

## **Panel 12a: Healthy and Adaptable Communities**

Communities are at the core of actions taken to mitigate natural hazard impacts and increase adaptability. This panel seeks papers that advance our understanding of the role and impact that communities have on the built environment. We aim to enhance our understanding of both potential synergies and potential conflicts between energy usage and reliability. We welcome a variety of perspectives and especially encourage submissions from the perspectives of Native Nations, municipalities, community-based organizations, utilities, and other entities working to address healthy building challenges. Selected papers will attempt to answer questions through research, field demonstration, and/or case studies, potentially including the following:

- What considerations need to be made when designing community-scale strategies (e.g., microgrids, energy storage, district thermal power), including in both new and existing communities?
- What are common barriers in implementing projects, and what are some strategies to overcome them?
- How do community-based organizations work to enact projects that benefit all community members?
- What role does energy efficiency play in improving health outcomes in a building?
- Which features are best managed at an individual-building level versus at a larger community scale?
- Which building technologies and operations methods can contribute to resilient performance?
- How can high-performance building features be leveraged, changed, or optimized also to deliver durable benefits?

Preferred papers will present outcomes that could include the following:

- Measurement and verification of energy performance, health, reliability, and affordability benefits offered by specific technologies
- Methods that ensure benefits can be delivered equally in terms of building performance
- Identification of best-value technology investments based on building types, geography, and potential building- or community-level threats (e.g., threats and hazards to building structures, systems, controls, and energy supply)
- Valuation of benefits from distributed energy resources (e.g., site generation, energy storage, microgrids) at individual-building and community scales
- Identification of strategy integration in disaster planning and disaster recovery effort