

Civic Innovation Challenge Webinar - Transcript

Josh Schacht, MetroLab Network: Hello, my name is Josh Schacht and I want to thank you for joining this Civic Innovation Challenge Webinar. We're thrilled to be involved in this national research and action competition called the Civic Innovation Challenge, and we look forward to engaging with civic and research partners across the country as you develop transformative projects in your communities. The goal of this webinar is to offer an overview of the Civic Innovation Challenge. The Challenge was launched in the beginning of April and will fund teams working in two focus areas: Communities and Mobility, and Resilience to Natural Disasters. We've recorded this webinar with representatives from the National Science Foundation, the U.S. Department of Energy, and the U.S. Department of Homeland Security. These three agencies are supporting the Civic Innovation Challenge with an anticipated \$9 million in federal funds, with NSF serving as the lead organization on the effort. I represent MetroLab Network, a DC-based non-profit that will be amplifying the impact of this Challenge through leading outreach activities prior to and during the Challenge and facilitating communities of practice among awardees. This webinar will offer an opportunity to review the details of the solicitation, address some frequently-asked questions, and offer context for this new initiative. We are also hosting a number of live Q&A sessions where you can ask specific questions to those involved with the Civic Innovation Challenge. You can sign up for these Q&A sessions at www.nsfcivicinnovation.org. The first two will be held on April 29th and May 15th. As you listen to this webinar, we encourage you to submit questions on that website - nsfcivicinnovation.org - and we'll seek to answer those questions during our live Q&A sessions as well as post the answers as FAQs on our website. Let's get started with some introductions from two of the NSF Program Officers leading the Civic Innovation Challenge.

Michal Ziv-El, National Science Foundation: Hi, my name is Michal Ziv-El, and I'm an Associate Program Director at the National Science Foundation, or NSF. If you're unfamiliar with NSF, it is an independent federal agency that supports fundamental research in all areas of science and engineering, accounting for around 27% of the total federal budget for basic research conducted at U.S. colleges and universities. The Civic Innovation Challenge grew out of NSF's Smart and Connected Communities program, which supports three to four year-long integrative sociotechnical research projects that involve pilot activities in and with communities. We encourage you to visit our Smart and Connected Communities program website (<https://www.nsf.gov/cise/scc/>) and especially to view that program's video in order get a sampling of how our support of community-university teams is already having an impact on the quality of life in communities. I want to add that any opinions or recommendations expressed in this webinar are those of the speakers and do not necessarily reflect the views of the National Science Foundation.

I'll now get us started with an overview of the Civic Innovation Challenge.

The Civic Innovation Challenge addresses two community-identified focus areas. Track A focuses on developing better mobility options to solve the spatial mismatch between housing that is affordable and jobs. Track B focuses on equipping communities for greater preparedness and resilience to natural disasters. When we started planning for this Challenge over a year ago, we had envisioned natural disasters as events including floods, hurricanes, and wildfires, but many other natural disasters certainly fit into this category as well, including pandemics.

The core of the Challenge is a competition among teams comprised of both civic and research partners for awards of up to \$1 million to support ready-to-implement, research-based pilot projects that have potential for scalable, sustainable, and transferrable impact within a time horizon of one to two years.

The competition involves two stages. During the first stage, up to twelve teams in each of the two tracks will be awarded a planning grant of up to \$50,000. These Stage 1 awardees will participate in a four month planning phase, involving a "boot camp", during which they will refine their proposals and prepare their submissions for Stage 2. Only awardees from Stage 1 will be eligible to submit proposals to Stage 2, so it's important that teams submit Stage 1 proposals by the July 1st deadline. During Stage 2, up to four teams per track will be selected to receive a full award of up to \$1 million for 12 month projects.

You can think about the Civic Innovation Challenge as part grant-program and part idea-accelerator -- and our goal is that by blending these two aspects, the effort will have outsized reach and impact.

If you haven't already, we encourage you to read the full solicitation. You can find a link to the solicitation through the Civic Innovation Challenge website - [NSFCivicInnovation.org](https://www.nsf.gov/civics).

Linda Bushnell, National Science Foundation: I'm Linda Bushnell, I'm a Program Director at NSF and am working closely on this project.

I'd like to underscore a few aspects that make the Civic Innovation Challenge unique relative to other programs that we support at NSF, including the Smart and Connected Communities program that Michal mentioned:

1. First, the Civic Innovation Challenge flips the community-university dynamic, asking communities to be in the lead of identifying civic priorities ripe for innovation and to then seek out research partners to address those priorities.
2. Second, the Challenge focuses on research that is ready for piloting in and with communities on a short timescale. Whereas

the time horizon of the Smart and Connected Communities program is already short by NSF standards, the Civic Innovation Challenge is looking at an even shorter time horizon, where real-world impact can start to be evaluated within 12 months;

3. Third, the Challenge requires the inclusion of civic partners in the core project team, in order to truly emphasize civic engagement. Civic partners include state, local, and tribal governments, as well as community organizations, but be sure to visit the solicitation to see the full definition of civic partners for this program
4. And Finally, the Challenge organizes and fosters "communities of practice" around high-need problem areas that allow for meaningful knowledge sharing and cross-site collaboration during both pre-development and piloting.

Josh Schacht, MetroLab Network: That's great. We also have the DOE, DHS, and MetroLab teams here - can you please introduce yourselves and tell us a bit about your role in the Civic Innovation Challenge?

Mark Smith, U.S. Department of Energy: Hi, I'm Mark Smith, I'm the Program Director for Technology Integration at the U.S. Department of Energy. Similar to NSF, we invest in many different areas of research. The division of DOE funding the Civic Innovation Challenge is our Vehicle Technologies Office, which supports research, development, and deployment of efficient and sustainable transportation technologies that will improve energy efficiency, fuel economy, and enable America to use less petroleum. The Civic Innovation Challenge offers a unique perspective on those topics, with a particular focus on peoples' commutes to and from work. We're excited to be partnering with NSF and DHS on this effort and can't wait to engage with your teams throughout the process.

David Alexander, U.S. Department of Homeland Security: I'm Dr. David Alexander, Senior Science Advisor for Resilience at the U.S. Department of Homeland Security. I work in the DHS Science and Technology Directorate, where our mission is to bring cutting edge science and technology to the homeland security enterprise, enabling innovative solutions to our frontline missions, supporting border and maritime security, cyber security, and critical infrastructure protection, immigration and customs enforcement, emergency management and disaster resilience, and state and local first responders. As the country has witnessed over the last couple weeks and months, crises like the covid-19 outbreak create significant disruption to our daily life, and pose new operational challenges to securing our homeland, protecting our citizens and communities, and safeguarding American values. DHS is excited to be collaborating with the National Science Foundation and Department of Energy on the Civic Innovation Challenge to explore how research and development can be applied toward addressing critical challenges facing our communities across the United States.

Ben Levine, MetroLab Network: Hi, I'm Ben Levine and I serve as the Executive Director of MetroLab. MetroLab is a non-profit organization that works with cities, counties, and universities on civic research and innovation. Our team is responsible for fostering communities-of-practice among awardees - collaborative networks that will enable idea sharing to promote greater impact in each team's community and empower projects to be more scalable and transferable. These communities-of-practice will be cultivated through networking events and virtual activities aimed at increasing team capacity and project impact. We're also responsible for promoting engagement in the competition. We contributed to the design of the Civic Innovation Challenge and will be involved throughout the process.

We began collaborating with NSF, DOE, and DHS on this project about a year ago. We held an Ideas Competition that sourced more than 100 project ideas from teams across the country. We refined those ideas with respondents at a workshop and arrived at a few universal themes that are reflected in the tracks for the Civic Innovation Challenge. These themes -- mobility and resilience -- which we'll explore in more depth in a moment -- affect communities of all sizes and geographies across the country.

Of course, we now find ourselves in unusual times, as we face a pandemic and its associated impact on our healthcare, economic, and social systems. Although the collective energy and effort of communities must focus on the crisis at hand, community members, researchers, and leaders will soon also be considering how civic services and systems should be rebuilt to be stronger and more resilient once communities emerge from this crisis. As teams reflect on the focus areas of the Civic Innovation Challenge, they are encouraged to consider how both the current situation and other experiences in their communities uncover new challenges, motivate new questions, and highlight the need for new perspectives.

Josh Schacht, MetroLab Network: Thank you all. Michal, you described two Tracks for the Challenge.

Michal Ziv-El, National Science Foundation: Yes, as we mentioned at the beginning of the webinar, these tracks are focused on "Communities and Mobility" and "Resilience to Natural Disasters".

I'll let my colleagues from DOE and DHS share a bit more about the tracks.

Mark Smith, U.S. Department of Energy: DOE is jointly funding the Mobility Track, which is a perfect fit given our focus at the Vehicle Technologies Office. We believe that efficient transportation goes beyond the vehicle itself to include well-planned and designed mobility systems. Such systems encourage efficient energy usage, reduce commute times, and create opportunity for people across a region. The focus of the Civic Innovation Challenge involves addressing the spatial mismatch between housing that is affordable and

jobs. While the pandemic has reduced and disrupted transportation, we'll soon be restoring and reimagining these systems in ways that prioritize efficiency, cost-effectiveness, and impact. We hope teams will also consider how mobility solutions can increase access to critical services and amenities that foster healthy and thriving communities, such as fresh foods, affordable childcare, medical care, education, and access to technology. DOE's role in this challenge is to support innovators across the country in their efforts to improve these mobility priorities in their communities.

Josh Schacht, MetroLab Network: And David, what's DHS's connection to these tracks?

David Alexander, U.S. Department of Homeland Security: The DHS Science and Technology Directorate is co-funding the Resilience Track because we know that our federal, state, and local customers need safe, reliable, and secure tools for adapting to an increasingly complex and evolving operating environment. Communities need resilience innovation to drive down risk and strengthen our ability to withstand these uncertain events and bounce forward much stronger than before. Given the current pandemic crisis, it is more apparent than ever that communities must consider and prepare for hazards and threats of all kinds. We encourage applicants to boost their resilience efforts across the full spectrum of preparedness, response, recovery, and mitigation.

Josh Schacht, MetroLab Network: Linda, it was mentioned that projects would address community-identified priorities. Can you expand on that?

Linda Bushnell, National Science Foundation: One challenge we see frequently in research projects in this domain is a supply-demand problem. What I mean by that is that a community might have unique priorities and challenges which would benefit from research and data-informed solutions. Meanwhile, researchers have the funding, creativity, and knowledge to help solve those issues. But how do they connect? How do they craft shared objectives about a research and deployment project? By requiring teams to involve both civic partners and research partners, the Civic Innovation Challenge will help direct the focus of the researchers on to the local priorities defined by the civic partners. One of the primary objectives of the Challenge is to create a structure to cultivate and sustain these projects, and it is the involvement of both types of partners that will position them to achieve concrete impact on community-identified priorities that can be evaluated within 12 months.

Josh Schacht, MetroLab Network: 12 months is pretty short relative to many research projects. What's the reason for pursuing such an ambitious schedule?

Linda Bushnell, National Science Foundation: There is a need to blend the timelines of researchers and civic partners. A civic partner may have a question or priority that requires action in a matter of

months. Researchers are trained to approach research questions in a comprehensive manner, which often takes years. These are realities of the two fields and in order to foster stronger collaboration we need to find structures designed to bridge the gap. There are a number of features layered into the Civic Innovation Challenge that we hope will help facilitate this process. For example, teams will receive planning grants to advance projects during an initial phase, enabling them to build support for projects among key partners and stakeholders. The teams that win 12 month, \$1 million awards will collaborate as a community-of-practice, which allows for approaches to scale across communities and allows teams to implement their projects as a cohort.

Josh Schacht, MetroLab Network: Let's shift gears slightly and get into the structure of the competition. Michal, can you take us through the timeline of this competition?

Michal Ziv-El, National Science Foundation: Sure. We opened the application window on April 7th, and we will be accepting applications for Stage 1 of the competition until July 1. At the end of that window, all proposals will be reviewed using NSF's merit review process. This will start with NSF-led review panel that will consist of experts from research and civic sectors. The NSF, DOE, and DHS working group will jointly select around 12 awardees per track to receive planning grants.

After receiving Stage 1 awards, teams will have 4 months to undertake pre-development activities including solidifying their team, maturing their project plans, and preparing their proposal for Stage 2.

Stage 2 applications must be submitted by March 31st, 2021, at which point they will undergo another review process. In Stage 2, up to four applicants per Track will be awarded Full Awards of up to \$1 million each. Each Stage 2 team will use their award to pursue their project and identify a plan for sustaining the outcomes of the project beyond the funded 12-month project period.

Throughout both stages of the competition, teams will participate in "communities of practice" led by MetroLab Network, as Ben described. The associated activities will be modified as needed to accommodate public health guidance.

At the end of Stage 2, teams will showcase their projects and -- we hope -- continue down a pathway of refinement, deployment, and scale.

In fact, we hope that teams that receive planning grants but not full awards will find that the process helps position their projects and teams for success; and even the projects not selected for planning grants will benefit from the proposal process.

Josh Schacht, MetroLab Network: So after those different stages, reviews, and awards, how long will this competition last end-to-end?

Linda Bushnell, National Science Foundation: The process will conclude in early 2022, which means the projects will take 2 years from end to end. As we said earlier, one of the objectives of this competition is to shorten the duration of research projects so that communities can show measurable impact. In that sense, this project will move much faster than other federally-funded research projects, which might last 3 or 5 years, as we mentioned earlier.

Josh Schacht, MetroLab Network: Well, we are so excited for this effort to progress, and can't wait to see the impact this competition will have on communities across the country. Thank you so much for taking the time to go over some details of CIVIC. Is there anything else you'd like to leave viewers with?

Michal Ziv-El, National Science Foundation: Please go visit the Civic Innovation Challenge website at nscivinnovation.org and register for the Q&A sessions we're having on April 29th and May 15th so you can ask further questions to us directly! You can also submit questions on that site. Finally, you'll find all of our contact information on that website under the "Who We Are" tab. Thanks so much for tuning in, and we look forward to your participation in the Civic Innovation Challenge!