

## CONVERGE COVID-19 Working Groups for Public Health and Social Sciences Research

### Research Agenda-Setting Paper

*This paper was written to help advance convergence-oriented research in the hazards and disaster field. It highlights areas where additional research could contribute new knowledge to the response to and recovery from the pandemic and other disasters yet to come. Questions about the research topics and ethical and methodological issues highlighted here should be directed to the authors who contributed to this paper.*

#### Working Group Name:

Bridging Needs with Research through Action-Oriented Community Design

#### Working Group Description:

The pandemic is demonstrating, in real-time and space, how scientific knowledge interacts with political power and a complex culture to shape decision making—from individual behavior to national policy. These tensions are not new, as seen in the longstanding debate on climate change policy in the United States. However, what was simmering, has ruptured during the pandemic, and manifested itself through everything from divergent individual responses to public health guidance regarding social interaction to social strife and civil disobedience. Community design practices and action research methodologies are effective ways to learn from and rapidly address complex spatial challenges. At the intersections of public health, climate change, and economic instability, this Working Group uses design-practice case studies, community-engagement processes, and action-research methods and processes to highlight the convergence of action research and community-engaged design practice to speculate on how these methods best prepare us to operate in the era of COVID-19 and beyond.

#### Priority Research Topics and Specific Research Questions:

This Working Group is focused on the unique value that community design practice and action research methodologies, and their combination bring to the challenges of this time.

Priority Research Topics	Potential Research Questions
<p>1. The structure of community design practice and action based research methodologies are intentionally born out of local experience and particular geographies. Such practices use a wide variety of “bottom-up” methods and processes as demonstrated by design centers at universities across the country.</p>	<ul style="list-style-type: none"> <li>• What socio-economic, environmental, political, individual, community, and academic forces shape community design and action research? As demonstrated by particular practices, how do these forces shape research questions, methodology, and outcomes?</li> <li>• What is the added value that this model of research brings to communities? Are qualitative and mixed methods research approaches and process oriented outcomes embedded in these practices?</li> <li>• How do individual researchers work on the spectrum of response between long-term objectives and near-term needs? Does this practice help shorten the gap between the two?</li> </ul>

<p>2. Community design research and practice within the university setting presents an imperfect fit to the typical structures of academic research. Design's inherent bias toward action and its evolving definition of research feed into this perception. As the field seeks greater academic legitimacy, clarifying the processes of design practice and research methods is a growing area of interest.</p>	<ul style="list-style-type: none"> <li>• Who benefits from community design research and practice and how should benefits be measured and evaluated?</li> <li>• How does your practice align with the university as a center, a for profit company, a community non-profit?</li> <li>• How does this alignment shape your interaction with faculty and students?</li> <li>• How do faculty conducting community design and action research demonstrate such alignment and how do universities reward such achievement?</li> <li>• Are these processes, practices, and products aligned with institutional Reappointment, Promotion and Tenure (RPT) policies (i.e., incentivize or penalize)?</li> </ul>
<p>3. The focus on joint production that is at the core of action research is also reflected in community design practice. Both methods differ from traditional community based research, which is often extractive, instead they are predicated on a partnership between the academy and community where the research process serves as a means to mobilize, synthesize and catalyze applied research through change.</p>	<ul style="list-style-type: none"> <li>• Does action research as a recognized method effectively moderate between more traditional scientific research production and community design practice?</li> <li>• How does this methodology engage effectively across scales? How do these ideas translate into a small discrete project site context, with a well-defined set of identified stakeholders, differently from how they might translate into something like a municipal or even regional comprehensive planning context?</li> <li>• How do action research methods and engaged community design practices transform how trust is gained and managed in comparison to traditional research methods?</li> <li>• How do community design and action research provide a method that can be adjusted to local conditions?</li> </ul>
<p>4. Community design practice and action research are both highly adaptive and responsive approaches to applied research. In the current moment of pandemic and social upheaval, where we face significant political polarization, evolving public discourse, and rapid knowledge expansion, these tactical approaches are well-suited to achieve meaningful, ethical, and effective change.</p>	<ul style="list-style-type: none"> <li>• At times of unrest, when solutions are not clear, how do design and action researchers achieve stability?</li> <li>• What new engagement methods, tools, and technologies are emerging and how do these respond to shifting perceptions and profiles of risk across time and place?</li> <li>• What are the ethical considerations of action research and design practice in times of societal distress and uncertainty?</li> <li>• How do action and design research engage complex adaptive systems thinking to understand relationships between communities, infrastructure, ecosystems, disease and cities?</li> <li>• How are policy implications visualized for popular comprehension? How do these fields incorporate this role?</li> </ul>
<p>5. Pandemics have historically changed the face and function of cities and communities. Some changes will be rapid while some will come about slowly but it is all but certain that major changes to our built environment will emerge following the Covid-19 pandemic. For community design practices and action researchers significant opportunities for research will emerge as cities, neighborhoods, and individuals respond and seek transformative change over the days and months to come.</p>	<ul style="list-style-type: none"> <li>• What are going to be the conditions (social, spatial, material) that shape community design practice and action research in the future?</li> <li>• What are the primary emergent needs in communities that align with design and action research practices?</li> <li>• How will norms related to public open space, assisted housing, and health care environments change?</li> <li>• Look at how COVID-19 individual and community risk response shifted dramatically in different communities and over short timeframes. What changes are likely to be durable, which transient?</li> <li>• How to think about these issues in the context of the geographic variability of a universal pandemic as it intersects with the geographic variability of different kinds of natural hazard risks/impacts, for which there are different kinds of temporal dimensions?</li> </ul>

<p>6. Designers work with people to imagine their individual and collective futures based on pre-existing experience and aided by local expertise. These same assets are brought to the collective table through action research. The scale, scope, and temporal nature of the pandemic has shifted problems, reordered priorities, and undermined many assumptions. As we move forward, what elements of these practices will emerge and how do these research methodologies and tools inform policy?</p>	<ul style="list-style-type: none"> <li>• Does the mode of COVID-19 transmission and the disparate impacts of COVID-19 shift the relevance, roles, and responsibilities of action and community design research and practice? How does design research and practice account for uncharted visioning?</li> <li>• How can these elements shape, inform and respond to other community needs and create co-benefits?</li> <li>• What is the role of design and action research in communities pursuing their rights and freedom in a time of enforced regulation?</li> <li>• What are the opportunities and obstacles of incorporating existing and novel technologies (i.e., smart phones, handheld devices, VR/AR) to expand the reach, understanding and outcomes of design practice, most specifically as they relate to the challenges created by COVID-19 physical distancing and safety measures?</li> <li>• What impacts will COVID-19 have on organizations and institutions like the university? How will that affect community design practices?</li> <li>• What kinds of engagement strategies are possible and ethical today, versus if there is a major COVID-19 resurgence soon or in the fall, versus after herd immunity or vaccination is achieved?</li> </ul>
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## Ethical / Methodological Considerations:

### *Ethical Considerations:*

- Research that is intertwined with the actual achievement of change is advocacy. How do we square our desire for change, to “solve” problems, settle disputes, or provide direct assistance with the goals of research that stipulate objectivity through distance? Is such separation necessary and are the traditional measures of objectivity skewed by traditional power dynamics that may be upended by the pandemic? We propose that an important role of this work is to consider the ethics of engagement throughout our efforts.
- In a time where scientific knowledge is both exceptionally precise and constantly evolving and society is going through rapid transformation, there are ethical considerations for how change is affected in communities. We propose that the balance of making change NOW as demanded by community members and the benefit of the longer-view is not at all settled and should be an ongoing ethical consideration of this work.

### *Methodological Considerations:*

- The IRB process plays an important role in protecting research subjects. The co-creation of research priorities, questions, and methodologies in action research and the bias towards action and iterative nature of community design research and practice often are in conflict with the standard IRB requirements and timelines.
- The need for social distancing, evolving adoption of individual and collective risk reduction methods as well as varying levels and perceptions of risk, require shifts in engagement processes, development of new tools, and consideration of new models of recovery.
- Questions remain on how we respect and ensure the health of the communities we partner with and continue to conduct catalytic collaborative research.

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## **Other Frameworks, Considerations for Collaboration, and/or Resources:**

Following the meeting held and the development of the research framework, the group is considering developing a series of future research projects including:

- Gathering of data about the impact of COVID-19 on our methodology through a broadly disseminated survey
- Presentation of Working Group progress through a webinar, publications, etc.
- Hosting a meeting in fall 2020 to assemble other groups working at the intersection of community design practice and action research

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