The University Role in Creating a Resilient City: An Annotated Bibliography
COALITION OF URBAN SERVING UNIVERSITIES

The Coalition of Urban Serving Universities (USU) is a president-led organization committed to enhancing urban university engagement to increase prosperity and opportunity in the nation’s cities and to tackling key urban challenges. The Coalition includes public urban research universities representing all U.S. geographic regions. The USU agenda focuses on creating a competitive workforce, building strong communities, and improving the health of a diverse population. The Coalition of Urban Universities (USU) has partnered with the Association of Public and Land-grant Universities (APLU) to establish an Office of Urban Initiatives, housed at APLU, to jointly lead an urban agenda for the nation’s public universities.

https://usucoalition.org

ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES

The Association of Public and Land-grant Universities (APLU) is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities in the U.S., Canada, and Mexico. With a membership of 242 public research universities, land-grant institutions, state university systems, and affiliated organizations, APLU's agenda is built on the three pillars of increasing degree completion and academic success, advancing scientific research, and expanding engagement. Annually, member campuses enroll 4.9 million undergraduates and 1.3 million graduate students, award 1.3 million degrees, employ 1.3 million faculty and staff, and conduct $44.9 billion in university-based research.

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The Coalition of Urban Serving Universities identified Smart Resilient Cities as a priority area. Through our collective work, we discovered there was little to no literature around the role the university does or might play in building smarter, more resilient cities. To address that gap, a group of university leaders from urban serving universities worked together to develop an annotated bibliography to help universities and communities work together to build a smart resilient city.
The discussion in this article provides critical information about what college leaders can do to identify this need among students, structurally support such students (through school policies, financial due dates etc.) and utilize school resources (i.e. school loan programs, counselors, community partnerships). Suggests strategies for institutions to develop partnerships with NPOs to increase student access, and identifies policy topics needing attention and advocacy at a national level.

**Broton, M. Katherine**

**Goldrick-Rab, Sara**

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**The Dark Side of College (Un)Affordability: Food and Housing Insecurity in Higher Education.**


doi:10.1080/00091383.2016.1121081
An in-depth and comprehensive review of literature related to homelessness/housing insecurity in higher ed. It addresses the need to de-stigmatize, and reconceptualize how homelessness is understood. It also explores the intersections of this chronic challenge with identity markers that face other significant stigmatization or marginalization. The manuscript also provides in-depth discussion of suggested ways research, institutional policy, practice etc. can be utilized to address this problem; specifically from a trauma-informed approach.

**Crutchfield, Rashida**

**Ronald E. Hallett**

**Special Issue: Homelessness and Housing Insecurity in Higher Education--A Trauma-Informed Approach to Research, Policy, and Practice.**

*ASHE Higher Education Report, 43*(6), 1-129.
This paper argues community colleges should make support programs related to housing and homelessness a primary objective. Strategies for moving in this direction are presented and discussed. The primary suggestion made is that proposal of a single point of contact on all college campuses to streamline access and service coordination and delivery to students facing housing insecurity.

Crutchfield, Rashida

Freas, Adam

Mo, Elaine

The Case for a Single Point of Contact for College Students Experiencing Homelessness.

New Directions for Community Colleges, 2018(184), 39. doi:10.1002/cc.20326
From the perspective that housing is a human right, this case study presents a partnership with a local homeless coalition that works to maintain, collect, and analyze data on homelessness in the community. It describes how a university can contribute to community-based research that can inform local policy decisions for governmental, community, and organizational partners. The partnership highlights the utilization of university resources related to technological savvy, creative thinking, scientific inquiry, and community engagement/outreach.

Social Justice Manifest: A University–Community Partnership to Promote the Individual Right to Housing. 

Cronley, Courtney

Lantz, Jennifer

Patterson, A. David

West-Martin, Stacia
The work presented here investigates food insecurity among college students and the potential for urban agriculture to address food insecurity in Los Angeles. Students wanted a greater awareness around food insecurity and food resources, and opportunities to learn life skills including cooking and budgeting. Recommendations include updating zoning, implementing a public land leasing program, subsidizing water rates, creating a city-wide UA network, and collecting additional UA data.

Emerging Topics in Food Insecurity: An Assessment of University Student Food Access and Urban Agriculture in Los Angeles.

Watson, D. Tyler
The work presents a model of two natural capital stocks (wood and fish) that provide ecosystem services to illustrate different cases possible within definitions of and relationships between resilience and sustainability. Four models are presented that argue: 1) resilience is necessary, but not sustainable; 2) resilience is sufficient, but not necessary, for sustainability; 3) resilience is neither necessary or sufficient for sustainability; and, 4) resilience is both necessary and sufficient for sustainability.

Baumgartner, Stefan
Derissen, Sandra
Quaas, Martin

The relationship between resilience and sustainability of ecological-economic systems. Ecological Economics, 70(6), 1121–1128. doi.org/https://doi.org/10.1016/j.ecolecon.2011.01.003
This article presents a model of urban sustainability, urban resilience, and urban transformation based on views in policy documents and academic research. The authors suggest that resilience is more than recovery from disturbances; it explores the persistence, perseverance, and potential alternative configurations of complex systems, and adaptive and transformative capacities of subsystems interacting across scales and over time.

**Sustainability and resilience for transformation in the urban century.**
[https://doi.org/10.1038/s41893-019-0250-1](https://doi.org/10.1038/s41893-019-0250-1)

**Andersson, Erik**
**Elmqvist, Thomas**
**Frantzeskaki, Niki**
**McPhearson, Timon**
**Takeuchi, Kazuhiko**

**Analysis**

**Model**

**Global**
This article presents a literature review of resilience and urban sustainability to extract a comprehensive set of criteria that can be used to develop an assessment system. It identifies urban resilience themes of environmental, economic, social, and institutional dimensions of sustainability, while offering a framework of theme, sub-theme, and criteria in a detailed table, including themes of infrastructure, security, environment, economy, institutions, social/demographics.

Sharifi, Ayyoob
Yamagata, Yoshiki

The article focuses on mechanisms by which farm-level responses to globalization and environmental change feedback to affect the sustainability and resilience of the social–environment system. The authors draw on two Latin American case studies to illustrate the collective and synergistic implications of farmers’ livelihood and land use choices for the sensitivity of the region to future market and environmental shocks, as well as for the role of the landscapes in the global carbon cycle.

**Linking local vulnerability to system sustainability in a resilience framework: two cases from Latin America.** *Climatic Change, 93*(3), 355–377. doi.org/10.1007/s10584-008-9514-x

**Eakin, Hallie**

**Wehbe, Monica**
This article offers a bibliometric analysis of the influential literature review on urban resilience over four decades. The article frames the concept of resilience within six tensions, which include: 1) definition of urban; 2) understanding system equilibrium; 3) positive vs. neutral conceptualizations of resilience; 4) mechanisms for system change; 5) adaptation vs. general adaptability; and, 6) timescale of action.


Meerow, Sara
Newell, P. Joshua
Stults, Melissa
This article showcases an analysis of peer-reviewed literature, relevant policy, and federal guidance to characterize the capabilities of Nongovernmental organizations (NGOs), contextual factors that determine their involvement in disaster operations, and key services they provide during disaster response and recovery. The operational model is recommended to be tested in community planning and disaster response as it holds promise as a unifying framework across national preparedness and recovery policy.

Acosta, Joie
Chandra, Anita

The article lays a basis for reviewing the transitions in urban governance that enable cities to circumnavigate change, build capacity to withstand acute shocks, and use innovation in the face of insecurities. Using three case cities, New Orleans, Cape Town, and Phoenix, the article examines cross-scale engagement and expands the scale at which urban resilience has been discussed by merging the idea that systems of cities cannot be viewed as an individual entity.

**Urban transitions: On urban resilience and human-dominated ecosystems.** *Ambio, 39*(8), 531-545. doi:10.1007/s13280-010-0081-9

- **Alfsen, Christine**
- **Davis, George**
- **Elmqvist, Thomas**
- **Leeuw van der, E. Sander**
- **Ernston, Henrik**
- **Meffert, J. Douglas**
- **Redman, L. Charles**
This article examines existing literature to determine key components of a leadership resilience model-oriented workforce, with a focus on organizational structures, training and education. A resilience-oriented workforce must balance the decisions that come from facing both acute shocks and long-term. Resilience-oriented leadership programs must support ways to navigate collaborative mechanisms, created shared outcomes and assurance frameworks, and article a plan that merges acute shocks and stressors.

**Beyond disaster preparedness: Building a resilience-oriented workforce for the future.**
*International Journal of Environmental Research and Public Health, 14*(12), 1563. doi:http://dx.doi.org.ezproxy2.library.drexel.edu/10.3390/ijerph14121563

**Acosta, Joie**  
**Chandra, Anita**  
**Costigan, Tracy**  
**Madrigano, Jaime**
As Artificial Intelligence is taking the lead role in our world, this article provides an in-depth look at how cyber resilience can play a crucial role in how systems and such prepare for acute shocks. This article offers honest advice on the nature of resilience through the lens of smart technologies. Taking a straightforward approach to the realities of how cybersecurity can play a critical role in mitigating shocks and stressors.

Nicholas, Paul

*Smart city resilience: Digitally empowering cities to survive, adapt, and thrive.* Retrieved from https://www.mckinsey.com
The article demonstrates the need to recognize and support, general social resilience at the community level, especially in urban areas as it remains a key task and has the potential to inform resource management, policy making, and research. Further, this article notes that although there are still challenges in moving from theory to practice in integrating resilience thinking, the need to base scaled societal responses to foster resilience has been identified as crucial to chronic pressures, acute shocks, and their interactions.

**Recognizing stewardship practices as indicators of social resilience: In living memorials and in a community garden.** *Sustainability, 8*(8), 775. doi:10.3390/su8080775

**Campbell, K. Lindsay**
**McMillen, Heather**
**Reynolds, Renae**
**Svendsen, S. Erika**
Rapid growth, climate instability, gentrification, rising costs of living, and changing social dynamics challenge the resilience of cities and communities. Universities as anchors of urban opportunity, prosperity and social justice are beginning to shoulder a role in advancing resiliency.

The paramount conclusion that emerges from a review of the literature provided here, is that building resilient cities means leveraging community engagement and partnerships with city organizations, non-profits, and industries. By working with both traditional and unlikely partners, universities can add their resources and advance urban resiliency.