UrbanWire, September 19, 2019.
- Martín, C, D. Teles, C. Duncan, and A. Adams. "Without linking recovery to communities' long-term goals, disasters will keep getting worse." UrbanWire, September 4, 2018.
- Martín, C, D. Teles, C. Duncan. "Gaps in data hinder equitable disaster recovery." UrbanWire, August 27, 2018.
- Martín, C, D. Teles, with A. Adams. "Improving the disaster aid application process will ensure victims aren't left behind." UrbanWire, August 21, 2018.
- Martín, C, D. Teles, C. Duncan, and A. Adams and C. Dunkin. "Disaster aid eligibility processes risk cutting out low-income households in need." UrbanWire, August 15, 2018.
- Martín, C, D. Teles, C. Duncan with A. Adams. "Problems with damage assessments can keep disaster victims from receiving the help they need." UrbanWire, July 30, 2018.
- Martín, C, D. Teles, with C. Duncan and A. Adams. "How better data can inform decisions and improve disaster recovery." UrbanWire, June 1, 2018.
- Martín, C. "What delays in immediate disaster relief mean for Puerto Rico's long-term recovery." UrbanWire, October 6, 2017.
- Martin, C. "Eliminating LIHEAP would leave poor families in the cold." *UrbanWire*, September 19, 2017.
- Peiffer, E. and C. Martin, "Still learning: What Hurricanes Harvey and Irma reveal about US disaster policy." *UrbanWire*, September 12, 2017.
- Martin, C. "The Trump budget for unhealthy housing." UrbanWire, March 2017.
- Martin, C. "Building America: The immigrant construction workforce." *UrbanWire*, November 2016.
- McTarnaghan, S. and C. Martin. "Building the evidence base to support low-income housing policy in Latin America and the Caribbean" *UrbanWire*, October 2016.
- Martin, C. "For infrastructure, candidates' plans still leave many holes in the wall—some bigger than others" *UrbanWire*, October 2016.
- Martin, C. "How many presidential candidates does it take to screw in a lightbulb?" *UrbanWire*, October 2016.

- Martin, C. "How would the candidates deal with the natural disasters that lurk ahead?" *UrbanWire*, October 2016.
- Martin, C. "Debates over Clean Power Plan divert from the actions that are already happening" *UrbanWire*, September 2016.
- Martin, C. "The real disaster(s) in Flint's water crisis" UrbanWire, January 2016.
- Martin, C. "Do we have the energy for low-income energy policy?" UrbanWire, Sept. 2015.
- Martin, C. "How the Clean Power Plan could affect low-income families." *UrbanWire*, August 2015.
- Martin, C. "Storm clouds on the horizon: Are we ready for the next Katrina? "*UrbanWire*, August 2015.
- Martin, C. "How to 'stop' the next Katrina." UrbanWire, August 2015.
- Martin, C. "What resilience means for communities like New Orleans." UrbanWire, August 2015.
- Martin, C . "Decades, 25 hours, 10 years and counting: A Katrina timeline." *UrbanWire*, August 2015.
- Martin, C. "Hurricane Sandy: What we still haven't learned." UrbanWire, October 2014.
- Martin, C. "What Sugar Hill's "tough" architecture says about low-income housing." *UrbanWire*, October 2014.
- Martin, C. and J. Collazos . "Hispanics in the housing industry"/ "Trabajadores y profesionales en la industria de la vivienda." *UrbanWire*, September 2014.
- Martin, C., E. Oo, and C. Stacy . "Detroit, Toledo, and other drops in the ocean of America's future water woes." *UrbanWire*, August 2014.
- Martin, C "Paying our nation's home utility bills this winter." UrbanWire, January 2013.
- Martin, C. "One year after Sandy: When will we learn?" UrbanWire, October 2013.

### Media interviews, quotes, and mentions

- Ross Levitt, Theodore Schleifer and Rene Marsh, "Two resign 'in protest' from EPA subcommittee." *CNN*, May 12, 2017.
- Chris Mooney, "Two experts resign from EPA posts to protest the agency's science committee shake-up." *Washington Post*, May 12, 2017.
- Kirk Johnson, "Old Houses From Canada Find a Home in Washington State" *New York Times*, April 18, 2016
- Charles D. Ellison, "Racism in the Air You Breathe: When Where You Live Determines How Fast You Die" *The Root*, August 17, 2015

### PRESENTATIONS

### Academic Conferences

- "Where to next? Climate Migrant Destination Communities," Temple Law Review Symposium, February 2021.
- "Where Disaster Migrants Go: Patterns in Post-Disaster Reception and Long-Term Outcomes for Relocated Households in Receiving Communities," Columbia University's "At What Point Managed Retreat?" Conference, June 2019.
- "Learning from Relocation: Applying Federal Housing and Community Displacement Lessons for Managed Retreat," Columbia University's "At What Point Managed Retreat?" Conference, June 2019.
- "The Civil Sector Deference to the Private: Charitable Adaptation: Private Philanthropy and Planning for Local Climate Change Adaptation," Urban Affairs Association, May 2019.
- "Urban Resilience in Latin America: The Road from Theory to Practice." APPAM International Conference, July 19, 2018.
- "Housing and Disasters: Understanding Housing Data in the 2017 Disasters." ASCE Infrastructure Resilience Division Research Forum: The 2017 Natural Disasters, July 13, 2018.
- "The Regional Sum of Resilient Cities' Parts: The Process and Effects of Urban Resilience Interventions within Broader Regions." Urban Affairs Association Annual Conference, April 5, 2018.
- "Housing Technology and the Contemporary Policy Context in the U.S," Pennsylvania State Housing Research Center Housing Research Conference, February 28, 2018.
- "Measuring Resilience in Recent Federal Environment Emergency Program Initiatives." APPAM Fall Research Conference November 2016.
- "100 Resilient Cities and Resilience Measurement." Natural Hazards Conference, July 2015.
- "Rebuild by Design." Urban Affairs Association Annual Conference, April 2015.
- "Housing Reconstruction and Community Recovery Following Disasters." Pennsylvania State Housing Research Center Housing Research Agenda. Bethlehem, Pennsylvania. February 2013.
- "Building Codes and the Construction of US Cities." Construction History Society of America. Philadelphia, Pennsylvania. May 2010.
- "Technology Matters—The Cost of and Returns to Innovating Homes, or Not." American Real Estate and Urban Economics Association 2006 Mid-Year Meeting. Washington, DC. May 31, 2006.
- "Tools: Building Labor History into American Architecture." ACSA 2004 Annual Conference. Miami, Florida. March 16, 2004. (Accepted Paper).
- "Building (the) Disciplines: The Case of the US Partnership for Advancing Technology in Housing." IAHS 30th World Congress on Housing. Coimbra, Portugal, September 9, 2002.

### **Invited Lectures and Panels**

- "The Crisis Before and After," Old Dominion University and Hampton Roads Community Foundation, May 2021.
- "Housing and Community Resilience," Robert Wood Johnson Foundation's Fostering Research to Practice to Promote Community Resilience: Sharing Knowledge to Build a Culture of Health, March 2019.
- "The State of the Residential Construction Industry," Hankin Distinguished Lecture, The Pennsylvania Housing Research Center at Pennsylvania State University, November 2018.
- "Equity "while you're in there": Lessons between energy efficiency and other home interventions for low-income or underserved households," Panel on Models for Equity-Driven Energy Efficiency, ACEEE Summer Study, August 2018.
- "Public Financing of Coastal Adaptation: A Review of U.S. Fund Sources and Funded Projects and the Case for More," University of Pennsylvania Wharton Risk Center and McHarg Center's "Adaptation Blueprint" Workshop September 2018.
- "Advancing Civil and Human Rights Throughout the Disaster Continuum." National Association for the Advancement of Colored People (NAACP), July 2018.
- "The Border Wall: Immigration and Construction," SPUR and Architecture Lobby, May 2018.
- "Supply-Side Challenges: Cost, Affordability, and Regulation." Urban Institute and CoreLogic's 5th Annual Housing Symposium, November 1, 2017.
- "Infrastructure as a Path to Development," Georgetown University Policy Conference, March 2015.
- "Green housing finance: Past policies, future demand." Keynote speaker, Virginia Tech College of Architecture 50th Anniversary, September 2014.
- "The Role of Philanthropy in the Green Economy." Good Jobs Green Jobs 2013 Conference. DC, April 2013.
- "Capitalizing on the Benefits of Multifamily Energy Efficiency Retrofits." (Panelist). HUD Advancing Sustainability Performance: A Research and Practice Forum . September 2011.
- "Climate Change and Housing: An Overview." National Association of Home Builders' State and Local Government Affairs Conference. Memphis, Tennessee. November 2008.
- "It Isn't Easy Being Green Redux: Green Housing and the Future of Existing Homes." Harvard University Joint Center for Housing Studies Remodeling Futures Project. Cambridge, MA. October 2008.
- "Public-Private Housing R&D in U.S. and Developing Countries: Appropriate Technologies, National Efforts and Transfers." Proceedings of the U.S – India Symposium on Urban Housing and Supporting Infrastructure, National Science Foundation, U.S.A and Ministry of Science and Technology (Funded by the US NSF). New Delhi, India. Oct. 20-22, 2005.

"From Pillar to Post: Architectural Technology in Historical Context and Contemporary Practice." Cornell University Architecture Lecture Series. (Invited Speaker). Ithaca, New York, September 24, 2002.

# **Policy Presentations**

- "Strategies for Promoting Innovation in Home Building." Briefing for HUD Secretary Ben Carson, Thursday, May 31, 2018.
- "The Evidence Base on How CDBG-DR Works for State and Local Stakeholders" Statement before the Subcommittee on Oversight and Investigations, Committee on Financial Services, United States House of Representatives, May 17, 2018.

# **SERVICE**

# **Scholarly Service**

- 2021 Lead Guest Editor, Housing Policy Debate-Special Issue on Climate Change and Housing Policy
- 2020 Reviewer, Journal of Environmental Studies and Sciences
- 2019 Invited Participant, MIT Center for Advanced Urbanism Equitable Resilience Workshops
- 2018 Reviewer, RAND "Energy Efficiency as a Tool for Preservation of Affordable Rental Housing"
- 2017- National Academies of Sciences Study Committee Member, "Measuring Community Resilience"
- 2016 Reviewer, National Renewable Energy Laboratory Paper "Estimating the National Carbon Abatement Potential of City Policies"
- 2016 Reviewer, Center for Neighborhood Technology Paper, "From 'Utility of the Future' to 'Communities of the Future'"
- 2015 Reviewer, American Council for an Energy-Efficient Economy Paper, "Enhancing Community Resilience through Energy Efficiency"
- 2014- Reviewer, Energy and Buildings
- 2013- Reviewer, Housing Policy Debate
- 2013- Reviewer, ASCE Journal of Architectural Engineering
- 2009-2014 HUD Cityscape Editorial Board

### **Policy Service**

- 2016- FEMA's National Risk Index Social Vulnerability Working Group
- 2016- Expert Panel for National Evaluation of Health Impact Assessments, Pew Charitable Trusts
- 2014-2017 EPA Board of Scientific Counselors Sustainable Community Subcommittee

- 2014 Guest Editor, HUD's *Cityscape* (Volume 16, Number 2)
- 2012 Moderator, HUD's Research Roadmap on Design, Construction, and Technology
- 2013-2015 Workers Defense Project, National Construction Survey Advisory Panel Member
- 2010-2012 US Green Building Council LEED for Homes 2012 Working Group
- 2010 National Endowment for the Arts Mayors' Institute on City Design Panel
- 2009-2012 ROOTS: Environmental Literacy Curriculum Reviewer
- 2010-2011 ICLEI Community Greenhouse Gas Built Environment Advisory Committee
- 2009-2010 Green for All Community of Practice Credential and Curricula Consultant

# **Professional Affiliations**

Scholarly Association Memberships Association for Public Policy Analysis and Management Association of Collegiate Schools of Planning Urban Affairs Association Natural Hazards Center Affiliated Scholars *Professional Association Memberships* American Evaluation Association American Institute of Architects American Planning Association American Society of Civil Engineers U.S. Green Building Council

### **RESEARCH AREAS**

Construction Industry Construction Technology Development and Construction Regulations and Policy Disaster Mitigation, Recovery, and Resilience Environmental Justice and Residential Conditions Housing and Housing Finance International Development Poverty, Vulnerability, and the Safety Net Neighborhoods, Cities, and Metros Race and Ethnicity

# **LANGUAGES**

English (Native) Spanish (Native) Portuguese (Fluent) French (Conversational) Arabic (Basic) Mandarin Chinese (Basic) Irish (Basic)