

SAT-A03: **Climate Smart Solutions for Every Community**
ASLA Blue Ribbon Panel on Climate Change and Resilience
Saturday, October 20, 2018: 11:00-12:30 pm

ASLA has identified climate change as a key issue for its members, and for the society at large. Representatives from ASLA's multi-disciplinary Blue Ribbon Panel on Climate Change and Resilience will discuss panel findings and public policy recommendations for mitigating and adapting to climate change through resilient design.

Learning Objectives:

- Participants will learn about barriers to climate smart and resilient design and planning.
- Participants will learn tools and techniques for effect community and public engagement.
- Participants will learn how to apply environmental justice analysis for community projects.
- Participants will learn about comprehensive public policy recommendations that assist design professionals in creating climate smart, resilient communities.

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**Annual Meeting
and EXPO**
October 19-22
Philadelphia

Biographies

Panelists



Tim Duggan, ASLA

Founder

Phronesis

Email: tim@phronesis-design.com

Tim Duggan, ASLA founded Phronesis in Kansas City as a nimble landscape architecture and urban design studio focused on creating regenerative infrastructure and community systems within the public realm. He has collaborated on a wide range of projects from post-disaster community planning to complex green infrastructure urban design strategies. As Director of Innovations for the Make It Right Foundation he has developed over 200 LEED platinum landscapes. Duggan was named as one of Metropolis magazine's 2012 Game Changers for his ambitious experiments in landscape design.



Diane Jones Allen, ASLA

Program Director for Landscape Architecture

The College of Architecture Planning and Public Affairs at the University of Texas at Arlington

Email: diane.allen@uta.edu

Diane Jones Allen, ASLA has 30-plus years of experience in professional practice focusing on land planning and varied scales of open space and park design, including community development work. In addition to her leadership role at the University of Texas at Arlington, she was a tenured professor at Morgan State University. She is principal landscape architect with DesignJones LLC in New Orleans and serves on the board of the Landscape Architecture Foundation. Her research and practice is guided by the intersection of environmental justice and sustainability in African-American cultural landscapes. Her book *Transit Deserts: Race, Transit Access, and Suburban Form* was published by Routledge Press.



Adam Ortiz

Director for the Department of the Environment

Prince George's County, Maryland

Email: AOrtiz@co.pg.md.us

Adam Ortiz heads a 300-person, \$160 million agency dedicated to recycling, composting, clean water, renewable energy and human animal care. Among other successes in his leadership role at Prince George's County, he launched an innovative public-private partnership stormwater retrofit program that is restoring local streams while creating green jobs. Previously, Ortiz served three terms as mayor of Edmonston, Maryland. His accomplishments included a 70% drop in crime, the end of devastating flooding, an inclusive immigrant-engagement effort, and building Edmonston Green Street, a model of sustainability. Before his government service, Ortiz worked as a Soros Justice Fellow and as a deputy director for Amnesty International.

Moderator



Vaughn Rinner, FASLA

Immediate Past President

American Society of Landscape Architects

Email: vaughn@vaughnrinner.com

Vaughn Rinner, FASLA is Immediate Past President of the American Society of Landscape Architects. She has over forty years of private practice experience in both small landscape architectural firms and as a partner in interdisciplinary firms. Vaughn has spoken widely about the importance of landscape architecture in addressing climate change impacts. She served as Chair for the interdisciplinary ASLA Blue Ribbon Panel on Climate Change and Resilience.

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Smart Policies for a Changing Climate

The Earth's rapidly changing climate is the challenge of our times. The impacts of climate change affect all of our projects and activities at an ever-increasing rate, and we must be leaders, working with a wide range of disciplines, to help communities become more resilient and able to adapt to changing conditions. Collaboration is essential to understanding the complex changes not only to the physical environment, but also to the social, economic, and cultural structures that are altered and must be adjusted due to climate change impacts.

The policies that are established by local, state, and federal governments and even international collaborations are a major determinant of the ability of communities to take actions that will help them to be resilient and able to adapt to both short-term events and long-term deviations from what has been defined as normal.

Changing policy can be very challenging. The following are key barriers to implementing climate smart and resilient community planning and design:

- Lack of knowledge of design solutions
- Resistance to change
- Challenge of working across political boundaries

In recognition of the importance of policies to resilient communities, the American Society of Landscape Architects convened a Blue Ribbon Panel on Climate Change and Resilience that included experts from several disciplines that work with planning, design, and policy as consultants and in both government and private institutions. The focus of the panel was to consider what policies would promote climate-smart community decisions and actions. For this session we have three members of the panel to discuss various aspects of the recommendations and to consider how to move the needle forward at all levels of government.

The recommendations of the panel have been organized into a report ***Smart Policies for a Changing Climate*** that serves as an educational tool to help governments and citizens at all levels to lead the way to increased resilience.

The following core principles are identified in the report:

- Policies should be incentive-based wherever feasible.
- Policies should promote holistic planning and provide multiple benefits.
- Policies should address environmental justice and racial and social equity issues.
- Policies should reflect meaningful community engagement.
- Policies should be regularly evaluated against performance measures and reviewed for unintended consequences.
- Policies should address broader regional goals and issues as well as local and site-specific concerns.

Utilizing these principles, the report outlines key planning and design strategies and guidelines for public policies that will promote healthy, climate-smart and resilient communities. The report is intended to be the foundation of a living document and is housed on the ASLA website. It can be downloaded at <https://www.asla.org/climatepolicies.aspx>. You can further share your ideas and projects on the Climate Change and Resilience Forum at <https://climate.asla.org/>.

Resiliency Planning and Community Engagement

Urban Acupuncture: Building a Vision through leveraging projects in Green Infrastructure, Resiliency Planning & Community Engagement

The 20th Century transportation network has created significant challenges for many communities and cities across the country and we are all facing significant aging infrastructure and economic development challenges in the 21st Century. Together, local, state, and federal governments set about on a frenzy of urban renewal projects through brazen demolition and bold, yet sometimes ill-advised, construction of infrastructure, buildings and roads.

Having internalized these lessons of the past, landscape architects are at a crossroads where they can either 1) maintain the status quo, or 2) elbow into the “decision makers” table and establish a new paradigm for landscape architects to solve this current set of problems. Our profession needs to shift patterns in the way the city infrastructure systems are planned, designed and operated today and adapt them to how present-day residents live, work, and play, integrated into the natural environment in a more sustainable manner.

Landscape architects must take a unique approach in how we seek ways to collaborate, engage, design and leverage opportunities into regenerative infrastructure solutions. We have developed a host of engagement tools that promote fun, interactive, and productive community workshops. Our tools include design drawings that reflect community visions and various scenarios, maps generated from layered geographic information, and interactive electronic and bean counting voting tools. Designing productive and engaging exercises is the key to a successful workshop. Drawing on a strong design background and public planning experience, materials, questions, and activities allow participants to have a true say in the planning process. This integration of high-tech and low-tech strategies reaches a wider audience and ensures the broadest possible engagement.

A high level of community engagement creates the opportunity to redefine infrastructure in America for the next 100 years, leveraging multiple community benefit outcomes through Urban Acupuncture.



Environmental Justice

People do not find themselves in vulnerable geographies by accident. They are often pushed there by racial injustice, economic inequality, and short-term, profit-driven development practices. The long-term decay of the nation's infrastructure is also a direct result of policy decisions that governing bodies and communities make time and again.

A vulnerability analysis is made by combining geographic, demographic, and transit access data combined with projections of unpredictable weather patterns, including storm surge, extreme rainfall, drought, hurricanes and other potential extreme events. A case study of Hurricane Harvey demonstrates how this approach helps communities to understand the challenge and develop strategies to address the environmental justice issues.

A lack of transit equity is a major issue during extreme weather events. Multi-modal transportation systems are resilient to the uncertainties posed by climate change. Landscape architects design systems with multiple, interconnected transportation options that create redundancy and flexibility, qualities that help communities evacuate and rebuild quickly in the face of natural disasters.

The Community Adaptation Program (CAP) in the City of New Orleans is a network of initiatives to implement green infrastructure city-wide in order to reduce risk from flooding. This includes design and implementation of interventions not only on public sites, but also on individual residential properties in vulnerable areas.



Implementing Public Policy

Natural Systems

Designing and planning in concert with natural systems promotes resilience, capitalizes on the multiple benefits provided by natural systems, and provides greater long-term return on investment than conventional development.

Recommendations focus on increasing the quantity and quality of green development. They include requirements for water and stormwater protection and management through green infrastructure, vegetated buffers, the use of vegetation that supports biodiversity and pollinators, and increased soil health. National and regional strategies include tree planting, protection of critical water sources, and wildland preservation. It is essential to address inequities in access to open space and recreation.



Community Development

Compact, walkable, transit-oriented development reduces energy use. When designed in concert with natural systems, these “smart-growth” communities are also resilient and climate smart.

Solutions include requirements for complete and green streets, redevelopment and reuse of brownfields and grayfields, and other programs that incentivize reuse and rebuilding. Funding mechanisms such as community investment trusts are encouraged to fund resilience projects, including clean energy. Municipal and regional climate resilience plans are needed, including climate change analysis of laws and regulations as well as human health impacts. Public insurance programs should be restructured to encourage resilient rebuilding.



Vulnerable Communities

Special attention must be paid to communities that are at special risk from the effects of climate change. These include communities located in coastal and inland floodplains as well as underserved and low-income communities.

Recommendations include the development of relocation, retreat, and/or evacuation plans, limits on the development of building in floodplains, and update of FEMA flood maps to include projections of climate change impacts. Promotion of mixed-income housing and mixed-use development as well as a focus on environmental justice and equitable access to transportation, housing, jobs, and open space are part of the solution.



Transportation

Transportation must be considered through multiple lenses: as critical connectivity from homes to jobs, amenities, and essential services; as a major source of greenhouse gas emissions; and as a contributor to or detractor from a community's appearance and function. Planned and designed thoughtfully, transportation systems can promote resilience.

Recommendations include transit-oriented development, equitable, multimodal transportation, and planning for new technologies. Regional transportation and development should be promoted.



Agriculture

At the same time that farmland is being lost to expanding development and sprawl, agricultural systems are being stressed by the effects of climate change and unsustainable farming practices. Current and future impacts on food production and security, including equitable access to healthy food options, must be addressed.

Additional Resources

Interested in learning more about what was discussed today? Check out these great resources!

Recommended Books

- ***After Nature: A Politics for the Anthropocene***, Jedediah Purdy Harvard University Press, 2015
- ***Cities and Climate Change: Responding to an Urgent Agenda***, edited by Daniel Hoorweg, Mila Freire, Marcus Lee, Perinaz Bhada-Tata, and Belinda Yuen The World Bank, 2011
- ***Climate Design: Design and Planning for the Age of Climate Change***, Peter Droege ORO Editions, 2009
- ***Climate of Hope, How Cities, Businesses, and Citizens Can Save the Planet***, Michael Bloomberg and Carl Pope St Martin's Press, 2017
- ***The Community Resilience Reader: Essential Resources for an Era of Upheaval***, edited by Daniel Lerch Island Press, 2017
- ***Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming***, edited by Paul Hawken Penguin Books, 2017
- ***Earth in Human Hands: Shaping our Planet's Future***, David Grinspoon Grand Central Publishing, 2016
- ***Energy Democracy: Advancing Equity in Clean Energy Solutions***, edited by Denise Fairchild and Al Weinrub Island Press, 2017
- ***How to Thrive in the Next Economy: Designing Tomorrow's World Today***, John Thackara Thames & Hudson, 2015
- ***Local Climate Action Planning***, Michael Boswell, Adrienne Greve, and Tammy Seale Island Press, 2011
- ***Natural Capitalism: Creating the Next Industrial Revolution***, Paul Hawken, Armory B. Lovins and L. Hunter Lovins Little, Brown and Company, 1999
- ***Nature and Cities: The Ecological Imperative in Urban Design and Planning***, edited by Frederick Steiner, George Thompson, and Armando Carbonell Lincoln Institute of Land Policy, 2016
- ***Resilient Cities: Overcoming Fossil Fuel Dependence, Second Edition***, Peter Newman, Timothy Beatley, and Heather Boyer Island Press, 2017
- ***Resilient Coastal City Regions: Planning for Climate Change in the United States and Australia***, edited by Edward Blakely and Armando Carbonell Lincoln Institute of Land Policy, 2012
- ***Urbanism in the Age of Climate Change***, Peter Calthrope Island Press, 2010

Recommended Articles

- **“The Dutch Have Solutions to Rising Seas. The World Is Watching,”** Michael Kimmelman *The New York Times*, June 15, 2017 www.nytimes.com/interactive/2017/06/15/world/europe/climate-change-rotterdam.html
- **“Building Resilience? There’s a Standard for That,”** Laurie Mazur *Planetizen*, July 31, 2017 www.planetizen.com/node/94011/building-resilience-theres-standard
- **“How to Turn Neighborhoods into Hubs of Resilience,”** Taj James and Rosa Gonzalez, *Yes Magazine*, April 14, 2017 www.yesmagazine.org/planet/how-to-turn-neighborhoods-into-hubs-of-resilience-20170414
- **“A Policy Approach Toward Climate Justice,”** Jalonne L White-Newsome *The Black Scholar*, Vol 46, Issue 3, 2016
- **“Protecting Communities from Climate Change (Hint: It’s Not Just About Seawalls),”** Jeni Miller *CoLab Radio*, April 25, 2016 colabradio.mit.edu/protecting-communities-from-climate-change-hint-its-not-just-about-seawalls
- **“This is How We Can Tackle Climate Change, Even with a Denier in Chief,”** Laurie Mazur, *The Nation*, December 12, 2016 www.thenation.com/article/this-is-how-we-can-tackle-climate-change-even-with-a-denier-in-chief
- **“Climate Change, Heat Waves, and Environmental Justice: Advancing Knowledge and Action,”** Jalonne L White-Newsome, et al , *Environmental Justice*, Vol 2, no 4, December 2009
- **“Assessing Heat-adaptive Behaviors Among Older, Urban-dwelling Adults,”** Jalonne L White-Newsome et al , *Maturitas*, Vol 70, Issue 1, September 2011
- **“Climate Change and Health: Indoor Heat Exposure in Vulnerable Populations,”** Jalonne L White-Newsome et al , *Environment Research*, Vol 112, January 2012
- **“Climate Change and Public Health,”** Jalonne L White-Newsome et al , *Non-governmental Actions by Individuals, Civil Society Organizations, and the Private Sector*, Oxford University Press, June 2015
- **“Strategies to Reduce the Harmful Effects of Extreme Heat Events: A Four-City Study,”** Jalonne L White- Newsome et al , *International Journal of Environmental Research and Public Health*, February 2014
- **“Survey of County-Level Heat Preparedness and Response to the 2011 Summer Heat in 30 U.S. States,”** Jalonne L White-Newsome et al , *Environmental Health Perspectives*, June 2014
- **“Validating Satellite-Derived Land Surface Temperature with In Situ Measurements: A Public Health Perspective,”** Jalonne L White-Newsome et al , *Environmental Health Perspectives*, August 2013
- **“Building Resilience? There’s a Standard for That,”** Laurie Mazur *Planetizen*, July 31, 2017 www.planetizen.com/node/94011/building-resilience-theres-standard
- **“How to Turn Neighborhoods into Hubs of Resilience,”** Taj James and Rosa Gonzalez, *Yes Magazine*, April 14, 2017 www.yesmagazine.org/planet/how-to-turn-neighborhoods-into-hubs-of-resilience-20170414

Recommended Reports

- ***Buy-in for Buyouts: The Case for Managed Retreat from Flood Zones***, a Policy Focus Report in collaboration with the Sonoran Institute, Lincoln Institute of Land Policy, 2016
- ***“Climate Change and the Resilience of New Orleans: The Adaptation of Deltaic Urban Form,”*** Armando Carbonell and Douglas Meffert, in ***Cities and Climate Change: Responding to an Urgent Agenda***, edited by Daniel Hoornweg, Mila Freire, Marcus Lee, Perinaz Bhada-Tata, and Belinda Yuen The World Bank, 2012
- ***Lessons from Sandy: Federal Policies to Build Climate-Resilient Coastal Regions***, Robert Pirani and Laura Tolkoﬀ Lincoln Institute of Land Policy, 2014 www.lincolninst.edu
- ***Bounce Forward: Urban Resilience in the Era of Climate Change***, a Strategy Paper from Island Press and the Kresge Foundation
- ***CIRCLE-2 Adaptation Inspiration Book***, edited by Marjolein Pijnappels and Philip Dietl, University of Lisbon, 2013 www.circle-era.eu/np4/552.html
- ***Innovation in Climate Adaptation***, Knowledge for Climate, Climate Adaptation in the Netherlands, 2014 edepot.wur.nl/315807
- ***Planning for Climate Change in the West***, a Policy Focus Report on urban form and GHG mitigation, Lincoln Institute of Land Policy, 2010 www.lincolninst.edu
- ***Understanding and Responding to Climate Change: Highlights of National Academies Report***. National Academies Press, 2008
- ***Urban Planning Tools for Climate Change Mitigation***, Patrick Condon, Duncan Cavens, and Nicole Miller, Lincoln Institute of Land Policy, 2009 www.lincolninst.edu

Recommended Websites

- e360.yale.edu/
- insideclimateneews.org