## ANDREW RUMBACH, PHD

Senior Fellow, Climate and Communities Practice Area Co-Lead Metropolitan Housing and Communities Policy Center Urban Institute 2100 M Street NW, Washington DC, 20037 arumbach@urban.org



www.urban.org/author/andrew-rumbach www.andrewrumbach.com @andrewrumbach

## **PROFESSIONAL SYNOPSIS**

Andrew Rumbach is a senior fellow at the Urban Institute in the Metropolitan Housing and Communities Policy Center and the co-leader of the Climate and Communities practice area. Rumbach is a mixed-methods researcher who studies household and community risk to natural hazards and climate change. He is especially interested in how federal, state, and local government plans and policies shape hazard mitigation, climate adaptation, and community disaster recovery. He has studied numerous federal and state-declared disaster events and has written about affordable housing and disaster vulnerability, land-use policy and environmental risk, the vulnerability of cultural and historic resources to disasters and climate extremes, and rural governance of disasters.

#### **EDUCATION**

PhD, City and Regional Planning, Cornell University, 2011

Thesis: The City Vulnerable: New Town Planning, Informality and the Geography of Disaster in Kolkata, India

MA, City and Regional Planning, Cornell University, 2007

BA, Political Science, Reed College, 2002

#### PROFESSIONAL BACKGROUND

## **Long-Term Positions**

January 2023 - Present

Senior Fellow

Urban Institute, Metropolitan Housing and Communities Policy Center

Washington, DC

<u>Supervisor:</u> Mary Cunningham, Center VP (mcunningham@urban.org)

Researcher on natural hazards, disasters and climate change and their impact on people and communities

 Understanding the effects of climate change on environmental hazards in overburdened communities, 2023-2026, \$1.5 million.

<u>Sponsor</u>: The National Academies of Sciences, Engineering, and Medicine's Gulf Research Program.

<u>Description</u>: How can healthcare providers plan for increased capacity needs from extreme events under future climate conditions?

Role: Project director and co-principal investigator

## January 2021 - January 2023

Associate Professor, Urban Planning
Director of Education, Hazard Reduction and Recovery Center
Texas A&M University
College Station, Texas

 Can big ideas about resilience survive the reality of a disaster? Built environment policy and recovery after the Marshall Fire, 2022-2023, \$100,416.

**Sponsor**: National Science Foundation

<u>Description</u>: In the aftermath of disasters, how do local elected officials and their constituents view climate resilience policies that may add to the cost of recovery? Does the support for such policies increase or diminish?

Role: Co-principal investigator focused on qualitative data collection.

 Building small town and rural resilience through equity-informed land-use planning and policy, 2022-2024, \$300,000.

<u>Sponsor</u>: Gulf Research Program of the National Academies of Sciences, Engineering and Medicine

<u>Description</u>: Small towns and rural communities are uniquely vulnerable to climate change and extreme weather events, but the majority of land-use tools for hazard mitigation and climate change adaptation are centered on cities and urban region. This project is focused on developing rural land-use tools for building equitable resilience.

Role: Principal investigator and project director.

Gulf Coast heritage preparedness initiative, 2021-2023, \$325,000.

Sponsor: Texas A&M University President's Excellence Fund.

<u>Description</u>: This planning and pilot study will assess the feasibility of a community-based, interdisciplinary model for protecting endangered places and heritage in surviving historic Black settlements founded 1865-1930 known as freedom colonies. The team will develop the materials, approach, and lead model testing among freedom colony descendants in the Brazos Valley region.

<u>Role</u>: Co-principal investigator focused on developing community-informed risk assessment tools.

Exploratory scenario planning – Towards small town and rural resilience? 2021-2023, \$10,000
 Sponsor: The Lincoln Institute for Land Policy

<u>Description</u>: This project is a literature review on rural planning, rural climate vulnerability/resilience, and exploratory scenario planning. The goal is to produce a white paper that examines the potential for scenario planning to contribute to rural resilience efforts.

Role: Principal investigator and project lead.

Planning for Hazards: Land-Use Solutions for Colorado, 2021, \$30,000

**Sponsor**: FEMA and Resilience Action Partners

<u>Description</u>: Planning for Hazards is an online toolkit and web platform designed to assist local governments with their land-use planning. This grant centered on developing new land-use tool content.

Role: Principal investigator and project lead.

#### August 2013 - December 2020

Assistant and Associate Professor of Urban and Regional Planning University of Colorado Denver Denver, Colorado

 Modeling the vulnerability of mobile home parks to disaster: A longitudinal study of affordable housing loss after Hurricanes Harvey and Michael, 2018-2023, \$593,879.

**Sponsor**: National Science Foundation

<u>Description</u>: Mobile home parks are a crucial source of affordable housing in the United States. Mobile home parks are vulnerable to natural hazards and disasters, but are understudied in the disaster and planning literatures. This mixed-methods research project centers on the recovery of mobile home parks after Hurricanes in Texas and Florida. <u>Role</u>: Principal investigator focused on analysis of land-use regulations and manufactured home park exposure to natural hazards.

Planning for Hazards: Land-Use Solutions for Colorado, 2015-2019, \$50,000.

Sponsor: Colorado Department of Local Affairs.

Description: Planning for Hazards is an online toolkit and web platform designed to assist local governments with their land-use planning. This grant centered on ongoing content development, outreach to local governments, and development of implementation case

Role: Principal investigator and project lead.

## August 2011 - July 2013

Assistant Professor of Urban and Regional Planning University of Hawaii Honolulu, Hawaii

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

# August 2011 - Present

Course developer and instructor National Disaster Preparedness Training Center FEMA and the University of Hawaii

Lead developer, subject matter expert and instructor on urban planning related courses for emergency management professionals, including AWR-228 (Community Resilience), AWR-356 (Community Planning for Disaster Recovery) and MGT-474 (Mitigating Hazards with Land-Use Planning)

## **PUBLICATIONS**

## **Peer-Reviewed Journal Articles**

Rumbach, Andrew, Esther Sullivan, Shelley McMullen and Carrie Makarewicz. 2022. "You don't need zoning to be exclusionary: Manufactured home parks, land-use regulations and housing segregation in the Houston metropolitan area. *Land Use Policy* 123: 106422.

Fan, Yingling, Lesli Hoey, Ashok Das, Clara Irazábal, Bruce Stiftel, Gavin Shatkin, Francis Owusu, Petra Doan, Yiping Fang and Andrew Rumbach. 2022. "Improving global planning education by centering the experience of international students in U.S. and Canadian planning schools." *Journal of Planning Education and Research* 42(3): 260-267.

Sullivan, Esther, Carrie Makarewicz and Andrew Rumbach. 2022. "Affordable but Marginalized: A Sociospatial and Regulatory Analysis of Mobile Home Parks in the Houston Metropolitan Area." *Journal of the American Planning Association* 88(2): pp. 232-244.

Rumbach, Andrew. "'Between the devil and the Bay of Bengal': the Ford Foundation and the politics of planning in post-Independence Calcutta." 2021. *Planning Perspectives* 36(5): 1025-1051.

Rumbach, Andrew, Anna Bierbrauer, and Gretel Follingstad. 2020. "Are we protecting our history? A municipal-scale analysis of historic preservation, flood hazards, and planning." *Journal of Planning Education and Research*.

- Rumbach, Andrew, Esther Sullivan and Carrie Makarewicz. 2020. "Mobile home parks and disasters: Understanding risk to America's third housing type." *Natural Hazards Review* 21(2).
- Weinstein, Liza, Andrew Rumbach and Saumitra Sinha. 2019. "Resilient growth: Fantasy plans and unplanned developments in India's flood-prone coastal cities." *International Journal of Urban and Regional Research* 43(2): pp. 273-291.
- Rumbach, Andrew and Douglas Appler. 2019. "Integrating historic preservation into post-disaster recovery: The role of the Main Street Program." *Journal of Preservation Education and Research* 11: pp. 32-55.
- Rumbach, Andrew and Gretel Follingstad. 2019. "Urban disasters beyond the city: Environmental risk in India's fast-growing towns and villages." *International Journal of Disaster Risk Reduction* 34: pp. 94-107.
- Rumbach, Andrew and Jeremy Németh. 2018. "Disaster risk creation in the Darjeeling Himalayas: Moving towards justice." Environment and Planning E: Nature and Space 1(3): pp. 340-362.
- Shirgaokar, Manish and Andrew Rumbach. 2018. "Investigating housing tenures beyond homeownership: A study of informal settlements in Kolkata, India." *Housing Studies* 33(1): pp. 117-139.
- Rumbach, Andrew. 2017. "At the roots of urban disasters: Planning and uneven geographies of risk in Kolkata, India." *Journal of Urban Affairs* 39(6): pp. 783-799.
- Rumbach, Andrew and Manish Shirgaokar. 2017. "Predictors of household exposure to monsoon rain hazards in information settlements." *Natural Hazards* 85(2): pp. 709-728.
- Hoey, Lesli, Andrew Rumbach and Joshua Shake. 2017. "Bringing practice to the classroom: Using a deliberative learning and case study approach to teach international planning." *Journal of Planning Education and Research* 37(2): pp. 2045-2063.
- Rumbach, Andrew, Carrie Makarewicz and Jeremy Németh. 2016. "The importance of place in early disaster recovery: A case study of the 2013 Colorado floods." *Journal of Environmental Planning and Management* 59(11): pp. 2045-2063.
- Appler, Douglas and Andrew Rumbach. 2016. "Building community resilience through historic preservation." *Journal of the American Planning Association* 82(2): 92-103.
- Rumbach, Andrew. 2016. "Decentralization and small cities: Towards more effective urban disaster governance?" *Habitat International* 52: pp. 35-42.
- Rumbach, Andrew and Dolores Foley. 2014. "Indigenous institutions and their role in disaster risk reduction and resilience: Evidence from the 2009 tsunami in American Samoa." *Ecology and Society* 19(1).
- Rumbach, Andrew. 2014. "Do new towns increase disaster risk? Evidence from Kolkata, India." *Habitat International* 43: pp. 117-124.
- Rumbach, Andrew and Neema Kudva. 2011. "Putting people at the center of climate change adaptation plans: A vulnerability approach. Risk, Hazards and Crisis in Public Policy 2(4): pp. 1-23.
- Rumbach, Andrew. 2008. "Challenges of disaster response." Planning Theory and Practice 9(4): pp. 517-564.
- Reardon, Kenneth, Marcel Ionescu-Heroiu and Andrew Rumbach. "Equity planning in post-Katrina New Orleans: Lessons from the 9<sup>th</sup> Ward's ACORN Housing/University Partnership." *Cityscapes* 10(3): pp. 29-48.

## **Peer-Reviewed Book Chapters**

- Rumbach, Andrew and Carrie Makarewicz. 2017 "Affordable housing and disaster recovery: A case study of the 2013 Colorado floods. In: Sapat, Alka and Ann-Margaret Esnard (Eds.) Coming Home After Disaster: Multiple Dimensions of Recovery, pp. 100-112. Boca Raton: CRC Press.
- Rumbach, Andrew. 2016. "Disaster Governance in Small Urban Places: Issues, Trends and Concerns." In: Miller, Ann and Michael Douglass (Eds.) *Disaster Governance in Urbanising Asia*, pp. 109-125. New York: Springer.
- Rumbach, Andrew. 2016. "From crowbars to community recovery: A planning education in the eye of the storm. In: Forrester, John and Kenneth Reardon (Eds.) *Rebuilding Community After Katrina:*Transformative Education in the New Orleans Planning Initiative, pp. 65-80. Philadelphia: Temple University Press.

## **Project Reports, Policy Briefs, and Other Publications**

- Sullivan, Esther, Carrie Makarewicz, Andrew Rumbach and Natasha Albert. 2021. "Affordable but marginalized: Study provides first comprehensive look at Houston's mobile home parks." *Urban edge*, a product of the Kinder Institute for Urban Research at Rice University.
- Rumbach, Andrew and Esther Sullivan. 2018. "Hurricane Harvey, mobile home parks and flood risk." Natural Hazards Center Quick Response Research Report #283.
- Rumbach, Andrew, Carrie Makarewicz, Jeremy Németh and Deborah Thomas. 2014. "Understanding household recovery following the Colorado flash floods (2013)." Natural Hazards Center Quick Response Research Report #250.
- Smith, Gavin, David Perkes, Darrin Punchard and Andrew Rumbach. "Living with the St. Vrain." Community Planning Assistance Team (CPAT) report for the Town of Lyons, Colorado.

#### **Commentaries and Media Mentions**

- Paterson, Leigh. "I was watching the roof as it was peeling off,' communities rush to repair mobile homes damaged by Marshall Fire winds." KUNC November 26, 2022. https://bit.ly/3D94q19
- Lubben, Alex. "Houston's solution to climate change is to force low-income people to move." *Vice News*, October 23, 2022. https://bit.ly/3ZycmT3
- Figueroa, Ariana. "Sitting on a time bomb': Mobile home residents at risk in red-hot housing market." *Colorado Newsline*. April 10, 2022. https://bit.ly/3COgk0a
- Uliano, Danielle, Ayurella Horn-Muller, Brendan Rivers, Allison Kopicki and Kelly Van Baalen. "Rising seas swamp Black, Spanish and Indigenous history in St. Johns County. December 2, 2021. https://bit.ly/3H2c6Vb
- Herr, Alexandria. "After the winter storm, a Texas mobile home community's nightmare was far from over." *Grist*, March 31, 2021. https://bit.ly/3kg8u8R
- Parsons, Doug. "Hazard mitigation meets climate adaptation." *America Adapts* podcast, episode 132, March 15, 2021. https://bit.ly/3XxBJCJ
- Sparling, Nina. "El Dorado County may consider protections for mobile home park residents." *CapRadio*, November 27, 2020. https://bit.ly/3H2v7GO
- de Yoanna, Michael. "Mobile home dwellers left behind after the 2013 floods." Associated Press News, September 15, 2019. https://bit.ly/3izMPIn
- Poon, Linda. "Why historic preservation needs to be part of disaster planning." *Citylab*, April 8, 2016. https://bloom.bg/3ZC4Rur
- Schimel, Kate. "How 2013's Front Range floods changed the face of the region." *High Country News*, October 12, 2015. https://bit.ly/3GElz3E

#### **PRESENTATIONS**

#### **Government Testimonies and Related Presentations**

Rumbach, Andrew and Katherine Dickinson. 2022. "An Update on Phase 1 of the Marshall Fire community survey." Presentation to the Town of Superior Board of Trustees, September 26.

# **Invited Lectures and Panels**

Rumbach, Andrew. 2022. "Urbanization and the political economy of disaster risk creation in the Darjeeling Himalayas." Texas A&M University Department of Geography, fall lecture series.

Rumbach, Andrew. 2022. "Historic preservation and disaster resilience: Five actions for your Certified Local Government." State of Colorado CLG program, monthly webinar series.

Rumbach, Andrew. 2022. "Manufactured home parks and managed retreat: Foundations and key questions." National Academies of Sciences, Engineering and Medicine.

Rumbach, Andrew. 2021. "Adaptation at the margins: Mobile home parks and the climate crisis." University of California Berkeley, College of Environmental Design Lecture Series.

Rumbach, Andrew. 2021. "Historic preservation and disaster resilience." NAACP Web Policy Chats.

Rumbach, Andrew. 2021. "Mobile home parks and disaster resilience in the Houston metropolitan region." University of Washington, Just Sustainabilities Symposium.

Rumbach, Andrew. 2021. "Hazard mitigation plans and local climate resiliency." Indiana University Environmental Risk Institute, Hazard Mitigation and Climate Resiliency Webinar Series.

Rumbach, Andrew. 2021. "Hazard mitigation planning: Community approaches to economic resiliency." Brazos Valley Council of Governments, Economic Disaster Resiliency Workshop.

Rumbach, Andrew. 2020. "Rural urbanization and disaster risk creation in the Darjeeling-Sikkim Himalayas." University of Hawaii Manoa, Department of Urban and Regional Planning Lecture Series.

Rumbach, Andrew. 2020. "Disasters beyond the city: Urban development and environmental risk in the eastern Himalayas." Impact and Policy Research Institute (IMPRI) India, City Conversations.

Rumbach, Andrew. 2019. "Disasters and uneven recovery: Lessons from the 2013 Colorado floods." University of Utah, Department of Metropolitan + City Planning Lecture Series.

Rumbach, Andrew. 2018. "Planning for Hazards: Land-Use Solutions for Colorado." American Society for Public Administration annual conference.

Rumbach, Andrew. 2018. "Community recovery after disasters: Considerations for creating long-term resilience." State of the Coast conference.

Rumbach, Andrew. 2018. "Post-disaster long-term recovery: Considerations for creating long-term resilience." Rocky Mountain Land Use Institute annual conference.

#### **SERVICE**

## Scholarly Service

Journal of the American Planning Association: Editorial board member; January 2022 - present

Journal of Planning Literature: Editorial board member; January 2020 - present

Anonymous referee for peer-reviewed journals including Annals of the AAG; City and Community; Disasters; Environment and Planning A; Habitat International; International Journal of Disaster Risk Reduction; International Journal of Urban and Regional Research; Journal of the American Planning Association; Journal of Applied Geography; Journal of Planning Education and Research; Journal of Planning Literature; Journal of

Urbanism; Natural Hazards; Natural Hazards Review; Pacific Affairs; Planning Perspectives; Weather, Climate & Society; and Landscape and Urban Planning; 2017 – present.

# **AWARDS & FELLOWSHIPS**

Enabling the Next Generation of Hazards and Disasters Research Fellowship: National Science Foundation; 2016-2017.

Gill Chin-Lim Award for Best Dissertation on International Planning: Association of Collegiate Schools of Planning; 2011.

J. William Fulbright Research Fellowship: U.S. Department of State; 2009-2010.

National PERIship Award in Hazards, Risk and Disasters: Public Entity Risk Institute; 2009.

Critical Language Scholarship; U.S. Department of State; 2009.

Foreign Language and Area Studies Fellowship (FLAS): U.S. Department of Education; 2006-2008.

# **SKILLS**

Qualitative research

Research Design: Mixed Methods

Research Design: Instrument Design/Data Collection

Instrument Design/Data Collection: Structured questionnaires
Instrument Design/Data Collection: Semi-structured instruments

# **LANGUAGES**

English (Fluent)

Hindi (Basic)