

CEE FY22 Program Information Sheet

Program Name

Communication, Education, & Engagement (CEE) Division: “Climate-Smart Communities Initiative” (CSCI)

Program Mission

An essential part of the mission of the NOAA Climate Program Office’s CEE Division is to help U.S. communities and businesses better understand and manage their climate-related risks and opportunities, which includes building resilience to climate-related hazards. To help achieve this mission, CEE manages and maintains the U.S. Climate Resilience Toolkit (or USCRT, online at <https://toolkit.climate.gov>), which gives easy public access to federal science-based information, tools, data products, and expertise. The USCRT embraces an inclusive, all-of-government approach to helping decision makers find and use federal resources they need to assist them in building resilience. Scalability and replicability of successful tools and methods are of particular interest to this program and, therefore, partnerships across all four domains—government, academic, commercial, and non-profit organizations—are essential to our success.

Focus for FY22

In Fiscal Year 2022 (FY22), pending availability of funds, NOAA CPO’s CEE Division will launch a new, four-year Climate-Smart Communities Initiative (CSCI) designed **to scale up, accelerate the pace, and reduce the cost of climate resilience-building, inclusively and equitably, in hundreds of communities all across the United States**. In this competition, a “community” is defined as any municipal, county, tribal, regional, or state government entity.

The CSCI will help bring the commercial market for climate adaptation and resilience services to maturity through a public-private partnership that connects community decision-makers with technical resources and expertise for the purpose of co-developing finance-ready resilience plans that are equitable and guided by the best-available science. The CSCI vision is to co-develop, with community representatives, equitable climate resilience in every U.S. community served.

The CPO/CEE Division seeks an academic, non-profit, or commercial organization to manage the Climate-Smart Communities Initiative (CSCI) Project, working very closely with NOAA’s U.S. USCRT team and its federal partners, via a four-year cooperative agreement grant. The CSCI will be a cooperative agreement grant because NOAA will be substantially involved in the implementation of the project. The goal will be to develop climate action plans that identify and address the highest priority climate-related hazards in at least 300 communities

around the United States; at least one in every state. Each plan must explicitly help communities link their action plans to finance and funding opportunities by meeting climate risk assessment requirements for federal and/or private sources of funds.

Funding for FY22

Pending the availability of funds, it is anticipated that there will be \$4 million in funding available for the first year of this cooperative agreement grant project.

There will be one award to one entity for a 4-year grant period. In years 2-4, the total NOAA funding amount available for the CSCI is anticipated to be approximately \$10 million to \$15 million per year, or a total of \$34 million to \$49 million for the entire four-year period.

Competition Information

The CPO/CEE Division seeks a partnering organization that holds “learning by doing and measuring outcomes” and “adaptive management” among its core values. The successful applicant of this competition will meet all of the following criteria:

1. The applicant shall be a recognized leader in developing or funding climate adaptation and resilience resources and services. The successful applicant shall have a demonstrated track record of successfully supporting communities in planning and/or implementing climate adaptation and/or resilience efforts. The applicant shall likewise have demonstrated experience surveying and researching climate services and resources gaps and opportunities.
2. The successful applicant shall demonstrate relevant experience monitoring and overseeing contracts that support community resilience efforts, including defining and evaluating successful outcomes. The applicant should show superior project management capabilities with the capacity to manage multiple interrelated tasks developing on different timelines.
3. The applicant shall demonstrate a good understanding of climate services, resources, and expertise. The applicant should show evidence of success in directly or indirectly helping individuals and organizations within the United States adapt to, prepare for, and mitigate adverse impacts of climate variability and change.
4. Because partnerships will be essential for the success of the CSCI, the applicant must possess excellent communication skills and a demonstrated capacity to network and collaborate with other climate services entities. The applicant must have no conflict of interest working and co-investing with NOAA or professionals conducting climate adaptation and climate resilience-building in any / all of the domains of academia, government offices / labs, non-profit organizations, and commercial businesses.

Additionally, at least three letters of support from active climate service and resource providers or climate adaptation/resilience-building practitioners within state or local government shall be provided to verify the applicant's experience and expertise among these criteria.

Goals & Objectives of this Grant

Introduction

Local government leaders across the country are seeking decision-support information, tools, expertise, and funding to help them make science-informed and equitable decisions to build resilience against climate-related hazards, now and into the future. Such hazards may include (but are not limited to) extreme heat/cold; severe storms; flooding caused by heavy rain, storm surge, and/or sea level rise; drought; wildfires; and poor air quality. Every one of the more than 32,000 communities in the United States needs these services.

NOAA's CPO/CEE Division seeks a partnering organization that will use existing decision-support tools that have proven successful at helping U.S. communities make decisions to build resilience. By using pre-existing tools with a proven track record, this partnership will take resilience planning and implementation "to scale" by reducing the costs of adaptation planning, rapidly increasing the number of U.S. communities that address climate-related hazards through building resilience, and by growing the number of climate service providers who have a shared mental model of exposure, vulnerability, and risk.

Over the next 4 years, the CSCI Program goals are to:

- train and boost the capacity of our nation's workforce of climate adaptation and resilience professionals.
- recruit trainees into cohorts of adaptation professionals and support their efforts to build resilience as they work with hundreds of U.S. communities (at least one community in every state) to produce equitable, finance-ready climate resilience plans.
- establish reporting metrics and mechanisms to streamline innovations; incorporate lessons from training into program management, and reduce the average cost of resilience planning for communities by at least half through the period of performance.

This initiative will systematize the implementation of the USCRT's Steps to Resilience through program management and by training climate service professionals. The training program is essential to supporting interactions among climate service providers who help communities build and implement climate resilience plans. By growing the number of adaptation professionals who approach climate resilience using similar methods and reporting mechanisms, this partnership will help individual communities prioritize and address their own

hazards, and it will also bring focus and maturity to the methods by which climate services are delivered by the private sector and by federal government representatives. The CSCI will incorporate principles of social equity into building climate resilience and will explicitly measure the success of resilience planning efforts.

CSCI Framework: the Steps to Resilience

The grant recipient and any sub-award recipients under this program must demonstrate capacity, willingness, and ability to develop resilience plans aligned with the USCRT [Steps to Resilience](#) (StR) framework through a combination of software systems and consulting. The successful applicant shall demonstrate capacity to provide spatially explicit information as well as non-spatial data to support each of the five named steps within the StR.

In the first step, the CSCI will help each community evaluate its **exposure to climate-related hazards** through asset inventories (people, places, things, and services for which communities are responsible) and by understanding locally relevant climate-related hazards that can impact those assets.

Second, the CSCI will help communities **assess vulnerability and risk**, considering social equity, economic systems/consequences/opportunities, ecosystem services, and other values determined by each community to be relevant for prioritizing resilience efforts. Vulnerability and risk scoping must explicitly incorporate concepts of adaptive capacity, sensitivity, probability, and the magnitude of consequence for a given potential impact. These characteristics shall be assigned to assets, populations, resources, and services through geographic information systems to the maximum extent possible. By enumerating these attributes, the CSCI will develop a schema by which resilience plans can be compared across communities and within a community; e.g., to compare conditions before and after an adaptation strategy is implemented. Vulnerability and risk assessments will be used to prioritize which potential impacts must be included within a resilience plan.

During the performance period, the successful applicant and any sub-awardees will employ best practices for engaging communities, centering diversity, equity, and inclusion (DEI) in community-based climate resilience planning efforts. Engagements will include community members and organizations who represent the needs and priorities of people who are at-risk from climate-related hazards, especially those who have been marginalized historically. Applicants should demonstrate an ability to incorporate group input into assessments of sensitivity, adaptive capacity, and magnitude of impact for vulnerability and risk assessments.

Team members will develop a list of **options** for building resilience by compiling customized solutions alongside options that have proven effective in other communities. Peer-reviewed literature and online databases can and should be routinely incorporated into the set of options that communities consider within their resilience planning processes. The successful applicant will incorporate Nature-Based Solutions (NBS) into the set of options used to address climate resilience challenges. NBS can provide benefits for humans and wildlife while

ensuring that the ecosystems upon which all life depends retain or regain their functions. NBS options should be promoted especially when they can be shown to be more efficient, adaptive, and cost-effective than traditional, “gray” (concrete) infrastructure. Examples of NBS may include the protection, restoration, or management of natural ecosystems or sustainable management of working lands or green infrastructure (e.g., wetland areas for stormwater mitigation) in urban and suburban settings.

The applicant shall propose a systematic process to **prioritize and plan** the range of actions to be incorporated into local resilience efforts, specifically addressing the highest vulnerability and risk within a community. The process may include expected value analysis, benefit-to-cost ratios, community values, or community-determined prioritization methods that gain the support of local decision-makers and community leaders. These prioritization and evaluation tools must explicitly address community evaluation of equity. Outcomes of the prioritization and planning step will enable projects to qualify for federal funding such as (but not limited to) the following: Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities (BRIC); Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Disaster Recovery or CDBG-Mitigation programs; Environmental Protection Agency community support programs; and the U.S. Fish and Wildlife Service’s National Fish and Wildlife Foundation grants.

The CSCI shall ensure plans are ready for funding so that communities may **take action**; however, *NOAA will not be the source of funding for project implementation*. The successful applicant shall demonstrate its strategies for helping communities identify and secure funds and/or finance mechanisms to implement their action plans.

The CSCI will establish the reporting mechanisms for tracking success of projects through each community project’s period of performance. The applicant shall outline a reporting schema which, in turn, will be incorporated into the USCRT website so that communities may contribute to national-level improvements in effectiveness and efficiency of building resilience to climate-related hazards. The USCRT is committed to sharing knowledge for public benefit, which includes documenting progress by communities and by the nation as a whole.

Required Project Elements

The CSCI must address program management, training, and innovation.

Program management will include a process for screening and pairing adaptation professionals with communities that seek to build resilience to climate-related hazards. The applicant will work collaboratively with the USCRT project team under this cooperative agreement.

The successful application must demonstrate a work plan for onboarding climate service providers (referred to as “practitioners” hereforward). Practitioners may be professionally

affiliated with academic institutions, for-profit businesses, and not-for-profit organizations. They must agree to participate in year-long StR planning cohorts who support one another in building resilience at the community scale. Partners must agree to cooperate, rather than compete, within these cohorts, so that the CSCI can produce effective and efficient plans. They will also contribute comparable metrics to allow for continual improvement and build national capacity for implementing resilience.

The successful applicant shall develop criteria by which communities will be encouraged to participate within the CSCI. The successful applicant will build capacity within communities for resilience planning and local decision-making, including the following: prioritized, fundable, equitable actions that will reduce vulnerability and risk; access to climate science experts; guidance for incorporating diversity, equity, and inclusion within decision-making; options for nature-based solutions that build resilience; guidance for identifying funding and finance options; and feedback from other CSCI adaptation service providers.

Training will be organized and provided to participating adaptation practitioners. The grantee will demonstrate a plan for delivering training in such a way that the StR are systematically applied within communities and so that procedures and outputs may be compared across communities. The training will provide project development and reporting templates so that results from adaptation efforts may be tracked and compared among communities around the nation. This reporting scheme shall be designed to ensure that partners deliver consistent, high-quality decision support for each community in the CSCI. A common set of vocabulary, metrics, and methods will enable consistent comparison of planning methods and return on investment, including economic and social valuation methodologies.

The applicant will **innovate** the CSCI through monitoring resilience programs across the nation. The successful applicant will incorporate lessons learned from completed and partially completed resilience projects into ongoing training, communications, and implementation support. Awardees will use the principles of adaptive management and governance to provide real-time updates of progress to financiers and program support staff. Measurement and evaluation are important in any sector, but especially so in the emergent and quickly evolving field of climate adaptation. Practitioners and decision-makers need to understand when and how both resilience planning and implementation actions are most effective; what type of expertise and enabling partnerships are necessary; who benefits from resilience action; and what strategies are most cost-effective and socially beneficial. Useful and informative metrics will be essential to bringing effective strategies to scale in communities across our nation. The successful applicant will employ metrics that enable comparison of the following parameters across communities: frequency and intensity of extreme weather and climate-related events and their impacts; costs associated with damage from previous events; insight into community participation (i.e., numbers, frequency, decisions that have been modified based on this input); changes to the system from the baseline, including improvements or negative impacts to the community; and funds expended and damages avoided or comparisons of realized savings.

Prospective funders of every resilience plan must be satisfied that their return on investment yields a positive benefits-to-cost ratio.
