

UNLOCKING COMMUNITY RESILIENCE: INNOVATIVE STRATEGIES TO ACCESS CLIMATE ADAPTATION FUNDING

Lessons from Colorado



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Community efforts to adapt to the physical impacts of climate change are lagging despite unprecedented financing available for resilience in the United States. Local and state governments and organizations are pioneering approaches to address key challenges and improve community access to resilience funding. These innovative strategies include:

- boosting local capacity to plan projects and access funding
- stacking public and private funding to implement and scale projects
- streamlining access to multiple financial resources for end users.

Case studies from Colorado illustrate on-the-ground examples of these strategies, which can be applied across a wide range of geographies and resilience needs. These successful approaches can be further supported by recommendations to federal agencies in this brief.

INTRODUCTION

While climate change is a global issue, its physical impacts are felt locally. To prepare for climate impacts, communities need help planning adaptation measures and completing resilience projects. According to the United Nations Environment Programme (UNEP), the global finance gap between adaptation needs and available funds is between \$194 billion and \$366 billion per year and growing.¹ In other words, the need for adaptation capital is 10–18 times more than the levels of capital available.

In the United States, an increasing amount and variety of resilience resources are being offered across federal and state agencies and the private sector. Both

the 2021 Infrastructure Investment and Jobs Act (IIJA) and the 2022 Inflation Reduction Act (IRA) provide unprecedented funding for climate resilience exceeding \$50 billion.² With these resources, communities have a unique opportunity to advance multiple goals, such as economic development and improved critical infrastructure, and realize tangible resilience benefits.

However, even when money is available, it can be hard to access. This, in part, explains the disconnect between resources available for resilience and the rate of adaptation projects getting done.

This brief introduces three key challenges communities face for accessing resilience capital. It then offers

three strategies, with case studies, to address these challenges. These strategies and leading examples were identified during the Center for Climate and Energy Solutions' (C2ES) 2023 *Climate Resilient Communities Accelerator* convenings, where a diverse set of stakeholders across the North Front Range of Colorado shared their resilience challenges and response initiatives.³ Governments and organizations such as the State of Colorado, Downtown Denver Partnership (DDP), and Impact Development Fund (IDF) have developed novel approaches

and partnerships to increase access to and impact of available resilience resources. These strategies can be applied across a wide range of geographies and climate adaptation needs, and we hope they inspire adaptation practitioners and organizations seeking to support local resilience solutions. This brief concludes with recommendations to federal agencies aimed at scaling these strategies and further reducing community challenges to accessing resilience funding.

KEY CHALLENGES COMMUNITIES FACE FOR ACCESSING RESILIENCE FUNDING

Community efforts to adapt to climate change are lagging despite unprecedented financing available for resilience in the United States, highlighting how funding is not the only limiting factor to getting resilience projects done.⁴ Through research on local adaptation solutions and convening regional conversations, C2ES identified three key challenges that communities face for accessing funding and implementing resilience initiatives: complex federal and state funding mechanisms; limited local capacity to plan projects and apply for funding; and unclear ownership and high costs for resilience investments.

CHALLENGE: COMPLEX FEDERAL AND STATE FUNDING MECHANISMS

There is a broad range of public financing and support resources for climate resilience in the United States, including low-interest loans, rebates, dedicated funds, and technical assistance from state and federal agencies. Many communities lack the staff capacity to look for grants and understand the nuances across growing and varied funding mechanisms.⁵ A survey of California adaptation practitioners also revealed a lack of clarity on what the eligibility criteria of certain grants are, and that grant applications were difficult to understand even when aimed at lower-capacity communities.⁶ The increasing breadth of resilience opportunities across agencies and topics makes it difficult for users to navigate and identify a program that matches their needs and eligibility. As a result, many communities—along with their residents and businesses—lack the capacity to leverage

even a single funding program to implement initiatives that would enhance their resilience to climate change.

Many state and federal funding programs are intertwined, with states acting as a pass through for important federal resilience resources, including disaster mitigation funding from the Federal Emergency Management Agency (FEMA). Identifying, applying to, and managing federal grants is a complex and cumbersome process at all levels, and especially for lower-resourced communities.⁷ Federal grants can seem inaccessible due to their high complexity, inclusion of criteria that disadvantage lower-capacity communities, and lack of clarity. For example, a review of FEMA Building Resilience Infrastructure and Communities (BRIC) grants found that scoring criteria often favored advantaged communities through local match requirements; prioritization of projects in communities with higher property values; rewarding places with building codes; and pitting high-capacity, urban centers against rural and remote communities that have fewer resources, staff, and time to complete complicated applications.⁸

Some improvements, however, are coming. In recent years, FEMA and other federal agencies have been focused on understanding and addressing inequities and redirecting support programs to more heavily benefit underserved communities.⁹ In 2023, FEMA first designated the most vulnerable census tracts nationwide as Community Disaster Resilience Zones (CDRZs) to coordinate support and direct more federal, public, and private resources to the highest need areas.¹⁰

CHALLENGE: LIMITED LOCAL CAPACITY TO PLAN PROJECTS AND APPLY FOR FUNDING

Multiple studies emphasize the limited capacity of local governments, particularly smaller ones, to implement adaptation strategies. For instance, a global review of small- and medium-sized municipalities found that the most striking barrier was a lower number of employees (compared to larger municipalities, which have a higher number of and more specialized individual departments) and the lack of adequate internal organization to enable and progress resilience efforts.¹¹ Existing services and resources fail to meet needs associated with effectively implementing, monitoring, and evaluating adaptation activities.¹² Capacity challenges are especially prevalent across environmental justice communities, rural towns, and Tribal Nations, and extend to individual residents and businesses in managing at-risk private properties.

This limited community capacity affects the ability of local governments to plan and apply for grants. In FY 2020, 94 percent of FEMA competitive BRIC grants were awarded to coastal states and wealthier counties, as those communities deficient in staffing, resources, and expertise were unable to submit competitive applications or apply in the first place.¹³ If communities perceive the time required is not worth the lack of an assured outcome, they may forgo writing grant applications, creating a positive feedback loop that continues to favor high-capacity governments. Other factors that contribute to decisions not to apply for grants include lack of dedicated staff, staff turnover, low confidence in ability to be successful, and high competition for a small number of grant opportunities.

CHALLENGE: UNCLEAR OWNERSHIP AND HIGH COSTS FOR RESILIENCE INVESTMENTS

Climate resilience is a public good and many adaptation projects improve shared resources, benefitting residents, visitors, and businesses alike. Given multiple beneficiaries and fragmented or unclear ownership in the public realm, who is responsible for paying for investments in resilience? Deciphering “who pays” is a crucial step to achieving adaptation initiatives given their relatively high costs and long-term returns on investments.

Research shows that fragmented or unclear ownership structures can hinder coordinated action for climate adaptation, particularly in urban areas where multiple stakeholders have varying interests.¹⁴ Furthermore, existing legal and institutional frameworks may not adequately support collaborative efforts among different property owners, leading to delays or failures in implementing adaptation measures.¹⁵ The high upfront costs associated with climate adaptation projects, such as infrastructure modifications and new green infrastructure, are a significant barrier, especially for small municipalities and private property owners.¹⁶

Federal grants often require significant local matching funds—often 20 percent or more—to encourage local investment and ownership, incentivize partnership and collaboration, and leverage additional resources, including from the private sector. However, local match requirements can limit some communities from accessing federal funding, especially rural and lower-capacity communities who lack the funds to meet them. More than 60 percent of federal resilience funding in the IJJA requires a local match, and an additional 13 percent requires a match under certain conditions.¹⁷

Issues of cost and ownership can lead to smaller-scale projects or incomplete implementation. A survey of California adaptation practitioners found that many thought pre-disaster hazard mitigation grants too small to cover full projects, resulting in “piecemeal work.”¹⁸

INNOVATIVE STRATEGIES THAT ADDRESS KEY CHALLENGES FOR ACCESSING RESILIENCE FUNDING

Leading local and state governments and organizations are developing novel approaches to address key challenges and help communities access and realize the benefits of available resilience funding. These innovative strategies include filling local capacity gaps, stacking funding to implement and scale projects, and streamlining multiple financing mechanisms for end users.

STRATEGY: BOOST LOCAL CAPACITY TO PLAN PROJECTS AND ACCESS FUNDING

Capacity-building programs to help fill local gaps are offered by state and federal agencies and private organizations. Such programs offer technical assistance and/or staff capacity to help with project scoping, plan development, grant writing, and coordination among local, state, and federal stakeholders and can take varying approaches. For example, projects can foster multi-jurisdictional partnerships that help link smaller rural communities with neighboring higher-capacity urban areas. Others seek to build diverse partnerships around broader resilience goals, including applying an economic development lens to attract private sector investment in financially constrained communities.¹⁹ Technical assistance programs are often underutilized and can serve as a good interim step for communities to help scope projects and prepare applications for major implementation funding.

One method to increase capacity is funding dedicated local staff to help articulate community needs, connect stakeholders, and identify projects that could be funded by the public and private sectors. Programs designed to increase local and regional capacity to identify and apply for federal grants frequently fund positions to take on these responsibilities. Federal funding opportunities that follow this model include:

- The U.S. Environmental Protection Agency (EPA) is funding selected nonprofit organizations and their partners to host Environmental Justice Thriving Communities Technical Assistance Centers (TCTACs) that help underserved and overburdened communities in their region navigate IRA and IIJA funding over the course of five years.²⁰
- The Economic Development Administration's (EDA) Economic Recovery Corps is placing 65 fellows in

local and regional governments for two and a half years to move economic development strategies from planning to implementation.²¹

- The U.S. Department of Energy (DOE) Community Energy Fellows program deploys recent graduates and mid-career clean energy professionals to local and Tribal governments to support their clean energy transition.²²
- DOE similarly supports the Arctic Energy Ambassadors program, in partnership with the Denali Commission and Alaska Municipal League, to fund experienced practitioners in each of Alaska's 12 regions to provide technical assistance, voice community needs, and develop replicable projects that can be funded by public and private partners.²³

It is more common to see national programs dedicated to supporting smaller governments; however, local, regional, and state governments have also dedicated resources to do the same and increase the capacity of communities within their jurisdictions.

Case Study: Colorado's Regional Grant Navigators

Program goal: Increase local and regional capacity to identify projects and apply for federal funding opportunities.

The state of Colorado created the *Regional Grant Navigators* program to bolster local capacity and maximize the state's attraction of federal funding from the IIJA (see Box 1).²⁴ The program funds full-time staff, called grant navigators, in Colorado's 14 councils of government to assist localities as they identify projects and apply for federal dollars, especially in under-invested rural areas. Navigators work with local governments to align community goals with available funding opportunities and overcome the complexities of the grant application process. They also help increase the scale and impact of projects by connecting communities with similar objectives and facilitating larger regional projects that can attract federal funding and enable smaller communities to leverage the capacities of larger ones. Navigators help identify suitable grants, connect collaborators, gather and review application materials, and manage awarded grants.²⁵

BOX 1: Additional programs created by Colorado to increase community access to IIJA funding

The grant navigators are one piece of a suite of programs that Colorado has established to increase local capacity and maximize IIJA funds coming to the state. For example, the *IIJA Local Match Program* has set aside \$10 million in state funds to meet federal grant match requirements, often 20 percent or more, a significant barrier for smaller communities. The state also established a program to provide no-cost, on-call consultants to localities, state agencies, and Tribes for project planning (design, engineering, permitting, and engagement) under its *IIJA Grant Writing and Technical Assistance Program*. When a grant application is not successful, communities can work with the consultants to review and improve their proposal for future resubmission, building skills at the local level. These programs fill multiple local and regional capacity gaps and support the complex process of achieving federal grant funded projects.

Source: Alyssa Dinberg (Recovery Officer for Local Government Strategic Coordination, State of Colorado) and Elizabeth Kosar (Senior Advisor, Federal Funds Communications, State of Colorado), in discussion with the author, February, 2024.

Impact to date

The Regional Grant Navigators program is already recognized as a good return on investment.²⁶ In its first year (2023), the program increased inter-municipal collaboration and large federal grant applications and awards (see Table 1). The Regional Grant Navigators program can credit part of its success to the Colorado Department of Local Affairs (DOLA), which works to identify and elevate on-the-ground needs and opportunities to the state.

How this program helps build community resilience to climate change

The state of Colorado has already received over \$1 billion in resilience funding from IIJA and IRA since these bills were passed in 2021 and 2022, respectively (see Figure 1). The Regional Grant Navigators program plays a central role in increasing resilience funding coming to the state by helping local communities identify their climate risks and coordinate adaptive solutions. For example, the state notes navigator involvement in over \$70 million in grants awarded for wildfire prevention and extreme heat and over \$13 million to improve air quality via community air monitoring and transportation electrification from the EPA, DOT, U.S. Department of Agriculture (USDA), and U.S. Forest Service (USFS).²⁷

STRATEGY: STACK PUBLIC AND PRIVATE FUNDING TO IMPLEMENT AND SCALE PROJECTS

In many cases, adaptation needs cannot be adequately addressed through grants or public funding alone.²⁸ Recognizing this, federal grants often require significant local matching funds, often 20 percent or more, to encourage local investment and ownership, incentivize partnership and collaboration, and leverage additional resources, including from the private sector. Some programs—FEMA’s BRIC program, for example—specifically seek out innovative projects that require public and private funding and cooperation.

Stacking funding is a strategy to combine multiple financial resources to help meet match requirements or fully fund projects. This strategy, also referred to as “blended finance,” can sometimes leverage public and philanthropic funds to attract private investment in climate projects.²⁹ This is particularly useful for projects with long-term community benefits that require significant capital.

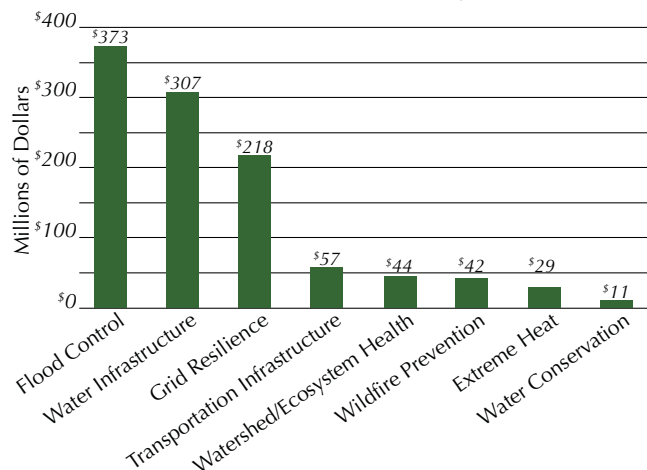
Public-private partnerships (P3s) have emerged as a crucial strategy in advancing climate resilience projects. They bring together disparate funding sources and leveraging the strengths and resources of both public and private sectors to effectively address larger-scale challenges effectively.³⁰ This collaborative model facilitates the pooling of financial resources, technical expertise, and innovative approaches.

TABLE 1: Examples of Regional Grant Navigator-supported federal grant projects in 2023

Community	Project	Amount, Status (Program)	Navigator Role
Glenwood Springs	South Bridge: construct a new bridge to connect neighborhoods and add pedestrian and bicycle access and a new evacuation route for the city	\$50 million, awarded (U.S. Department of Transportation [DOT] Rural Surface Transportation Grant Program)	Identified grants and eligible projects; coordinated between stakeholders; reviewed grant submission materials
4 municipalities in Upper Arkansas Area	Coal Town Roadway Coalition: new partnership of rural communities (with signed MOUs) working on roadway projects together	Technical Assistance, final round (DOT Thriving Communities Program)	Led formation of new coalition of municipalities; leading application process
17 local governments across Logan, Phillips, Sedgwick, Washington, and Yuma Counties	Northeast Colorado Long-Range Transportation Plan: first regional planning effort in northeast Colorado to address unique challenges rural communities face for transportation access, environmental sustainability, and safety	\$1.2 million, application submitted (DOT RAISE Planning Grant)	Coordinated first intermunicipal effort in region; supported project identification and grant proposal

Source: State of Colorado.

FIGURE 1: Total federal resilience funding awarded in Colorado from the IIJA & the IRA



Funds announced or awarded in the state of Colorado through November 22, 2023, by project type

Source: State of Colorado.

Case Study: Downtown Denver Partnership’s Urban Forest Initiative³¹

Program goal: Support larger urban trees by expanding street tree beds to combat heat and air pollution, as well as improve resilience, vibrancy, and streetscapes in downtown Denver.

In a 2012 study, Denver ranked last of 20 major cities in terms of urban tree canopy cover, with 9.9 percent coverage city-wide and 4 percent in the downtown.³² In their 2017 Outdoor Downtown Plan, the city set a goal to increase downtown tree canopy coverage from 4 percent to 10 percent and recommended strategies to enable the growth of large mature trees that offer greater environmental benefits, such as increasing the size of street tree beds.³³ In response, Downtown Denver Partnership launched the *Urban Forest Initiative* (UFI) to improve urban tree canopy in the 120-block Business Improvement District it manages (see Figure 3).³⁴ Although the City’s right of way includes sidewalks and street trees, the local code states that these trees are under the maintenance jurisdiction of the adjacent property owner. The initiative stacks public, private, and philanthropic funding to incentivize property owners to enlarge their street tree beds beyond the city’s minimum requirements (Figure 2). Stacking resources is helping the partnership achieve

FIGURE 2: Example of an enlarged street tree bed in downtown Denver



Before and after photos of a street tree bed that was improved by the Urban Forest Initiative

Source: Downtown Denver Partnership.

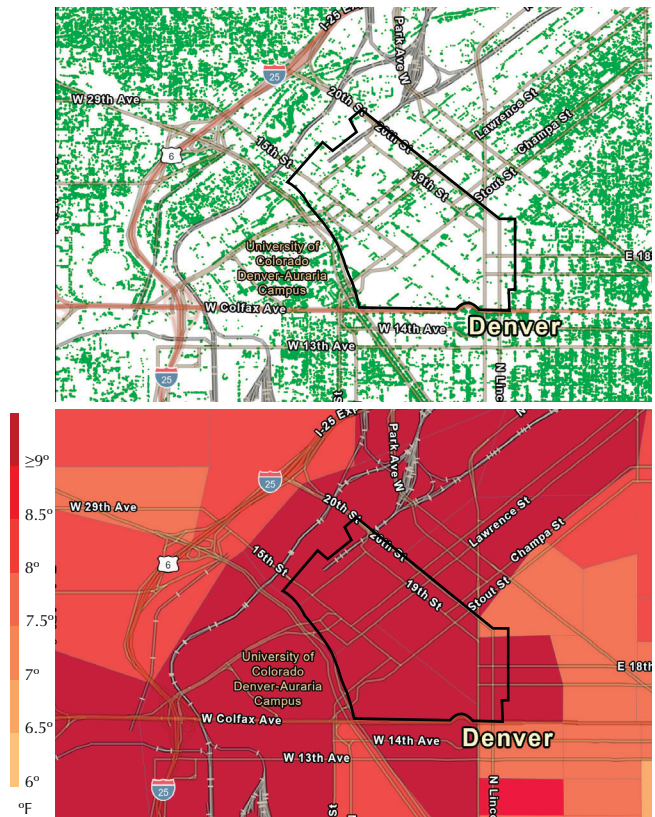
its goal of enlarging 400 downtown tree beds by 2026 and realize longer-term social, economic, and environmental benefits of an urban tree canopy.³⁵

The Partnership’s multi-source funding strategy to “use public funding to leverage private capital to improve the public realm”³⁶ began with a 5-year, \$3 million financial commitment from the City via the Denver Parks Legacy Fund, which covers a third of the initiative’s cost. DDP leveraged these committed public funds to secure private participation and the remaining two-thirds of investment from property owners in the district, a model that has been successful for large property owners including commercial office buildings and residential Homeowners Associations (HOAs). To encourage participation from small and medium property owners, the initiative moved to a partnership model where private owners are responsible for 50 percent of the costs.³⁷ To cover the remaining 17 percent of project costs, the partnership raised additional funding from local corporate philanthropies, which are attracted by the program’s environmental and community health benefits. Contributors include the Bank of America Charitable Foundation, Gates Family Foundation, The Kaiser Community Health Fund at the Denver Foundation, and The Nature Conservancy.

Impact to date

As of December 2023, the effort has increased the sizes of 107 tree beds across 19 properties and has scheduled 50 additional beds for enlargement in 2024.³⁸ Launched in 2020, the initiative is recognized regionally as a suc-

FIGURE 3: Maps of urban heat index and tree canopy in downtown Denver



Maps of the city of Denver where the black outline roughly represents the DDP Business Improvement District. The top map shows where tree canopy can be found throughout the city. The bottom map shows the UHI intensity (temperature difference between each census tract and the average temperature of the city). Of note is the increased temperature in areas that lack tree canopy.

Source: Downtown Denver Partnership.

cessful model for uniting public, private, and philanthropic investment around a shared resilience goal with clear economic benefits. With Denver’s commitment to fund one-third of each tree bed enlargement project, the program has been able to leverage significant investment from the property owner constituency, between 50–75 percent of project costs, as well as raise philanthropic dollars to secure broader participation. The program has invested \$1.3 million into downtown Denver’s tree canopy to date.³⁹ Realizing that financing is not the only barrier and property owners have their own capacity constraints, DDP increased educational efforts and technical assistance around the initiative and allocated annual funds for centralized tree maintenance across the district.

How this model helps build community resilience to climate change

Metro Denver is among one of the worst regions in the country for poor air quality, and these impacts are exacerbated by increasing wildfire and extreme heat events.⁴⁰ In addition, the urban heat island effect in downtown Denver—where concrete and other hard surfaces absorb and re-radiate heat—presents human health risks.⁴¹ Trees, particularly larger ones, can play vital roles in reducing the risks of heat stress and improving air quality by providing shade canopies and capturing pollutants in their leaves, trunks, and roots.⁴² For example, tree-canopied streets feel 10 degrees F cooler to pedestrians and can reduce particulates from car exhaust by up to 60 percent.⁴³ In addition, forested business districts have seen a reported 12 percent increase in consumer spending.⁴⁴ The UFI's approach of expanding tree beds enables the growth of larger street trees so that residents, visitors, and downtown property owners can experience improved cooling and air quality alongside other benefits such as increased public health, business revenue, and building energy efficiency.

STRATEGY: STREAMLINE ACCESS TO MULTIPLE FINANCIAL RESOURCES FOR END USERS

Often, communities do not have the capacity to sort through and identify available funding for resilience projects. Efforts to link communities with the complex and expanding array of resilience financing can focus on creating clearinghouses of grant opportunities. These repositories list and categorize available resources, providing a starting point for those seeking funding in a complicated ecosystem. To substantially increase uptake of resilience funding, certain organizations have the capabilities to streamline distribution of and access to multiple financial resources for communities and other end users. These organizations can bear the burden of navigating, securing, managing, and reporting on multiple financial programs to provide users a more accessible, singular experience. This strategy requires a trusted third party, such as community development financial institutions (CDFIs) and public benefit corporations (PBCs), to work in partnership with federal and state agencies and private funders to provide a financing pathway or platform for communities, residents, and businesses (see Figure 4).

This strategy has been successfully applied to climate mitigation in business and home energy efficiency programs. For example, New York State Energy Research

and Development Authority (NYSERDA) is a PBC that has offered *Home Energy Efficiency Programs* for over a decade. The program provides a holistic pathway for residents to improve their home energy performance with free home energy audits, certified contractors, low-interest loans, on-bill financing, tax rebates, and grants for low-income households. Although similar programs for renewable energy and other climate mitigation measures have been deployed across the nation, there are few models applied to climate resilience.

Case study: Impact Development Fund's Disaster Recovery Program

Program goal: Maximize the use and benefit of disaster recovery resources made available to households after the 2021 Marshall Fire, including serving immediate needs and supporting long-term recovery and resilience.

The Impact Development Fund is a CDFI focused on affordable housing in Colorado. IDF launched the *Disaster Recovery Program* less than six months after the 2021 Marshall Fire that destroyed over 1,100 homes and businesses, caused 2 deaths, and led to over \$2 billion in damages, predominantly in Boulder County.⁴⁵ Through the program, IDF manages multiple public and private funding sources and distributes them via one streamlined process to households that were affected by the fire. Funding comes from a variety of county, state, and philanthropic sources, including the State of Colorado, Boulder County, and Community Foundation Boulder County (CFBC).

FIGURE 4: How CDFIs combine funding sources for post-disaster recovery & resilience



Source: Adapted from Impact Development Fund.

The program’s “one-stop-shop” application process removes the guesswork across funding sources for households and shifts the burden to IDF’s in-house experts. Affected households submit a single application to IDF, which then makes calculations and determinations across different funding sources.⁴⁶ For example, IDF can confirm applicant eligibility with respect to their household income using a range of calculation methods required across funding programs. IDF can then ensure that applicants receive the appropriate funds without the need to manage multiple applications or funding channels. IDF distributes funds directly to applicants or to contractors for services rendered and tracks if funds are utilized effectively to help ensure transparency and accountability. To meet growing demand for this program, IDF developed an internal process and guidelines for screening and funding loans and grants, and hired a team of 10 people, four of whom focus on application intake and case management.

Providing support to communities quickly after a disaster is a pertinent role for CDFIs, which are “unique in their abilities to access, manage and distribute funds like a bank in some instances and like philanthropy in others. CDFIs are not subject to the same type of regulations that banks are, but they have enough bank-like resources to be useful.”⁴⁷ Furthermore, CDFIs are client-facing, mission-focused nonprofit lenders with experience providing underwriting and lending services, managing multiple sources of government and nonprofit contracts, and working with underserved populations and low- to moderate-income (LMI) households.

Impact to date

IDF has distributed over \$20 million in aid for victims of the Marshall Fire and assisted over 300 individual households.⁴⁸ The program’s quick launch and early success in distributed funds is credited to IDF’s established trust with communities and the state of Colorado. Specifically, these funds originated from a variety of new and established grant programs that support recovery, rebuilding, and resiliency (see Table 2).

Managing this level of funding over multiple contracts is a burden for a smaller organization, which most CDFIs are.⁴⁹ Moving forward, IDF would like to incorporate more pre-disaster resilience funding and staff support to help ensure long-term program sustainability, especially given the intermittent cycle of disasters and post-disaster funding.

How this model helps build community resilience to climate change

The program has provided timely and trusted support to a community after an unprecedented disaster. IDF expanded their impact beyond the immediate, basic needs of post-disaster recovery by incorporating funding for rebuilding (including building new homes in areas affected by disaster) and pre-disaster resilience (including home-hardening and electrification) to help the community mitigate and adapt to future climate risks.

TABLE 2: Categories and sources of funding distributed to households through IDF’s Disaster Recovery Program

Recovery	<ul style="list-style-type: none"> • CFBC Unmet Need Program • CFBC Housing Support Program
Rebuilding	<ul style="list-style-type: none"> • State of Colorado Housing Recovery Program • CFBC Rebuild Grants • Boulder County Use Tax Rebate
Resilience	<ul style="list-style-type: none"> • State of Colorado Wind & Wildfire Protection Mitigation Grant • Colorado Energy Office Electrification Rebate Program

Source: Impact Development Fund.

EXPANDING KEY STRATEGIES TO ENHANCE COMMUNITY ACCESS TO RESILIENCE FUNDING

Costly disasters and other climate risks are increasingly impacting communities, and the global adaptation finance gap is widening. In the United States, barriers to local resilience planning, funding, and project implementation are significant and challenges persist around complexity of funding mechanisms, limited local capacity, unclear ownership, and up-front costs of resilience investments. These challenges make it difficult for many communities, particularly small, under-resourced and rural ones, to access the unprecedented public funding available. However, innovative strategies to overcome these key barriers are being explored with early examples of success.

Accessing resilience funding represents an opportunity for communities to advance multiple goals and realize tangible financial benefits—if they have the initial local capacity to take advantage of these resources. Colorado’s Regional Grant Navigators program helps fill local capacity gaps to attract significant federal investment required to upgrade critical infrastructure that residents and businesses rely on. The navigators program could be replicated across the nation and tailored to target a range of federal funding programs to advance each state’s individual resilience goals.

It takes more than federal funding alone to implement resilience projects. Combining funds can help communities meet local match requirements for federal or state grants, increase the project scope, and accelerate the pace of projects that were previously financed by public funds alone. Stacking public and private funding through a partnership model helps address the costs of adaptation and overcome unclear ownership structures in the public and urban realms. Downtown Denver Partnership’s Urban Forest Initiative is improving the urban environment for residents, businesses, and visitors. By tackling a specific need—larger street tree beds, in this case—the initiative can also improve long-term heat resilience, human comfort, and economic prosperity in Denver’s downtown urban core. Resilience projects of various types and scales could benefit from using public funding to leverage and activate private investment, as well as attract additional philanthropy.

Navigating post-disaster resources and rebuilding to be more resilient against future hazards can be a burdensome process for impacted households. Impact Devel-

opment Fund launched its Disaster Recovery Program to serve the community and provide timely recovery funding after a devastating wildfire. As a CDFI, the organization understood additional resilience needs in the region, such as energy efficiency and affordable housing, and chose to extend the program to include longer-term rebuilding and resilience funding. The program increases the use and impact of available funding by streamlining distribution of and access to multiple complex mechanisms for households. This service could be applied to myriad resilience funding programs to reduce barriers for communities, residents, and businesses. The national network of CDFIs, focused on economic growth in distressed communities, represents existing social and financial infrastructure that could be deployed for this purpose.

Beyond their use of strategies to access and deploy resilience funding, these case studies offer several additional lessons around elements that contribute to a program’s success. First, community trust is essential, as is coordinating and partnering with a variety of stakeholders with deep understanding of local context from the beginning, including local governments, metropolitan planning organizations (MPOs), state and federal agencies, private businesses and philanthropies, and community-based organizations. This coordination and trust ensure that organizations can co-design programs in response to on-the-ground needs and opportunities and will help attract funding and ensure buy in.

Second, public and private funders can provide education, technical assistance, and flexible match requirements to increase program accessibility and participation. For example, federal grants that allow for a “sliding scale match”—where the match requirement varies depending on criteria such as the grantee’s financial capacity, population served, or project’s scope—can make grant programs more accessible and equitable, especially for smaller organizations or those serving underserved communities.

RECOMMENDATIONS FOR FEDERAL AGENCIES

Despite the resilience funding opportunities in the United States, too few models to overcome community challenges exist to enable timely and adequate investment. The greatest of these challenges emerge from the complexity of public funding mechanisms, insufficient local capacity, and unclear ownership structures. In our exploration of the strategies and case studies described here, we identified the following recommendations to federal agencies to help address and preempt some of these barriers. These recommendations are aimed at the federal agencies that provide funding and support programs for community resilience, including the U.S. Department of Energy, U.S. Department of Transportation, U.S. Environmental Protection Agency, Federal Emergency Management Agency, U.S. Department of Housing and Urban Development, National Oceanic and Atmospheric Administration, United States Department of Agriculture, and U.S. Forest Service.

- **Increase federal agency staff capacity on funding programs** to improve communication and awareness, support communities through the application process, and manage funded projects for better outcomes.
- **Streamline the grant application process** to help ensure that limited funding is allocated to communities that need it, rather than just the communities with the greatest capacity to develop competitive proposals. Federal agencies can seek to waive local match requirements, expand definitions for in-kind contributions, prioritize equity, reform benefit-cost analyses, and provide tools to support applicants and fill data gaps (e.g., the USDA Community Wildfire Defense Grant [CWDG] Dashboard provides simple eligibility and scoring information for all U.S. communities). Agencies can also consider and test a “common application” approach for resilience that allows communities to submit a single project to be considered for funding across a range of relevant federal programs.
- **Integrate a pre-proposal process into funding programs** to reduce the initial barrier to entry and allow communities to submit letters of interest or brief project descriptions before completing a full grant application. Agency staff can assess if the project concept is eligible before communities invest significant time and resources, thus shifting some of the analysis and decision-making burden from capacity-constrained communities to federal agency staff.
- **Provide feedback on unsuccessful funding applications** for communities to improve their expertise and chances of success in pursuing future opportunities.
- **Support public-private partnerships** to encourage broader support and funding for local resilience projects by providing optional incentives for diverse private sector involvement, including businesses, CDFIs, and philanthropies. Highlight private sector roles and case studies in programs materials to build awareness about partnership pathways and opportunities.
- **Fund state-level support offices within federal agencies** to provide communication, technical assistance, and guidance on funding programs available to communities and states, like the DOE’s State and Community Energy Program (SCEP).

BOX 2: Identifying Resilience in Action

The local examples presented in this brief come from the state of Colorado, which faces growing impacts of wildfires and extreme heat due to increasing temperatures, dryer air, and more extreme precipitation patterns.

Building on a history of stakeholder convenings, thought leadership, and research on local climate resilience, the Center for Climate and Energy Solutions (C2ES) launched its first regional Climate Resilient Communities Accelerator to support communities and businesses that operate in the *North Front Range of Colorado*, defined generally as the corridor between Fort Collins and Denver.

In 2023, the Accelerator convened leaders in the region to align resilience-building efforts, bring in additional federal and private sector stakeholders and resources, and form relationships critical for continued collaboration. Participants represented small to large local jurisdictions, private businesses, economic development, community-based organizations, nonprofits, academic institutions, and state and federal agencies.

C2ES designed the Accelerator to build on and complement existing climate resilience programs in the pilot region and scale across multiple regions around the nation to elevate policy gaps and opportunities to federal lawmakers.

For more information, please review the Summary Report of the 2023 Climate Resilient Communities Accelerator, *Accelerating Resilience: Wildfire and Heat Strategies for Colorado's North Front Range*.

CONCLUSION

The physical impacts of climate change now require transformative action across all levels and sectors of society. Impacts and the burden to adapt often falls to localities, which face multiple barriers to investing in climate resilience both before and after hazards strike. Despite the availability of unprecedented federal funding, communities, especially smaller and under-funded jurisdictions, continue to face significant hurdles in accessing and deploying these resources effectively. As we move forward, it is imperative that efforts to close the adaptation finance gap are accelerated and scaled. This includes innovative strategies to enhance the capacity of local governments, foster collaborations that leverage the strengths of both public and private sectors, and simplify the distribution of and access to funding opportunities.

The C2ES Climate Resilient Communities Accelerator program connects local practitioners and resource providers to facilitate solutions sharing and a two-way conversation between public and private funders and funding seekers. The strategies and case studies that emerged from the North Front Range of Colorado can be applied to a broad range of geographies and resilience needs across the United States. Learning from these programs and what makes them successful provides insight for how more organizations can take a leading role in fostering critical local resilience building.

C2ES Resources

Climate-related Financial Risks and Opportunities: A Primer for Local Governments

www.c2es.org/document/climate-related-financial-risks-and-opportunities-a-primer-for-local-governments/

An Emerging Blueprint for Companies: Strategies to Advance Local Climate Resilience

www.c2es.org/document/an-emerging-blueprint-for-companies-strategies-to-advance-local-climate-resilience/

Climate Resilient Communities Accelerator

www.c2es.org/building-climate-resilience/climate-resilient-communities-accelerator/

Accelerating Resilience: Wildfire and Heat Strategies for Colorado's North Front Range

www.c2es.org/document/accelerating-resilience-wildfire-and-heat-strategies-for-colorados-north-front-range/

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