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About Resilient Cities Network

The Resilient Cities Network (R-Cities) is the world’s leading urban resilience network. We bring together global knowledge, practice, partnerships, and funding to empower our cities. We help our member cities build a safer, more equitable, and sustainable future for all their residents. R-Cities’ mission is to reduce the vulnerability and improve the well-being of over 220 million urban dwellers around the world. Our demand-driven approach allows us to deliver impact through engaging our network, implementing programs in cities and mobilizing investment.

R-Cities Network builds on over ten years of investment in resilience from The Rockefeller Foundation and the former 100 Resilient Cities program. In 2020, R-Cities became an independent 501(c)3 organization with several major funders, including the Rockefeller Foundation and new funders from each of our 5 global regions. We are a city-led, regionally-driven, partner-based, and impact-focused organization.

For more information or to get involved with the work in our resilient cities please contact:

Stewart Sarkozy-Banoczy
Global Director, Policy & Investments
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Ssarkozy@resilientcitiesnetwork.org

Laurian Farrell
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Regional Director, North America
Lfarrell@resilientcitiesnetwork.org
A moment of crisis can create opportunities to introduce bold solutions and bounce forward and to become better than we were before. City leaders across the network are stepping up to the challenge.

At R-Cities, we are building partnerships to design, invest and scale urban resilience solutions worldwide to make urban communities thrive in the face of acute shocks and chronic stresses. We do this alongside our Chief Resilience Officers (CROs), who are responsible for leading, coordinating, and developing a city’s resilience strategy and policy.

Cities from across the United States and Canada have provided two or three priority projects, selected from their City Resilience Strategies. The result is this Prospectus which highlights 52 prioritized projects form 19 cities that, once implemented, will build urban resilience and improve lives.

Throughout the Prospectus you will learn about each city’s resilience objectives, project descriptions and the impact of each project, and who to contact for more information.

Cities cannot do this work alone. Resilience requires public, private and philanthropic partnerships. Cities are seeking funding and partners to assist with implementing these important initiatives.

That’s where you come in!
Cites have been on the frontlines of the COVID-19 pandemic, with urban residents facing devastating health and economic impacts. The pandemic has exposed the deep inequities confronting cities around the world while also highlighting opportunities for new approaches to city building. A recent United Nations report stated that by the year 2050, 89% of the US population will live in urban spaces and within those urban spaces shocks and stresses will be unequally distributed across racial and income groups. Without action the most vulnerable populations will disproportionately live in dangerous conditions.

A moment of crisis can create opportunities to introduce bold solutions and bounce forward and to become better than we were before. City leaders across the network are stepping up to the challenge. As cities are pressed to prepare and activate recovery plans, they must shift the historical trajectory created by past practices toward a more resilient city. Leaders must break the cycle of disaster response and recovery, and improve the quality of life for vulnerable communities. We will be more prepared to survive the next shock if cities can wrap their responses in forward-looking, holistic, and equitable resilience. This requires intentionality and specificity.

There is no other viable approach, resilience is the way forward.

Cities must lead with data-driven, transparent, and inclusive decision making. Urban challenges are deeply connected, and our solutions must be as well. The resilience approach recognizes that our health and well-being, economy and society, infrastructure and environment, and leadership and governance – the four dimensions of urban resilience – cannot be improved in isolation.

And we know that identification and planning are nothing without implementation. Member cities empowered with the resilience framework know what they need, but they are often stalled by advanced project preparation and access to funding. For implementation of resilient strategies, cities depend on private organizations to make these plans a reality. To truly build back better there needs to be long-term commitments from the private and public sector to adapt and to normalize resilience.
Shocks and Stresses

R-Cities is excited to share this collection of innovative and impact-driven projects. The time is now for the public sector, private sector, philanthropy and financial institutions to come together in unprecedented ways to address the inevitable threat of cascading shocks and stresses.

The map below illustrates some of shocks and stresses experienced in the United States and Canada in 2020/2021.
What is Resilience?

Since the beginning of the pandemic in 2020, cities in North America have faced immense pressure to meet the needs of residents. We immediately saw how “business-as-usual” models of reactive planning and siloed decision-making did not meet the challenge. As the world becomes more interconnected, new and adaptable models of governance are required. City governments will need to engender the strength and flexibility essential for its communities to thrive in the face of cascading shocks and stresses.

Acute shocks (e.g., a building collapse) are sudden, sharp events that threaten a city while chronic stresses (e.g., systematic racism and aging infrastructure), weaken the fabric of a community over time and exacerbate shocks when they inevitably occur. Already in 2021, North American Network cities have experienced the cascading shocks and stresses of extreme heat, crumbling infrastructure, racial violence, political unrest and devastating wildfires, all underscored by COVID-19 response and recovery efforts that have laid bare the vulnerabilities in our health systems.

If the pandemic has taught us anything it is that shocks and stresses are not siloed – so why would cities’ responses be? Resilient cities follow an holistic resilience approach that accounts for city capacities and their true risks.

Resilient projects incorporate the 7 qualities of resilience: Reflective, Inclusive, Integrated, Flexible, Robust, Resourceful, Redundant

Resilient projects incorporate the 7 qualities of resilience and break down silos to achieve multiple benefits (or “co-benefits”). By looking for co-benefits on every project, cities can begin to tip the scale away from the devastating impacts of shocks and stresses, toward a more resilient city where all residents can thrive. Cities are equipped and ready to implement these essential strategies, ready to move past a time of reactionary decision making and into a future that ensures that all can thrive.
No Equity, No Resilience.

“It is critical to pause, reflect, and recognize that cities who are not equitable will always be in recovery mode.”

Ron Harris, CRO Minneapolis, Stewart Sarkozy-Banoczy, R-Cities
“No Equity, No Resilience: Minneapolis is All of Us” Meeting of the Minds, 2020

Inequity is a stress that impacts every project and policy in cities. Historically, city building has created a reality where individuals have unequal access to city services, green space, healthy food, healthcare, well-paying employment, and a good education. Inequity increases the probability and severity of shocks such as civil unrest or a global pandemic and because we are globally connected in the 21st century, its effects can reach well beyond municipal and national boundaries. Resilience is the way forward and centering equity in this framework ensures that everyone in the urban spaces we occupy moves forward together.

In the months following the murder of George Floyd in Minneapolis on May 25, 2020, corporations, foundations, and organizations of all sizes made commitments to invest in dismantling inequities, inside and outside of their organizations. Cities need their support now, more than ever, as no city can address these challenges alone. Equitable cities benefit everyone – from the playgrounds to the boardrooms – and the Resilience Prospectus presents many opportunities to invest in equity, at various scales and across varying commitment timelines.
How can you partner with cities?

The Resilience Prospectus projects were identified by Chief Resilience Officers as priorities in each of their cities. Investments in any one of these projects can shift the trajectory of a city and directly improve lives today, and for generations to come. An investment in resilience-based planning, projects, and practices will return cost-savings, cost-avoidance, and multiple benefits across city systems. Every dollar spent by a city is precious, and likely entails a trade-off for a dollar not being spent elsewhere. Likewise, funders and financiers need to be explicit about maximizing the co-benefits of their investments. Resilience projects provide practical and implementable solutions, while strengthening communities and maximizing impact per dollar spent. We do not need to wait for disasters to strike – resilience benefits can be realized during good times while preparing communities for inevitable economic, environmental and social shocks and stresses.

Building resilience requires partners at all scales – at R-Cities we are building solutions at the neighborhood scale, implementing city wide programs, sharing knowledge and practice at the state/province and national levels, increasing regional capacity in the Americas and other regions, and working with multi-nationals across the global network.
About the projects

This prospectus contains 52 projects from 19 cities that are essential to building resilience capacity in the United States and Canada. You will find the projects organized by two categories:

**Network Wide Projects:**
City members of the Resilient Cities Network are deeply connected and can identify areas where collective action would allow for the acceleration and scaling of initiatives. Five “network wide” programs and projects were developed to this effect and are presented at the beginning of the project section.

**City Projects:**
Each city is unique, with its own history, culture and vision for its residents. Understanding a city’s beauty, its strengths and its ambitions helps us to understand why cities need to access every resource available to ensure its future is resilient. Cities, with their unlimited potential and expertise have what it takes to build a better future based on local solutions that can be expanded to other cities around the globe.

19 cities have provided up to three (3) projects with the following details: project description, opportunities, impact, schedule and funding needs. Some of the projects have already benefitted from partial funding and are in need of additional funds to complete and/or scale the work. However, there are many projects with the potential to create great impact that need funding to get started.

If a project is of interest – contact us!

Each city includes contact information for the Chief Resilience Officer who can provide full project details and discuss opportunities to collaborate.
The projects in the following pages can be characterized by five different types of activities (01), summarized in Table 1. Some projects focus on the built environment (i.e., construction of buildings, parks, housing and other city infrastructure). Others focus on building out city programs that provide much needed services for residents. Studies set out to find elusive answers to questions that need to be answered in order to achieve resilience. Finally, several projects endeavour to effect change through policy instruments or by developing new tools to help city practitioners streamline, standardize, articulate or sometimes improve their methodologies.

City operations involve complex and interconnected systems, covering an equally wide variety of topic areas. Project topics are summarized in the table (02) along with the levels of investment required (03) to undertake the projects.

No matter an organization’s mission, level of investment, timeline to participate or geographic area of interest, partners will be able to find alignment within the projects presented in this Resilience Prospectus – if not let us know, as we have many more in our over 80 global City Resilience Strategies!

### Table 1: Project Characterization by Types, Topics and Costs

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<td>01</td>
<td>Built Programming Study Policy Tools</td>
<td>&lt; $100,000</td>
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<td>02</td>
<td>Social Cohesion Economic Opportunity Food Security Climate Governance Infrastructure Housing Public Health Disaster Management Racial Equity Education</td>
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Network Wide Projects
The practitioner-led and practice-based Racial Equity through Resilience Community of Practice (CoP) is committed to finding ways to transform city systems from the inside out, using an holistic resilience approach. Rather than starting from scratch, the CoP is starting from a place that recognizes the shortcomings of our current systems and builds off of our shared strengths toward a future where an individual’s potential to exist, survive, and thrive is not determined by their race.

In the summer of 2020, in the wake of George Floyd’s murder in Minneapolis, Minnesota, a group of Chief Resilience Officers came together to determine how cities can achieve racial equity through an holistic resilience approach. CROs know that without equity, cities will never be able to adequately respond to shocks and stresses – be they social, environmental, economic or cultural. CROs are uniquely positioned in cities to address systemic issues.

Why the CoP?
Without equity, a city will never be resilient. The moment is now for cities to act in all of their capacity to dismantle anti-Black systemic racism. The Community of Practice is Co-Chaired by Ron Harris, CRO Minneapolis and Lori Nelson, CRO Boston.

Budget
$100,000: Tools for Dialogue
$200,000: Equitable Resilience Effect
$25,000: Gamechanger Sessions
$150,000 annually: Operations & Engagement
$50,000 annually: Miscellaneous Program Support

Timeline
The CoP has been operating as a volunteer network since July 2020. Funded programming is ready to begin immediately.
North American CoP operations 3–5 years with scaling to Global R-Cities Network in 2023

Response to COVID-19
As COVID-19 response and relief efforts bring together diverse actors in new ways, we must act together with real humility and inclusiveness to seed innovation and help adapt systems to achieve racially equitable outcomes. This is how to build resilience to climate change and find solutions in the intersections of shocks and stresses in our communities. R-Cities and its member Chief Resilience Officers (CROs) are taking action to build upon the existing holistic resilience framework already active in our cities.
The Resilient Community Impact Funds (RCIFunds)

**Project Description**
The RCIFunds is a catalytic grant-based platform of funding for members of the R-Cities to invest in projects that can deliver immediate benefits for vulnerable communities and ensure long-term resilience impacts to cities. R-Cities will raise funds for the RCIFunds, targeting a minimum fund size of $10 million USD, over the first two years, to be put towards prioritized resilience projects that are small to medium scale and can further leverage funding on the ground from key financing and grant making stakeholders, as well as the cities themselves. The initial phase of fundraising and funds disbursement will focus on projects and programs prioritized by CROs and cities themselves, as well as the thematic action areas created by R-Cities, its Global Steering Committee of CROs, and the RCIFunds Advisory Board.

**Project Opportunity**
The RCIFunds will make catalytic grants to prioritize small and medium scale local resilience projects around the globe that further leverage funding on the ground, jumpstart projects, and increase holistic resilience impact for vulnerable populations. Initial rounds of RCIFunds will highlight equity and resilient recovery from COVID-19, while aligning to our overall urban resilience goals and thematic pathways. The projects funded through the RCIFunds will be essential steppingstones for urban spaces around the globe to implement resilience into the policies, projects, and infrastructure while relieving the strain on city budgets.

**Response to COVID-19**
City governments across North America continue to struggle with the COVID-19 pandemic and its cascading effects, while confronting the ongoing shocks from climate change. City agencies and employees are spread thin with increases in caseloads to revive urban areas and budgets are depleted following the economic downturn caused by the pandemic. Funding supplied by the RCIFunds will allow cities to budget for resilient projects, even as potential national programs and funding begin to take hold.

**Impact**
The RCIFunds has an ability to fund projects for generations to come. While the initial investment could fund 20–40 projects the accumulating profit on investment will allow for many more projects to be funded as the world and city issues and goals change from year to year. Making an investment in the RCIFunds is an investment into a resilient future for all.

**Budget**
$10 million target over first two years

**Partners**
Z Zurich Foundation
Bank of America

CONTACT ~ Stewart Sarkozy-Banoczy | Global Director, Policy and Investments | Resilient Cities Network | ssarkozy@resilientcitiesnetwork.org
Resilience 21 Coalition (R21)

Project Description
In late 2020, 50+ dedicated resilience experts from across the US came together to form the Resilience 21 Coalition (R21). The R21 offers guidance and insight from members’ collective experience to federal policymakers. R21 aims to implement a coordinated set of solutions with resilience as both the goal and the mechanism for change. This important work requires access to administrative support and opportunities to advance knowledge and understanding of resilience, policy, global movements as well as environmental and social issues. R21 had published a list of hundreds of policy recommendations with the ability to improve the lives of millions of Americans, but support is needed to push this work forward and make recommendations a reality.

Project Opportunity
The practitioners participating in R21 know that a resilient community addresses the vulnerabilities of all its people proactively, to meet social, economic, and environmental needs. Building resilience is about creating equitable, sustainable solutions in times of calm and in times of crisis. The policy recommendations have the potential to inject resilience into American policy, projects, and beyond addressing increasingly serious social issues ranging from climate change to racial injustice and at every intersection. R21 members are working together, to lead unprecedented resilience transformation – one where resilience is integral to government action and communities are empowered to adapt well to the realities of a changing world.

Response to COVID-19
Policy recommendations made by the R21 coalition were developed during the COVID-19 pandemic and with the economic, health, education, and social ramifications of the pandemic very much in mind. While many of the recommendations advocate for general resilience, if taken they have the potential to improve federal, state, and local responses to future crises as well as assisting in a more equitable and resilient recovery.

https://www.resilience21.org/home
Resilient Infrastructure Diversity and Equity Scorecard (RIDE)

CONTACT – Laurian Farrell | Regional Director, North America | Resilience Cities Network | lfarrell@resilientcitiesnetwork.org

Project Description
The Resilient Infrastructure Diversity and Equity (RIDE) Scorecard, is an innovative new framework for assessing urban resilience infrastructure projects that are climate ready, equitable and allow for the creation of green jobs. It helps cities reimagine what is meant by climate-ready infrastructure. It places social and racial equity on the same level as the evaluation of traditional structural design elements and financial feasibility for assessing a planned project and it prioritizes projects that embed equity into project design early in the process.

The Scorecard is in beta version and requires funding for development. Phase 1 of the project will include development and testing for the tool for a representative sample of real city projects (existing and proposed) and a comprehensive engagement process with project managers to gain valuable insights about the opportunities and constraints cities face when undertaking projects that center equity. The final product will be made available to all cities (open source) and resilience practitioners.

During Phase 2, support products will be developed to help project managers improve their RIDE score by enhancing project designs. Technical support will be provided where needed, with a special focus on cities with low technical and financial capacity.

Project Opportunity
The scorecard was developed in support the Chair’s Agenda – an initiative of R-Cities’ Board Chair, Mayor Sylvester Turner (Houston). This initiative seeks to gather funding partners who will invest in climate ready infrastructure that is equitable and creates green jobs. The vehicle for investing will be the RCIFunds. The tool for assessing project eligibility will be the RIDE scorecard, along with the R-Cities Fair Funding Framework.

By working through the RIDE scorecard, project managers and designers are given clear indicators of success and gaps in knowledge and capacity in project design are identified. Cities have the ability to invest in infrastructure, but structures themselves to not make cities resilient. Investments in resilient infrastructure and in the services that infrastructure provides to communities will result in long-term benefits for people.

Response to COVID-19
All investments in infrastructure must contribute to the long-term health and well-being of the most vulnerable in our society. The RIDE Scorecard allows us to identify and maximize the co-benefits of equitable and resilient infrastructure.

Impact
The scorecard is the first tool of its kind that incorporates measures of social equity as an essential part of the infrastructure design process. It helps cities worldwide to reimagine infrastructure projects as pathways to equitable resilience and as pathways to community wealth, health and well-being.

Budget
Phase 1 – $300,000
Phase 2 – $750,000 +

Partners
Wood
Resilient Community Development Finance Initiative: A Pathway to Resilient Funding and Financing Principles and Project Assessment

CONTACT – Stewart Sarkozy-Banoczy | Global Director, Policy and Investments, R-Cities | ssarkozy@resilientcitiesnetwork.org

Project Description

What began as a simple concept note to bring resilience to the world of community development financial institutions (CDFIs) and their related funding and finance partners, in the Spring of 2018, blossomed into a robust awareness-building, educational and tool development project, now known as the Resilient Community Development Finance (ResCDF) Initiative, and larger lessons and practice for R-Cities in resilience measurement. Partnering with Opportunity Finance Network, the ResCDF Initiative convened a 20+ person technical advisory committee from the CDFI, impact investing, banking, philanthropic and other sectors, including Chief Resilience Officers, to build out the nascent Community Resilience Lending Principles, highlight additional target sectors, and flesh out the original “resilience checklist” for projects. What ensued actually brought together a smaller cohort of CDFI lenders to create and test the Community Resilience Lending Tool across 11 different projects/deals, ranging from $100,000 to $20 million. This testing and the broader workshopping of the Principles and Tool, provided further refinements and a set of additional support elements that now require deeper engagement and rollout for R-Cities internal operations, as well as adoption and adaptation for the finance sector and beyond.

Project Opportunity

The ResCDF Initiative is a nascent but bold and tested effort to bring CDFIs and their investors/partners into the task at hand for the US and beyond – to build a ground-up, deal-by-deal, institution-by-institution foundation for resilience in all communities, for all people. CDFIs and their investors/partners are a unique and powerful tool to step into the task to “normalize resilience” in the US. As noted by a Florida-based member of the ResCDF Initiative Technical Advisory Committee (TAC), it is not just the CDFIs who benefit in “baking in” resilience. She noted, “The market needs resilience.” The next phases of the ResCDF Initiative will allow the partners to complete further adoption and adoption of the Principles and Tool for the CDFI and impact investment sectors, while also expanding the tool typology and the target sectors and industries for further rollout. Further, this process will allow the R-Cities team to take advanced steps in defining the principles, assessment and measurement necessary for the Resilient Community Impact Funds and the grantmaking goals and criteria.

Impact

The development and testing of the ResCDF Initiative principles and tool on actual projects through diverse lending institutions further reinforces the ability to quantify and measure co-benefits and resilience dividends that start at the project level and feed the greater neighborhood, community and system. This baseline of data and lessons will be expanded to a variety of tool typologies and broader set of target sectors and organizations, as well as further training and awareness delivery in key industries like developers, builders, designers, engineers and architects to promote a common language of resilience. The extension into the criteria and goals of the Resilient Community Impact Funds and lessons for measurement create a deeper foundation for maintaining Resilience Value in key projects with funding and implementation partners.

Budget

Phase II (2022/23): $100,000
Phase II (2023/24): $150,000

Present Partners

Coastal Enterprise Inc (CEI)
Black Business Investment Fund (BBIF)
NDN Collective / NDN Fund
Enterprise Community Partners
Genesis Fund
City Projects
Atlanta, Georgia
United States

Resilience Strategy Goals
In the Resilient Atlanta strategy, the community envisioned an Atlanta that preserves and celebrates who we are, enables all Atlantans to prosper, builds a future city today, and designs systems that reflect our values. These visions are reflected in Mayor Bottoms’ framework for creating One Atlanta, an affordable, equitable, and resilient City. The pillars of the vision are:

• Safe, welcome, inclusive city
• World-class workforce, infrastructure, and services
• Ethical, transparent, fiscally responsible government
• Thriving neighborhoods, communities, and businesses
• Residents equipped for success

Why Your City
Atlanta’s grit and spirit of compassionate renewal fuels our progress as a global business hub and inspires investment in the diverse communities that make life so rich and vibrant here in the nation’s cradle for civil and human rights. By aligning progressive leadership with collaborative action on every front, we know that we will achieve our vision for One Atlanta – an Affordable, Resilient and Equitable Atlanta.


Key Shocks and Stresses

- COVID-19/pandemics
- Civil unrest
- Lack of affordable housing
- Lack of social cohesion
- Poverty/inequity
- Deficient infrastructure and mobility

Chief Resilience Officer
Megan Sparks
Senior Director, Programs and Strategic Partnerships
One Atlanta | City of Atlanta | msparks@atlantaga.gov
470-698-5167
Project Description

Atlanta began developing REEP in 2019 to achieve the goals articulated in our Clean Energy and Affordable Housing Plans, which mirror goals in the Resilient Atlanta strategy. The first request for proposal (RFP) for REEP work will be awarded by the end of 2020 to provide energy efficiency measures and education to 200 homes while conducting an extensive survey and data analysis effort around occupants and structures. The second RFP will be awarded in 2021 and will integrate findings from the first RFP to determine the most cost-efficient, impactful interventions for energy efficiency, education, and community engagement in order to scale the program to 3,500 homes over 5 years.

The goal for the program is to address the disproportionately high energy costs faced by low-income and minority Atlantan households due to inefficient housing stock that causes housing unaffordability and in extreme cases, contributes directly to housing displacement for Atlanta’s most vulnerable populations.

Project Opportunity

REEP is modelled on successful energy efficiency programs nationwide. Studies of similar energy efficiency and weatherization programs (WAP, KEEM, Energy Fit) have shown that in addition to experiencing reduced energy costs, homes receiving interventions exhibit statistically significant improvements in health and economic outcomes for household members, including reductions in asthma, depression, and days missed at work and school. The reduced costs enable them to spend more on other essentials like food, education, childcare, and health expenses.

Reducing energy costs and making homes more livable helps to preserve units of naturally occurring affordable housing across Atlanta in a period when housing displacement is rapidly increasing due to gentrification and real estate investment in energy-burdened areas. REEP also leverages existing City rehab programs that focus on home repair but not on energy efficiency.

Response to COVID-19

REEP helps residents most affected by COVID-19. The rate of infection is higher in energy-burdened households, which are typically composed of minorities employed in industries subject to job furlough or loss. These residents live in homes that are older and up to 50% less energy efficient.

REEP will not only alleviate energy costs, but it will leverage the City’s COVID-19 response to create a referral-based system to connect participants to programs focused on health and safety, economic development, and workforce development.
Reimagining ACDC (Atlanta City Detention Center)
Atlanta, Georgia

CONTACT – Megan Sparks | Senior Director, Programs and Strategic Partnerships | One Atlanta, Office of Mayor Keisha Lance Bottoms | City of Atlanta | msparks@atlantaga.gov | 470-698-5167
This program is led by the Chief Sustainability Officer, Shelby Buso, who sits in the One Atlanta, the Mayor’s Office of Equity and Resilience.
Please contact Megan first with any interest.

Project Description
By creating central space(s) where residents can not only equitably access the services and resources they most need, but also build alliances and learn skills that help them advance the initiatives they care about the most is true resilience building. The Reimagined ACDC project ultimately helps address several shocks and stresses, including:
• Health disparities
• Civil unrest
• Lack of affordable housing
• Lack of social cohesion
• Poverty/inequity

Project Opportunity
It is the “Atlanta Way” to come together, to listen and learn, and to make our city better. Mayor Bottoms and the Reimagining ACDC Task Force recognized the opportunity for a redeemed Atlanta – a place where we can transform systemic barriers of harm and inequality, and reimagine our city jail into a Center for Equity.

This project will create greater opportunity and greater access to resources for Atlanta’s most vulnerable residents, leveling the playing field so all have the chance to reach their full potential. It improves public safety by investing public and private fiscal, human, and physical capital in preventive, assets-based, or supportive services rather than in punishment. It also offers the opportunity to remake an underutilized portion of downtown Atlanta, revitalizing the neighborhood and installing innovative green infrastructure throughout the facility.

Response to COVID-19
The COVID-19 pandemic has highlighted and exacerbated the stark racial and economic disparities that exist in our city. The reimagined Center for Equity already is much needed by our most vulnerable residents. Even before its construction, the near-term focus on this project will help bring attention and funding to the services that our low-income and communities of color need now more than ever.

Impact
More meaningful opportunity for vulnerable people in a city with one of the worst income inequality rates in the US

Budget
Depending on the redevelopment option preferred, we anticipate costs could be anywhere from $40M to $100M+.

Timeline
• From May 2019-May 2020, the Task Force of community representatives led an intensive community engagement process and assessment work to provide 4 potential redevelopment options for consideration.
• If timelines proceed as imagined, groundbreaking may occur 2022.

Partners
Designing Justice Designing Spaces
Racial Justice Action Center
Women on the Rise
Atlanta Committee for Progress
Bloomberg Associates
Berkeley, California
United States

Resilience Strategy Goals
Goal 1: Build a Connected and Prepared Community
Goal 2: Accelerate Access to Reliable and Clean Energy
Goal 3: Adapt to the Changing Climate
Goal 4: Advance Racial Equity
Goal 5: Excel at Working Together within City Government to Better Serve the Community
Goal 6: Build Regional Resilience

Why Your City
Berkeley is a relatively small city, but has a large reputation. Berkeley is famous around the world as a center for academic achievement, scientific exploration, free speech, and the arts. Berkeley is often seen as a leader in developing innovative policies, programs, and ideas. Berkeley was the first city to install curb cuts for people with disabilities, and more recently was the first City in the nation to prohibit natural gas in new buildings as a measure to fight climate change. While Berkeley has much to offer, the City also faces significant challenges such as housing affordability, racial disparities, and the threats of earthquakes, wildfires and wildfire smoke, droughts, and other climate change impacts.


Key Shocks and Stresses
- Earthquakes
- Affordable Housing
- Racial Inequality
- Wildfires
- Flooding
- Sea Level Rise

Chief Resilience Officer
Katie Van Dyke
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African American Holistic Resource Center (AAHRC)
Berkeley, California

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Project Description
The City is planning to develop an AAHRC in South Berkeley, which will serve as a place of support and strength for the Berkeley community. The mission of the AAHRC is to eliminate inequities and disparities by using community-defined best practices and approaches. Culturally responsive services are offered to address social determinants of overall health, mental wellness and equity across the life span. The AAHRC provides advocacy, support and referral services for an array of educational issues, legal matters and programming and services for cultural, social and recreation. A strong focal point is on promoting self-awareness and strengthening connections by fostering unity in the African American community.

The African American/Black Professional & Community Network and Berkeley NAACP have been advocating and leading this effort for more than 10 years to create the AAHRC.

A feasibility study has been completed, a site has been identified, and the City is investing over $7 million for the AAHRC. However, additional funding is needed to support planning and project management costs.

Project Opportunity
The African American/Black community in Berkeley has the highest rate of morbidity and mortality of any racial/ethnic group, and are 2.3 times more likely to die in a given year from any condition compared to whites. From 2013–2018, the rate of poverty among African American families has quadrupled. Further, the African American population in Berkeley has significantly declined, from 13.3% in 2000 to 9.7% in 2010. The change is even more pronounced in South and West Berkeley where the African American population declined by 40% between 2000 and 2017.

To address these inequities, a paradigm shift is essential for this population in the delivery of care and services. The AAHRC will introduce culturally appropriate services and community-defined practices that are effective in welcoming, supporting, healing, and empowering Berkeley’s African American/Black residents, and those displaced from the city due to the impacts of racism, gentrification, and racial inequity.

Response to COVID-19
The AAHRC has not yet been built, and therefore does not have any COVID-19 response impacts. However, COVID-19 has disproportionately impacted African Americans in Berkeley. As of August 2021, data shows there have been 274% more cases of COVID-19 and 424% more COVID-19-related deaths in African Americans than in whites, even though African Americans only account for approximately 8% of the Berkeley population.

Impact
The delivery of culturally congruent services at the AAHRC will provide African Americans with the support they need to decrease inequities and disparities in their community.

Services will include, but not be limited to, health education and screening, mental wellness, educational supports and tutoring, social service referrals, cultural/ethnic events and activities, recreational programming and a community meeting space.

Budget
City of Berkeley is investing $7,325M to support the AAHRC project, including $7M in bond funding, $250,000 for planning, and $75,000 for pre-planning.

Additionally, an approximate $2M is needed for project planning and project management throughout the entire project process to completion.

Timeline
The project is anticipated to take approximately 5 years, with a goal of beginning in early 2022.

Partners
AAHRC Steering Committee and the AAHRC Community Leadership Committee
Electric Mobility Roadmap
Berkeley, California

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Project Description
Berkeley, in concert with community partners, recently completed its first Electric Mobility Roadmap (Roadmap). The Roadmap was adopted by City Council in July 2020, but funding for implementation is still needed. The Roadmap identifies goals, strategies, and actions to create a fossil fuel-free transportation system that integrates with and supports the City’s ongoing efforts to increase walking, biking, and public transportation, and ensures equitable access to the benefits of clean transportation.

This is equity-centered work. Early engagement of community-based organizations and nonprofits helped identify mobility gaps for low income residents, renters, communities of color, people with disabilities, and other priority stakeholders. For many members of the Berkeley community, access to electric vehicles (EVs) is limited due to financial, technological (e.g., lack of home internet or smart phone), and/or physical/accessibility barriers. Community partners were critical in the development of the Roadmap, and its equity-focused approach, and will be essential to its implementation.

Project Opportunity
Berkeley’s Electric Mobility Roadmap is a plan for supporting the use of EVs and other forms of clean transportation with a focus on equitable and affordable access to their benefits. The plan needs funding for implementation. The Roadmap identifies a total of 23 strategies and 58 actions which fall under four goals:

• Ensure Equity in Access to Electric Mobility: Maximize electric mobility benefits in underserved communities
• Improve Alternatives to Driving: Shift trips to walking, cycling, and shared electric modes
• Achieve Zero Net Carbon Emissions: Eliminate emissions from private vehicles
• Demonstrate City Leadership: Lead by example and guide the electric mobility transition

Transportation is the largest source of greenhouse gas (GHG) emissions in Berkeley, accounting for 59% of the community’s total emissions in 2018. Continued support of walking, biking, and public transit, while also ensuring equitable access to increased electrified motorized transportation modes, is a critical component of becoming a Fossil Fuel Free city.

Response to COVID-19
Since the Roadmap’s development, transportation has been altered dramatically due to the COVID-19 pandemic and resulting social distancing/shelter in place requirements. By early April 2021, passenger vehicle travel in the Bay Area declined by over 60% and BART ridership dropped by over 90%. These dramatic declines in transportation have contributed to better air quality, fewer traffic injuries, and reduced noise, but at unsustainable costs. Support is needed to maintain momentum for positive travel behaviors, like walking, biking, and telecommuting: rebuilding trust in public transit and shared vehicles is critical.

Impact
Roadmap implementation will create diverse, accessible, and affordable clean transportation options that will help make Berkeley a Fossil Fuel Free City by 2045, with a focus on prioritizing investments to disadvantaged communities.

Budget
$30,000–$50,000 Annually: Community participation
$50,000–$150,000: Mobility Needs Assessment
$200,000: Staffing annually
$25,000–$100,000: Support EV workforce and training development programs
$50,000: Catalyze work with community partners
$450,000: Funding to develop concept, partnerships, plans, and pilot project implementation

Timeline
Project planning could begin when funding is identified. Because of the dynamic nature of EV technology, the Roadmap strategies are intended to be implemented and assessed within the next 5–10 years.

Partners
It is anticipated that several community partners who assisted with the development of the Roadmap will remain involved with Roadmap implementation.
Emergency Response Funds – Air Purification and Public Safety Power Shutoff (PSPS) Readiness
Berkeley, California

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Project Description
PSPS Preparation: Over the last three years, the utility has proactively shut-off power for extended periods of time in order to reduce fire risks in what are called Public Safety Power Shutoff events. These events often coincide with local high fire risk events which may require evacuations. The City seeks funding for battery back-up systems for traffic signals affected by PSPS events and/or along key fire evacuation routes. Low-cost, portable traffic control signs will be purchased as a supplemental solution.

Air Purifiers: For the last several years, Northern California has been blanketed with unhealthy air quality for weeks at a time due to smoke from regional fires. Berkeley partners with 12 Community Resilience Centers (CRCs) which serve disadvantaged communities (including low-income senior and disabled apartments, a wheelchair repair service, a Black church, and a Latinx arts and social justice cultural center) to provide disaster preparedness training and host emergency supplies for their communities. Funding would provide mobile air purifiers to enable CRCs to continue serving their communities when air quality is unhealthy. Additional air purifiers will be deployed to City-operated shelters, cooling centers, and COVID-19 testing/vaccination sites.

Project Opportunity
Backup batteries for traffic signals are needed to provide safe, orderly evacuation from high fire risk areas and ensure that emergency vehicles will be unobstructed as they navigate the narrow, curvy hill roads. Traffic signage will help provide safety information.

Air Purification: Wildfire season the last several years has left Northern California blanketed with unhealthy air quality for weeks due to smoke from regional fires. When air quality is poor, community organizations, shelters, and other critical service buildings need air purification to safely continue to provide services. Funding for air purifiers would be provided to CRCs, City-operated shelters, cooling centers, and/or COVID-19 testing/vaccination sites.

Response to COVID-19
PSPS Preparation: The City faces the concurrent challenges of utility-led power shutoffs during the COVID-19 pandemic, and needs to be able to safely evacuate people from the hills during PSPS events and/or wildfires.

Air Purification: True HEPA air purifiers filter out both particulate matter from smoke as well as airborne COVID-19, providing a dual benefit to increase safety.

Impact
PSPS Preparation: 6–10 backup batteries for traffic signals in evacuation and egress routes, plus signage for evacuations during PSPS/wildfire events.

Air Purification: 50+ air purifiers to support up to 12 Community Resilience Centers, plus other City-operated shelters, cooling centers, and COVID-19 testing sites.

Budget
PSPS Preparation: $60,000–$115,000
$55,000–$110,000 to purchase an estimated 5–10 traffic signal battery systems at approximately $11,000 each.
$5,000 for 12 signs at approximately $400 each.

Air Purification: $40,000(+) to purchase approximately 50(+) mobile air purifiers (e.g. Medify MA–112 V2.0 Air Purifier, approximately $800 each).

Timeline
PSPS Preparation: Funding could be spent as soon as possible.

Air Purification: Funding could be spent as soon as possible.

Partners
Air Purification: Community Resilience Centers (currently 12 community organizations)
Resilience Strategy Goals

Boston’s resilient strategy (1.0) was constructed based on these painful, yet telling truths; even with a history of firsts, and with progress that paint more access and opportunity for people of color, race and root causes of systemic oppression still exist.

The goal of the strategy and the resilience office is to continue to lift up these root causes while holding the government accountable to change. We strive to reimagine and lead in demonstrating the urgency of equity, with the hopes of representing the true composition of our culturally diverse city, where Black, Brown and immigrant populations represent over 51% of the residents.

The Boston Strategy focuses on (3) priorities that inform, shape, and reimagine governance in the city:

1. Equity  
2. Race/Cultural Awareness and Sensitivity  
3. Resilience

Why Your City

Resilience. It sounds awkward but true. This city has survived global and national traumas that has made it a focus of the nation. Boston is a strong and deeply rooted city of faith, of perseverance, of determination, and under this current administration; a bold and courageous leadership style that is willing to unpack root cause issues to better the city and to further understand our diverse history and residents that we serve.

Race Dialogues: Dialogues to Action
Boston, Massachusetts

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Project Description
This project expands upon the well-received Race Dialogues (2018), built in partnership between the Mayor’s Office of Resilience and Racial Equity (MORRE) and the Hyams Foundation, that focused on specific neighborhoods, and extends it to all 22 city districts. Dialogues to Action will occur in three parts:

Part 1: Arts
• Engagement with Black and Brown artists and 15 cultural institutions will promote efforts towards unification and beautification of historically Black and Brown communities and create spaces for conversation at the intersection of art and community understanding of race matters (akin to the south end Frederick Douglas mural)
• Activities: Training on race matters and racial reckoning, developing narratives on how art can heal, unify and advance dialogues.

Part 2: Conversation
• Conduct dialogues to gather information to develop an equitable budgeting strategy. Embodying the MORRE philosophy of meeting the people where they are through external conversations
• Retain the services of two historians to conduct these dialogues
• Strategy development completed by MORRE office based on dialogues

Part 3: Advocacy
• Through advocacy training and education Dialogues to Action will empower the voices we heard from in Part 1 and 2

Project Opportunity
The foundation of this work is structured by people sharing thorough small conversations and large community events and demonstrating empathy for decades of “isms” that have lent to the painful struggles of inequality in the city. In partnership with the NAACP and the Museum of African American History, Dialogues to Action will expand access to policy making. By allowing for opportunities to share, each part will incorporate community voices into policy resulting in a cultural shift from city hall to the people and allow for communities to play a key role in the decision-making process.

This project will help advise strategies and plans for the administration to consider related to disadvantaged populations of governance. By listening to the voices of the underserved communities the city will begin to authentically address the shocks and stresses where we have been historically unsuccessful.

Response to COVID-19
The Dialogues to Action model has been used throughout the COVID-19 pandemic to form the City of Boston’s “Health Inequities” and “Recovery” task forces, aimed at hearing and creating strategies to address inequities during and post-pandemic. This demonstrates the importance of regular engagement and incorporation of diverse communities in city decision making processes in emergency situations, day-to-day decision making, and long-term planning.

Impact
The Dialogues to Action will allow for the resilience office to hear community concerns and ideas and incorporate these recommendations into policy, partnerships, programs, and long-term planning. This will give the city an opportunity to expand access to the policymaking process to all communities including the most vulnerable populations which have historically been excluded from the process. The dialogues underscore the value of including diverse thought in the execution of city services and initiatives.

Budget
Partially funded by the city of Boston: $30,000
Asking for additional funding:
Part 1: $150,000
Part 2: $150,000
Part 3: $50,000

Timeline
Pending funding: approximate duration 2 years

Partners
Museum of African American History
Mass League of Health Centers
Racial Equity and Leadership (REAL) Training Program
Boston, Massachusetts

CONTACT – Lori Nelson, Chief Resilience Officer | lori.nelson@boston.gov

Project Description

The Climate Risk Financial Disclosure Tool will be a decision-making tool utilized to quantify the cost of retrofits and upgrades versus the do-nothing alternative, screened against the interdependencies. This will support city decision-making and financial support from other government entities.

For the city to make informed financial decisions related to infrastructure management, it is necessary to assess costs based on several interdependencies including critical infrastructure, climate change scenario planning, and infrastructure risk assessments.

This project is in development with Toronto and Vancouver, based on recent work within the Task Force on Climate-related Financial Disclosures (TCFD Guide, 2019) and with the Chartered Professional Accountants Canada (CPA).

Project Opportunity

The City of Boston has made great strides towards implementing resilience and equity since the 2019 executive order made by then Mayor Walsh. The REAL Training Program is the next step to ensure that equity is woven into city systems now and for generations to come. This project will see the expansion of equity development and training through leadership across city systems. Ultimately training over 18,000 city employees across 45 different departments.

This project will occur over 3 phases:

Phase 1 – REAL Training Curriculum Development
Phase 2 – Delivery of Training for City Leadership and Pilot Training
Phase 3 – Plan for Broad Implementation and Sustainability of a Citywide Training Program

This training program has an ability to shift the way the City of Boston approaches implicit bias and anti-racism and developing a model that can be applied across city networks.

Response to COVID-19

Throughout the COVID-19 pandemic the City of Boston, like cities around the world, saw how the virus hit communities of color and low-income communities hardest. The REAL training program would reinforce policy makers’ insight to address shocks and stressors with these inequities in mind. As we continue to recover it will be important for equity and resilience to be at the core of every policy, project, and program. The REAL training program will ensure this for the City of Boston.

Impact

In addition to 11,000 reached under current program, an additional 7,000 can be engaged.

Boston Housing Authority, Boston Planning Development Agency, Boston Public Health Commission, Mass Water and Sewer (another 6500 employees)

Budget

3.5 million acquired through city
Project manager for training
Money for trainers to train the trainer
Administration
Implementation of training guide
Look at cross-sectional – research phase

Timeline

Pending funding: approximate duration 10 months

Partners

Human Impact Partners (HIP)
Quality Interactions (QI)
Building up Community Voices
Boston, Massachusetts

CONTACT – Lori Nelson, Chief Resilience Officer | lori.nelson@boston.gov

Project Description
The overarching goal of this initiative is to help facilitate opportunities to remove barriers across racial and economic lines in our communities and to strengthen social cohesion through the formal development of faith-based networks throughout the City of Boston.

In times of crises Boston has relied on faith-based organizations to reach hard to engage communities with resources and information. This initiative would empower the strengths of these organizations through collaborations, knowledge sharing, and resource allocation.

Phase 1 – Formal Alliance and Network Strategy Development (6 months): Engage up to 120 faith based organizations across 22 city districts to join network and develop collaborative strategy

Phase 2 – Knowledge Sharing and Project Implementation Period (12 months): Identify key players, resources, and collaborations already in existence. Develop and expand across the network.

Phase 3 – Gap Assessment and Strategy Adjustment: identify gaps in outreach, inequities in funding, and areas for improvement across racial and economic lines and adjust network and strategy accordingly.

Project Opportunity
Our framework outlines the work of community building and community voices. We recognize the importance of faith leaders within our community and want to build upon our current reality of life with COVID, focusing on the role of faith leaders.

We believe this effort will address the lack of social cohesion felt along racial lines which is a significant barrier to empowering a population that can persevere and grow despite ongoing and unforeseen obstacles. To create a truly resilient Boston, we must deliberately address racial and economic equity in conjunction with the physical, environmental, and economic elements of resilience.

Response to COVID-19
Throughout the COVID-19 crises cities across the US and the world needed to make fast decisions based on ever changing conditions and recommendations. This reactionary decision making led to community confusion and often exclusion. In Boston, faith-based organizations were key in reaching siloed communities with important information and resources and they will continue to be important throughout the city’s recover efforts to ensure all communities are reached.

Impact
The City of Boston has built preliminary relationships of approximately 120 faith-based organizations throughout the COVID-19 across all walks of faith and city districts. This initiative will allow the City of Boston to build off the momentum of collaboration started during the pandemic and channel it into recovery efforts and beyond, so that these organizations can be a reliable source of community support, reliable information, and valuable resources. Strengthening these bonds will allow the city to reach the most vulnerable of its 800,000 residents during good and bad times.

Budget
Phase 1 – $150,000
Phase 2 – TBD project implementation

Timeline
18 months upon funding

Partners
May include up to 120 faith based agencies from the Boston area
Calgary, Alberta
Canada

Resilience Strategy Goals

The Resilient Calgary strategy considers events that weaken the people, natural environment, economy and urban systems of Calgary. A Future Focused Calgary theme guides all four pillars in using a future-focused lens when advancing outcomes and actions. This theme recognizes that for Calgary to have a resilience and prosperous future, we need methodology to reveal novel ideas, challenge existing assumptions, and explore the forces driving change. COVID-19 has crystallized the value of this shared theme as we plan for the recovery and re-imagining “The Future Of…” in four pillar areas:

• Calgary’s Economy – all community members participate in a diverse and strong economy.
• Inclusive Futures – institutions have trusted and informed relationships with Calgary’s equity-deserving communities.
• Calgary’s Natural Infrastructure – natural assets are identified, protected, tracked, managed, and used to inform investment and planning decisions.
• Future Ready Infrastructure – Calgarians are supported through strategic investment in resilient infrastructure.

Why Your City

• Calgary has a vision: a great place to make a living, a great place to make a life. Calgary has been named the “Most Livable City in North America” by The Economist Intelligence Unit’s Global Livability Index
• The City of Calgary has institutionalized resilience throughout its services
• We are future focused and flexible, with an appetite for technological innovation, economic diversity, and equitable opportunities. We prioritize strong infrastructure and environmental sustainability amid a changing climate and social change for our communities.


Key Shocks and Stresses

- Economic uncertainty
- Climate change
- Inequality and lack of social cohesion
- Access to affordable housing
- Financial and economic crisis
- Extreme weather incidents

City Resilience Officer

Christine Arthurs, General Manager & City Resilience Office, People, Innovation, & Collaboration Services (PICS)
Resilience Dividend Tool for Capital Budgeting
Calgary, Alberta

**CONTACT** – Christine Arthurs, General Manager & City Resilience Officer, People, Innovation, & Collaboration Services | Christine.Arthurs@calgary.ca | 403.268.8758

**Project Description**

The City of Calgary has strong support from its executive leadership for resilience and is an example of how cities can operate and make decisions with a resilience lens. A Resilience Dividend Tool would support robust, data-driven decision making during our city-wide budgeting processes. The tool will assist to identify positive impacts, co-benefits of potential city projects and break down traditional departmental silos.

Specifically, the Resilience Dividend Tool will:

- Help guide investment decisions that are strategic, coordinated, and future-focused to improve quality of life, public confidence, and demonstrate service value.
- Identify shared value indicators across capital projects and service delivery to inform planning, operations, and investment decisions.

**Phase 1: Logic Model** – develop flow chart to make informed resilient decisions to apply to our budgeting process. May be informed by the experience of other cities within the network.

**Phase 2: Requirements document** – creation of a requirements document to build the digital tool based on Phase 1 outputs.

**Phase 3: Building the tool** – technical development, testing and change management.

**Project Opportunity**

Calgary has the administrative support to advance this complex project, however, identifying the resilience dividend of projects is a priority for all of the network cities within Canada (namely, the Team Canada cities of Calgary, Vancouver, Toronto and Montreal). There is an opportunity to include the Team Canada cities, and other network cities in the development of the tool. Ultimately this work will aid all cities in making more data-driven decisions that optimize the resilience value of projects. The tool will help cities prioritize budget allocations based on resilient outcomes and will support the implementation of actions identified in Resilient Strategies across the North American and global network of cities.

**Response to COVID-19**

In response to COVID-19, Calgary has made numerous fiscal and infrastructure investment supports available across various levels of government. However, as cities face substantial fiscal pressures, there is an immediate need to prioritize projects that deliver multiple benefits for health outcomes, economic outcomes and environmental outcomes.

Development and growth opportunities should be strategic and consider a resilience dividend that allows for a better understanding of short and long-term benefits across the City Resilience Framework and decisions made today in response to the pandemic must ensure that capital outlay also contributes to city resilience.

**Impact**

A greater understanding of resilience benefits of city projects will allow for that the prioritization of city projects that strengthen city resilience – not just for Calgary, but for Cities across the globe. During the budget process, cities will be able to make decisions that result in increased resilience for its residents.

**Budget**

$90,000 (CAD) to fund Phase 1: Logic Model.

The City of Calgary currently has $90,000 in matching funds to undertake this work.

$100,000 (CAD, estimated) for Phase 2: Requirements Document

TBD (based on output from Phase 2) for Phase 3: Building the Tool

**Timeline**

September 2021 – January 2022: Phase 1 to be completed in time to inform the 2022 City Budget Cycle

Phases 2 & 3: 2–3 year project timeline. Start date pending funding.

**Partners**

The City of Calgary Corporate Economics Office

The City of Calgary: Service Owners

Calgary Economic Development

Industry and Community partners (to help develop shared value)
Downtown Resilience – Innovation District Community Plan
Calgary, Alberta

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Project Description

Our city has invested significantly in downtown projects recently completed or underway including the National Music Centre, Downtown Public Library, Event Centre, Performing Arts Centre and the $5 billion Greenline LRT project. Our post-secondary institutions are opening downtown campuses alongside move-in-ready offices.

Despite all of this, Calgary has a downtown office vacancy rate of 27%, the highest downtown office supply per capita, and the lowest downtown office average net asking rent at $11.85 per square feet compared to $21.52 in Montreal, $33.92 in Toronto, and $37.65 in Vancouver (as of 2019).

Prior to the pandemic, and despite extensive study and investments in the downtown core, Calgary’s downtown has not realized it’s potential. This project will create the Innovation District Community Plan (through consultation with experts/community and research) to strengthen the economic resilience of the downtown in the light of the new realities of the COVID-19 pandemic. In support of the Downtown Strategy and Economic Development Strategy, this project is intended to increase our understanding of our competitive advantage and barriers to success while identifying achievable steps to address them.

Project Opportunity

Thriving Core: In support of the downtown strategy, external support can help us work with our community to understand our barriers and opportunities to developing a downtown that thrives. How do we effectively convert excess office space? How do we attract investment? How do we best leverage our existing and developing assets?

Innovation District: Can Resilience partners help identify and address barriers and requirements to foster our innovation ecosystem and encourage intentional collisions of people and ideas? What can Calgary learn from other innovation ecosystems? Are there benefits to be leveraged from a ‘corridor’ approach or the physical proximity of assets? Does Calgary have competitive strengths in a certain emerging technology? How will the district attract and develop talent?

Response to COVID-19

The impact of COVID-19 has exasperated existing foundational issues and made traditional solutions less viable. The ability for people to work from home has put further downward pressure on office space. Low oil prices have forced more layoffs in our primary sector. Social distancing regulations have forced restaurant and store closures. The real estate market and street activity are severely impacted. However, with innovative ideas to respond to the pandemic, Calgary will create a viable downtown core that addresses the physical challenges of the pandemic while also addressing the challenges that existed pre-pandemic.

Impact

Opportunity to re-activate 1 million square foot in a mix of office, retail art and educational opportunities. Accelerate our downtown transition based on values of inclusion, collaboration, sustainability and accessibility.

Budget

$550K (USD) or $700 (CAD)
• Downtown Summit for international experts and community members (live or virtual)
• Research
• Develop Innovation District Community Plan

$16M (USD) or $20M (CAD)
• funding/financing of infrastructure requirements within the innovation district

Timeline

Fall 2020 – 2022 (up to 18 months) to create the Plan.
2020-2026 (5 years) infrastructure investment.

Partners

University of Calgary
Calgary Municipal Land Corporation
Calgary Economic Development
Office of the Mayor
Business Improvement Areas
A Virtual Co-Creation Strategy
Calgary, Alberta

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Project Description
City resilience improves when equity-deserving communities (EDCs) have meaningful voices in decision-making and leadership, are connected, and feel empowered to act. “Community Future Thinking” is a way to achieve this. It is a participatory, intelligence-gathering, vision-building process that enables EDCs to imagine various futures. It results in EDCs mobilizing joint actions that lead to their preferred futures while preparing for other possible futures.

COVID-19 has forced us to rethink how we plan for possible futures. We need a Virtual Co-Creation Strategy, where we can meaningfully collaborate with EDCs in virtual spaces while addressing the digital divide and fostering trust and psychological safety. This project consists of four phases:

- Phase 1: Development of Strategy - The City of Calgary collaborates with hiring consultants to create an action plan
- Phase 2: Addressing Digital Disparity – providing access to a library of laptops and free Wifi
- Phase 3: Strengthening Digital Infrastructure – strengthening City IT capacity to support large scale community co-creation sessions.
- Phase 4: Implementation - Co-Creation with EDCs

Project Opportunity
As we gather virtually, there are questions we must consider. How can we use online technology to promote real conversations that work for EDCs? How can we lessen the digital divide so that hard-to-reach communities, can participate in building their preferred future?

This project directly advances our city’s leadership and strategy by empowering a broad range of stakeholders, especially those who have faced systemic barriers in participating in resilient city building. It will improve our economy and society by (1) promoting cohesion between communities and institutions and (2) fostering engaged communities. The philosophy, methods, process for tools development and successful outcomes from this project will be made available for other cities to replicate where appropriate.

Response to COVID-19
In the context of COVID-19, this project enables cities to build new muscles in community engagement for resilient city building. It addresses city stresses of inequity, systemic discrimination, and racism by intentionally reaching out to EDCs that face barriers to participation. It also ensures that we don’t lose voices of EDCs in the face of physical distancing and increasing digital disparity. This virtual co-creation strategy will continue to be used post COVID-19 as part of a larger Resilient Calgary engagement strategy. Multiple methods of collaboration are needed to reach more people to effectively respond to the stresses of inequity, poverty, and racism.

Impact
Increased number of Calgary’s ESCs who (1) have agency to shape their preferred future post COVID-19, and (2) are involved in meaningful decision making and participation.

Budget
Total Estimated budget needed: $675,000 (USD) or $850,000 (CAD).
- Phase 1: Development of Strategy, $80K (USD) or $100K (CAD)
- Phase 2: Addressing Digital Disparity, 120K (USD) or $150k (CAD)
- Phase 3: Strengthening Digital Infrastructure, $400K (USD) or $500K (CAD)
- Phase 4: Implementation - Co-Creation with EDCs, $80K (USD) or $100K (CAD)

Timeline
Planning to begin in November 2021
First co-creation session with EDCs in March 2022

Partners
Calgary Regional Immigrant Employment Council
Canadian Poverty Institute
University of Ottawa
Vibrant Communities Calgary
United Way of Calgary & Area
Institute for Community Prosperity
Dallas, Texas
United States

Resilience Strategy Goals

Goal 1: Advancing Equity in City government.
Goal 2: Ensure Dallas is a Welcoming City to immigrants and all residents.
Goal 3: Increase economic mobility for Dallas’ vulnerable and marginalized residents.
Goal 4: Ensure Dallas provides residents with reasonable, reliable, and equitable access.
Goal 5: Leverage partnerships to promote healthy communities.
Goal 6: Invest in neighborhood infrastructure to revitalize historically underserved neighborhoods.
Goal 7: Promote environmental sustainability to improve public health and alleviate adverse environmental conditions.

Why Your City

We are a prosperous community and are fortunate to have the prospect of continued growth. Despite this optimistic outlook, however, large segments of our community are not thriving. To secure Dallas’ position as the economic powerhouse of north central Texas, we must eradicate the barriers that prevent hardworking residents from achieving economic mobility and build pathways for those who strive to achieve prosperity. This is the critical work of resilience building.


Key Shocks and Stresses

- Tornado
- Gun Violence
- Structural and Institutional Racism
- Intergenerational Poverty
- Housing Affordability
- Economic Mobility
- Health Disparities

Chief Resilience Officer
Genesis D. Gavino
Resilience Officer
Bridging the Digital Divide
Dallas, Texas

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**Project Description**
Closing the digital divide for Dallas residents means that residents have access to high speed internet and that all residents are connected to the internet. The City is approaching the issue with Digital Navigators by focusing on three critical areas:
1. **Access** – planning for short, medium, and long-term solutions that connect all households within the City
2. **Hardware** – providing opportunities for residents to access computers or hotspots
3. **Digital Literacy and Skills** – ensuring residents have the skills and abilities necessary to access the internet in a safe manner

Digital navigators provide individualized or small group assistance to the community who need access to affordable home internet service, access to affordable internet-capable devices, and/or coaching in introductory digital skills in order to become effective home internet users.

**Project Opportunity**
Bridging the Digital Divide will have an impact in educational attainment and access across racial and economic groups in the city of Dallas. Currently, there are an estimated 87,000 students in charter schools, private schools and higher education institutions without broadband internet in Dallas County, and over 46,500 Dallas Independent School District (ISD) students estimated to be without internet in their homes.

**Response to COVID-19**
The pandemic has magnified the need of internet access. While practicing social distancing and dealing with the closures of many businesses and social services, internet access helps families and individuals conduct a wide range of activities including schoolwork, job searching, seeking healthcare, and paying bills. While businesses and schools reopen, the City of Dallas recognizes expanding access to the internet will increase equity and encourage educational and economic engagement beyond the COVID-19 pandemic.

**Impact**
Challenges often encountered in seeking to connect to and use the internet include selecting affordable plans, safe/effective applications and tools, and increased time spent on troubleshooting technology. The digital navigators can help overcome these barriers through community engagement and assistance through pre-established community trust and relationships. The program has the potential to assist 5,000 households in the least connected zip codes.

**Budget**
$1,000,000 for program expenses to deliver services in least connected communities.
**Seeking:** $1,000,000 to support efforts in providing households with computers and laptops for their personal use.

**Timeline**
Procurement process to select service provider pending funding

**Partners**
Dallas Independent School District
Dallas Foundation
Dallas Innovation Alliance
Commit Partnership
Federal Reserve Bank of Dallas
Dallas County
El Paso, Texas
United States

Resilience Strategy Goals

The Vibrant Desert City
The built environment reflects who we are, who we have been, and is the vehicle that moves us into the future. El Paso will leverage its unique rich heritage, cultural identity, and desert assets to transform behavior, advance city systems, and enhance infrastructure to build a city with a standard for a high quality of life.

The Thriving Bi-national Economy
As a hub for commerce, development, and international relations for centuries, El Paso has an opportunity to drive the direction of economic growth and expansion in the region by defining its identity as an environmentally aware, creatively diverse, bi-national community.

Empowered El Pasoans
Resiliency must begin with activating the agency of El Pasoans. The strength of our culture, the richness of our roots, and the depths of our potential can only emerge through an empowered populace.

Why Your City
Our regional population is expected to exceed 3 million by 2030. Beyond the statistics, El Paso has the chance to define the paradigm for the modern urban border environment. As the largest binational city in the western hemisphere we have leveraged our cultural resilience – even as population growth, migration, a domestic terror attack in 2019, and the global COVID-19 pandemic have exacerbated existing issues and created new challenges. El Paso’s greatest asset has been, is today and will always be our people.

Healthy Affordable Housing Solutions for All
El Paso, Texas

CONTACT – Nicole Ferrini, Chief Resilience Officer, Director, Community + Human Development | ferrininm@elpasotexas.gov

Project Description

El Paso is seeking funding to seed the El Paso Community Trust Fund, which will supplement federally funded initiatives such as down payment assistance, homeownership, financial counseling, gap financing for affordable housing, and more. The City is leading an effort across a diverse group of regional stakeholders to implement a housing strategy focused on programs, policy, and funding, protecting vulnerable populations, expanding systemic equity, and maximization of lifestyle choice. The plan recommends (1) investment in filling the growing affordable rental housing gap for those earning less than $30K and (2) addressing declines in homeownership for those earning under $40K a year.

A proactive plan for El Paso includes:
• Establishing a clear picture of the number of El Pasoans at risk of or experiencing homelessness
• Restructuring existing social service and housing programs to expand access and increase positive outcomes
• Establishing a community-wide crisis response system
• Increasing capacity for permanent housing.

Project Opportunity

By proactively developing policies and programs that prioritize housing as infrastructure, the City achieves multiple co-benefits ranging from public safety and community stability to equitable access to opportunity and quality of life. This all culminates in expanded, widespread economic prosperity and systemic resilience in the face of crisis conditions.

Response to COVID-19

As with most community vulnerabilities, COVID-19 has not created a housing crisis for our community but has exacerbated pre-existing stresses; these include access to affordable housing for low and extremely low-income populations as well as the financial stability and resilience of El Paso families. The need for homeless prevention services has increased exponentially. As the pandemic continues, our community is projecting a significant increase in the number of individuals experiencing homelessness and in need of other public services.

Budget

$10M goal to establish the El Paso Community Trust Fund
Additional funding to support the program:
CARES Act Federal Stimulus: $16.1M
Annual Entitlement: Approx. $ 5.6M

Timeline

Project commenced Summer 2019.
Seeking: seed funding for El Paso Community Trust and establish framework.

Partners

County of El Paso
Housing Authority of the City of El Paso
The Opportunity Center for the Homeless
Project VIDA
Centro San Vicente
UTEP
Home Builders Association
Private Sector Developers
Urban Land Institute
Texas City Housing Network

CONTACT - Nicole Ferrini, Chief Resilience Officer, Director, Community + Human Development | ferrininm@elpasotexas.gov
Project Description

The vision for the City of El Paso financial stability initiative is for all El Pasoans to be empowered to pursue their path toward prosperity through access to education, dynamic opportunity, and enhanced economic mobility.

The City set a precedent for this work by establishing One Fund El Paso in response to the mass shooting tragedy that occurred on August 3, 2019. The fund was established to streamline the distribution of donated funds to the victims and families of the August 3rd mass shooting in El Paso. Bolstered by what we have learned from COVID-19, the need for a permanent community assistance fund has become apparent. The vulnerabilities of our city are stresses exponentially exacerbated by two distinct shocks, a mass shooting and a pandemic.

The city seeks to establish a permanent fund in partnership with the Family Independence Initiative (FII). FII’s long-term vision is broad adoption of a strength-based approach by all levels of government and philanthropy to ensure that all people are seen and invested in for their strengths.

Project Opportunity

Individual income security and household stability is critical to community economic mobility and poverty reduction. By activating networks and resources as well as empowering El Pasoans to invest in and drive stability for their own financial future, overall community economic stability and opportunity is enhanced.

Through years of partnering directly with families across the country we know that FII’s approach results in the following:

1. Significant annual increase in economic activity including a net positive effect on government revenue and increased earnings create community multiplier effect
2. Robust Data Set: collected data shines a light on the initiative, creativity, and leadership of low-income communities. Families leverage that data to further their goals, and government agencies use the data to better understand what fuels families, shifting how they view and respond to poverty to create relevant new systems in a new knowledge economy where entire communities thrive.

Response to COVID-19

The El Paso Community Assistance Fund provides emergency financial assistance to individuals and families affected financially by the COVID-19 crisis. The method of assistance will be one-time emergency gap assistance, allowing purchases at grocery stores, supermarkets and pharmacies. It can also be used for emergency individual needs excluded from other forms of assistance, including (without limitation) medication, healthcare, household supplies, school supplies, and transportation. An individual or household may receive an amount up to $1,000.
Project Description
Public participation is key to building wellbeing, and the City of El Paso actively seeks to develop the capacity of its residents to become community leaders and affect positive change through both formal and informal engagement. Listening and learning are the basis of the three key goals for this project:
1. Activate non-traditional tools to build productive dialogue among community groups and public agencies.
2. Connect people to citywide assets and programs that address community challenges, promote community vitality, and improve quality of life.
3. Improve conditions and enhance preparedness for low income residents by providing access to resources that address community challenges.

The Center for Civic Empowerment is the physical centerpiece of the City of El Paso’s resident engagement and empowerment efforts. As indicated in the City Resilience strategy, El Paso’s greatest asset is her people. Supporting their individual paths toward prosperity and quality of life is the backbone of community resilience.

Project Opportunity
The strength of our culture, the richness of our roots, and the depths of our potential can only emerge through an empowered populace; this requires planning and policy that begins from the grass roots up. Community dialogue, service, volunteerism, and collective impact are the vehicles through which City government can build community trust, increase citizen understanding of government, and ultimately guide inclusive decision-making and equitable community investment.

Response to COVID-19
As a community and culture heavily dependent on interaction and familial connection, El Paso has experienced a social crisis as well as a health (due to the pandemic) and economic crisis. The Center for Civic Empowerment will be equipped with technology that allows virtual community collaboration and dialogue without the need for in-person convening.

Budget
$500K for Annual Program Funding
2020 Entitlement: $1.5m
Annual Operational Funding: $60K – 70K

Timeline
Additional initiatives occurring on annual basis pending funding

Partners
El Paso Neighborhood Coalition
87 El Paso Neighborhood Associations
El Paso Coalition for the Common Good
El Paso Community Foundation
Paso Del Norte Community Foundation
Texas Rio Grande Legal Aid
Housing Authority of the City of El Paso
El Paso Senior Volunteer Corps
El Paso Communities of Excellence Partners

CONTACT - Nicole Ferrini, Chief Resilience Officer, Director, Community + Human Development | ferrininm@elpasotexas.gov
RESILIENT CITIES NETWORK
Greater Miami & the Beaches
United States

Resilience Strategy Goals
The Resilient305 Strategy is divided into three overarching goal areas: people, places, and pathways. We focused actions on opportunities where we would be best positioned to move the needle while recognizing some of the exceptional work that was and is being done throughout our diverse communities.

Through our actions, we aim to address location-based challenges and strengthen climate resilience, improve mobility and housing options, and enhance and safeguard our natural ecosystems. Through our people actions, we aim to improve the lives of residents, support job and wealth creation, address health needs, and prepare neighborhoods and networks for disruptions. Throughout Pathways actions, we aim to build connections, collaborations, and committed leadership to become global leaders in resilience.

Why Your City
From the coral reefs to the Everglades, the unique subtropical environment of South Florida makes this area unlike any other in the United States. Our community is located along the southeast tip of the Florida peninsula, bounded by Biscayne Bay and the Atlantic Ocean to the east and Everglades National Park to the west. It encompasses more than 2,000 square miles, an area larger than most states. One-third of Miami-Dade County is in Everglades National Park and yet, nearly 2.8 million people call Miami-Dade County home.


Key Shocks and Stresses
- Hurricanes and Tropical Storms
- Growing Traffic Congestion
- Sea Level Rise & Coastal Erosion
- Aging Infrastructure
- Lack of affordable and safe housing
- Income Inequality

Chief Resilience Officer
James Murley, Miami Dade County
Amy Knowles, City of Miami Beach
Prepare Your Property
Greater Miami & the Beaches

CONTACT – Alissa Farina, Resilience Programs Manager | afarina@miamigov.com

Project Description
The goal of this project is to provide the tools, policies, and incentives to support property owners of all types in hardening and retrofitting their properties to mitigate the increasing risks of storms, flooding, and heat. Due to lack of affordable and safe housing within Greater Miami, we are now focused on multifamily affordable housing owners and operators.

Miami has secured the funding to work with Enterprise Community Partners and several community-based organizations, which will go towards the development of portfolio-based assessment and property level audit tools, conducting training and outreach, and providing match funding for the retrofits. The City of Miami and GM&B is seeking support to (1) identify funding and financing mechanisms to further incentivize these retrofits and (2) create similar tools and incentives for other property types (e.g. small businesses, low/mod income single family home owners).

Project Opportunity
This project will help to:
• Reduce climate-related risks for Greater Miami’s most economically vulnerable
• Provide workforce development and small business opportunities
• Address lack of affordable safe housing
• Reduce utility burdens on renter households
• Reduce pressure on county and state for evacuation capacity
• Reduce carbon emissions

Response to COVID-19
This project will make future stay-at-home requirements safer and more affordable. It also allows for more people to shelter in place under a hurricane warning, reducing capacity requirements at public shelters. The workforce development and small business opportunities will support economic recovery efforts.

Impact
Fifty multifamily properties will have had an on-site audit along with a plan and cost estimate for retrofitting. Miami has the funding to support the retrofit of 2-3 properties. 200-250 renters could be provided with additional hurricane preparedness and energy/water efficiency training and kits.

Budget
• Approximately $1 million secured.
Seeking: $100k-$5M+ to potentially be matched by the City’s Affordable housing funding in the Miami Forever BondOp building retrofit cost shares range from $100K-400K. $40k-75K hurricane preparedness, training, kits for renters

Timeline
• Pending funding: approximately 2 years duration

Partners
Southeast Sustainability Network
Enterprise Community Partners
South Florida Community Development Coalition
Miami Dade County
City of Miami Beach
Integrate Resilience into Parks and Open Spaces
Greater Miami & the Beaches

CONTACT – James Murley | James.Murley@miamidade.gov

Project Description

Public parks and open spaces offer a large-scale opportunity to implement resilient design and innovative resilience measures at multiple scales. GM&B is leading by example as we implement resilience best practices into pilot projects throughout the region.

Miami-Dade County is proposing a pilot demonstration stormwater park at an existing park that is undeveloped or at a park that is redeveloping existing assets. A stormwater park combines the amenities of a park with local flood prevention. This pilot demonstration project will integrate public space and stormwater infrastructure to reduce flood risk while also increasing public awareness about sea level rise and flooding using educational signage and programming.

After the implementation of the pilot project, additional funds can be used to develop a feasibility and implementation plan for additional locations of stormwater parks. The implementation of the project will be informed by the unified sea level rise projections and groundwater models, pilot stormwater parks, and plans in municipalities.

Project Opportunity

Resilient park design reduces physical vulnerabilities to environmental stressors such as flooding, sea level rise, and the urban heat island effect while enhancing community health and resilience.

Parks and open spaces can also serve as living classrooms and examples of resilient design, which can foster education about water resources, green infrastructure, and living shorelines.

Response to COVID-19

The COVID-19 pandemic has demonstrated that residents flock to parks and outdoor recreational spaces during and after times of distress. Parks serve as critical resource distribution sites to provide essential supplies (food, water, etc.) to the community during and after emergencies. We have seen this firsthand as the COVID-19 pandemic has unfolded.

Impact

Parks, recreation, and open space users and community organizations will have access to a pilot demonstration of utilizing greenways and blueways as an adaptation tool.

Budget

$300,000 (Estimated cost for planning, design, and implementation of pilot project)

$900,000 (Estimated for planning, design, and construction of additional 3 pilot projects)

Timeline

2022-2023: Pilot project site selected, and construction of project begins

Partners

Miami-Dade County Parks, Recreation and Open Spaces Department
Miami-Dade County Office of Resilience
South Florida Parks Coalition
Miami-Dade Parks Foundation
Community Based Organizations
Strengthen Neighborhood-level Emergency Response
Greater Miami & the Beaches

CONTACT – Alissa Farina, Resilience Programs Manager | afarina@miamigov.com

Project Description
GM&B is a 1,900 square mile area home to 2.7 million people. When a shock like a hurricane, tropical storm, or major heatwave hits, resources tend to be thinly spread, making it crucial for residents to be ready to support themselves and their neighbors in the initial stages of recovery. Investing in bottom-up disaster response tools will empower residents to take ownership in their community’s recovery. Further, these investments will help government agencies prioritize their response and more effectively distribute resources.

GM&B would like to invest resources in expanding the region’s Community Emergency Response Team (CERT) program and building resilience hubs. CERT volunteers can help with basic first aid, light search and rescue, and inventorying community needs initially after a shock. Teams of volunteers will be coordinated at a neighborhood level and serve as key liaisons during response and year-round, helping provide preparedness information to residents and connecting them to resilience hubs.

Project Opportunity
While there are over 5,000 trained CERT volunteers in GM&B, they are not being effectively utilized in disasters. Funding would be used to hire a full-time CERT coordinator who would be responsible for overseeing skills trainings, development and organization of neighborhood level teams, and creation of communication protocols with municipal leaders based on National Incident Management System protocols. For those in need of extra assistance, either after a shock or year-round, resilience hubs will serve as key resource centers providing cooling, Wi-Fi, charging, updates, and access to municipal staff.

By strengthening neighborhood-level emergency response via CERT teams and resilience hubs, GM&B will:

• expedite disaster recovery
• improve the relationship between government and residents
• increase community participation in preparedness and recovery
• improve community cohesion

Response to COVID-19
COVID-19 has underscored the importance of self-sufficiency, hyperlocal response, and robust community communications. Many of the neighborhoods that need CERT teams and resilience hubs the most are lower income, may have high populations of elderly, and relatively lower access to the internet. CERT volunteers can canvas neighborhoods with proper PPE and deliver resources and information, contact free, to neighbors. During a pandemic, resilience hubs will serve as obvious points of distribution for food, testing, vaccines, and other resources.

Impact
GM&B residents will have adequate neighborhood-level networks and access to key resources to help them weather the initial stages of emergency recovery with limited government assistance.

Budget
Secured: Part time CERT Coordinator, Miami-Dade County, City of Miami, and City of Miami Beach (varies)
Funding for supplementary resilience hub services via Catalyst Miami
Seeking: Full time GM&B CERT coordinator, 2 years: $100K
10 CERT trainings: $100K
Site enhancements for 3 Pilot Resilience Hubs: $450K
Total: $650K

Timeline
• Some activities currently underway
• Remaining activities pending funding: approximately 2 years duration

Partners
The Miami Foundation
Catalyst Miami
Communities United
Biscayne Bay Resilience Accelerator
Greater Miami & the Beaches

CONTACT – Amy Knowles | AmyKnowles@miamibeachfl.gov

Project Description
The Biscayne Bay Resilience Accelerator Workshop will bring together national experts and local leaders to collaborate on the recommendations of the Biscayne Bay Task Force (BBTF). The Accelerator will lead implementation on priority projects that will improve the health of Biscayne Bay. The Accelerator format will draw on academic expertise while bringing together key stakeholders to build action-oriented solutions to climate and ecological threats, while incorporating additional community benefits. A key component will be community engagement, with the goal of building trust and understanding of resilience.

Ultimately, the Accelerator will lay the foundation for the future of a more resilient Biscayne Bay that can bounce forward from shocks and stresses.

Project Opportunity
Biscayne Bay is a center of gravity for the identity and economy of the Greater Miami region. The Biscayne Bay estuary is of national significance with county, state, and federal levels of management, including the State Biscayne Bay Aquatic Preserves and Biscayne National Park.

A grand jury report released last year called for urgent action to restore the Bay due to serious threats to water quality and rippling impacts on the health of the ecosystem and economy. Given the importance of this ecosystem and increasingly significant threats, we must act to address multiple resilience challenges.

In 2019, the BBTF was formed to provide recommendations to protect the Bay. The BBTF is expected to have their formalized recommendations released this summer. The Accelerator will serve as a catalyst to bring the recommendations from the BBTF to fruition by convening local stakeholders and developing an action plan to move key recommendations forward.

Response to COVID-19
The global pandemic has reminded the world that we live in a delicate balance between society and the natural environment. Humans and development strain the natural environment. Unfortunately, as budgets have dried up overnight, programs and projects that protect and enhance our environment have taken a backseat. In order to ensure the future health of the Biscayne Bay ecosystem, we need to create momentum for projects that build ecosystem capacity before it is too late.

Impact
Improved regional coordination and collaboration to advance innovative projects that will improve the health of Biscayne Bay.

Budget
$200,000 (estimated cost includes data gathering, planning, community engagement, and workshop implementation)
$150,000 in-kind staff time

Timeline
Pending funding

Partners
Resilient Cities Catalyst
University of Miami
Florida International University
Expand Renewable Energy
Greater Miami & the Beaches

CONTACT – James Murley, James.Murley@miamidade.gov | Project Lead: Patricia Gomez, Patricia.Gomez@miamidade.gov

Project Description

Uninterrupted access to reliable energy is critical to the Greater Miami & the Beaches region. Sustaining the region’s lifestyle requires a deliberate effort to increase energy efficiency, use alternative sources, and improve the resilience of energy systems. Implementing these strategies focuses on reducing energy, greenhouse gas emissions and consequent heat waves. This also helps increase the resilience of county operations by diversifying the sources of energy and provides the opportunity to upgrade facilities with other improvements such as new roofs. Expanding renewable energy helps address infrastructure, pandemic, and aging infrastructure shocks and stresses.

Leading by example, Miami-Dade County conducted a Phase 1 analysis, identifying and prioritizing County sites for installation of on-site solar energy generation systems. To jumpstart Phase 2 of this project, the County has developed a draft solicitation to procure a turn-key solution for onsite solar energy services for 28 County facilities and is expected to be released as a request for cost-neutral proposals in the Fall 2021. Future Phase 2 analysis activities would be a more detailed look at other facilities not included in Phase 1 such as airport, transit and water and sewer facilities.

Project Opportunity

Expanding and advancing the use of renewable energy would have multiple co-benefits for our community. Employing renewable energy will help reduce greenhouse gas emissions, improve air quality, and improve natural disaster preparedness because it will be a more reliable source of energy after a storm.

Together with strategies to improve energy efficiency and conservation, this project will result in increased production of on-site renewable energy, battery storage, and other similar energy systems and microgrids. There is also an opportunity to implement and create job training programs and additional job creation, particularly in under-resourced communities. Additional community benefits of this project include decreased energy burden for residents by providing alternative spaces to work, cool, etc.

Response to COVID-19

Though many residents do not have the resources or technology to transition to work and study from home, the energy burden has been amplified by the pandemic. More families are at home, utilizing more energy to stay connected to school, work, and staying cool. As we improve energy efficiencies and employ more renewable energy, we must also look at providing alternative sites for residents to work and study, such as libraries and parks.

Impact

Installation of on-site solar renewable energy for the 28 County facilities represent a total of approximately 20,232 kW-DC and 32,141,171 kWh/year, and approximately 4 ground mount, 2 floating solar, 22 rooftop solar systems.

Budget

Secured: $293,000 committed by Miami-Dade County for FPL Solar Together Program

Seeking: $50,000 to support on-going solar solicitation for County facilities

Additional funding (amount TBD) to do energy efficiency upgrades, procurement, and installation of on-site solar on the facilities identified in the Phase 1 and Phase 2 analysis

Timeline

Pending funding: approximately 12 month project duration

Partners

Florida Power & Light
Rocky Mountain Institute
World Resources Institute
Solar Cooperatives
Private industry
Reef Creation & Resilient Coral Transplantation
Greater Miami & the Beaches

CONTACT – Amy Knowles | AmyKnowles@miamibeachfl.gov

Project Description
The goal of this project is to develop and test coastal resilience strategies that combine grey and green infrastructures to reduce the vulnerability of coastal communities.

The project is divided into two phases:
1. Develop and test restoration strategies that combine gray and green defenses to protect our coast. This phase is completed.
2. Complete a vulnerability and physical modeling to move the project into deployment. The deployment consists of reef structures with and without transplanted corals offshore of Miami Beach. The project will test the performance of coral fragments mounted onto modules under natural conditions. Then, coral survivorship and growth will be monitored. Along with the model being tested at UM SUSTAIN laboratory, the researchers will be able to compare the results under the modelling and under natural conditions. The project will provide first-ever actual measurements of reductions in wave energy as a result of artificial reefs deployment both with and without restored coral.

Project Opportunity
The project will utilize offshore structures to enhance habitats and provide storm surge protection. The researchers will deploy artificial reef structures along with transplanted corals in Miami Beach and implement a communications strategy to inform stakeholders on the benefits of nature-based coastal protection strategies for coastal resilience.

In the second phase of the project, it will be fundamental to apply lessons learned for the large-scale funding needed to deploy artificial and transplanted reefs to enhance coastal resilience at meaningful scales. Furthermore, the project will assist with the identification of places where nature-based solutions for coastal defense can be deployed in a cost-effective way.

Impact
This project will create models that identify places where nature-based solutions for coastal defense can be deployed cost-effectively and can be replicated across other coastlines.

Budget
$20,000 funded by the City of Miami Beach plus in-kind support
$150,000 funded by the University of Miami
Need: $1,000,000

Timeline
Ongoing

Partners
University of Miami Laboratory for Integrative Knowledge (ULINK)
The Nature Conservancy
Honolulu, Hawaii
United States

Resilience Strategy Goals

Remaining Rooted: ensuring an affordable future for our island by investing in long-term solutions that increase self-sufficiency, reduce out-of-pocket expenses, and assure our community stays intact

Bouncing Forward: fostering resilience in the face of natural disasters such as hurricanes, flooding, and extreme weather to put our entire community on stronger footing after each event

Climate Security: tackling climate change by reducing emissions and adapting to impacts, transitioning to a 100 percent clean energy economy as rapidly as possible and begin changing our policies and infrastructure to protect the lives and property increasingly in harm’s way

Community Cohesion: leveraging the strength and leadership of local communities, fostering connectivity and collaboration to ensure that we will come together stronger and tighter in the face of economic and environmental challenges

Why Your City

The City and County of Honolulu has an unparalleled legacy of sustainability and resiliency, a legacy rooted in Native Hawaiian culture and practices that fostered sustainability and self-sufficiency. Since the establishment of the Office of Climate Change, Sustainability and Resiliency by popular vote in 2016, we have reinforced our island value of aloha, which promotes equity, inclusion, and respect, praising our diversity— the highest in the nation— and protecting our environment.


Key Shocks and Stresses

- Hurricane
- Rainfall flooding
- Climate change
- Aging Infrastructure
- Cost of living

Chief Resilience Officer

Matthew Gonser, Chief Resilience Officer & Executive Director of the City and County of Honolulu Office of Climate Change, Sustainability and Resiliency
Community Resilience Hub Network
Honolulu, Hawaii

CONTACT – Matthew Gonser, matthew.gonser@honolulu.gov | Project Lead: Christopher Cunningham, c.cunningham@honolulu.gov

Project Description
The City and its community partners are seeking to create a pilot Resilience Hub for the Ko'olauloa region of O'ahu to be co-developed with the local community. Community Resilience Hub Network project would include:

1) Developing a Resilience Hub Action Plan. This will assess which communities, locations, and existing infrastructure are best suited to developing Resilience Hubs across the island. This plan will help achieve the ultimate goal of an island-wide network of Resilience Hubs.

2) Implementation of the Resilience Hub Action Plan. This would include building the island’s first Resilience Hub and would require staffing resources to evaluate the effectiveness of this hub in order to adjust the plan before moving forward with future hubs.

Project Opportunity
A proposal for the City’s first Resilience Hub is in the process of consideration, with a plan to develop the larger Community Resilience Hub Network in its beginning phase. Resilience Hubs serve as sites of community resiliency and empowerment both during and in the immediate aftermath of an emergency, as well as in blue skies. In the event of a natural disaster or other emergency, Resilience Hubs function as gathering points, distribution hubs, and information centers. These hubs may include onsite power systems and energy storage as well as food, water, and medical supplies. Outside of an emergency, Resilience Hubs serve as focal points of their communities year-round, with the potential to provide not only gathering spaces for group and recreational activities but also educational services, healthcare and social services, job training, community gardens, and before- and after-school programs.

Response to COVID-19
The Resilience Hub pilot, led by The Hau'ula Community Association, has been integral to the community’s COVID-19 response. Their actions have included running community food distribution and workforce development programs. While central to community led response, these efforts are vulnerable due to the placement of the existing community center, which is located in a coastal hazard area.

The wider Resilience Hub Network will ensure that future community response efforts like Hau'ula’s are able to continue under all conditions, including pandemics.

Impact
The pilot Hau'ula Resilience Hub will provide 25,000 residents with emergency food, shelter, and power, plus year-round community services. A future Resilience Hub Network will service communities island-wide.

Budget
$500,000 in City funding for the environmental assessment and planning and design for the pilot Resilience Hub
$285,000 from FEMA to develop the Resilience Hub Action Plan

Timeline
The Hau'ula Community Association is currently pursuing an environmental assessment and planning and design for the proposed project site for the pilot Resilience Hub.

The development of the island-wide Resilience Hub Action Plan is set to be completed by the summer of 2023.

Partners
Hau'ula Community Association
Federal Emergency Management Agency (FEMA)
The SHADE Institute
University of Hawai'i Texas City Housing Network
Ala Wai Watershed Flood Mitigation Project
Honolulu, Hawaii

CONTACT – Matthew Gonser | matthew.gonser@honolulu.gov

Project Description
The Ala Wai Watershed Flood Mitigation Project is a complex, multi-sector, blue-green-gray infrastructure initiative that will have a profound influence on Honolulu’s Waikīkī area and surrounding neighborhoods. The project’s focal point, the Ala Wai Canal, is a 2-mile-long waterway constructed during the 1920s and situated within the Ala Wai Watershed encompassing 19 square miles composed of 40% conservation land and 60% densely populated urban neighborhoods. Due to its aging infrastructure and high levels of pollution, the canal is susceptible to both severe flooding and other water quality impacts in the event of a storm, threatening neighboring communities.

With the support of the US Army Corps of Engineers and other partners, the City is investigating flood risk reduction strategies in the Ala Wai Watershed.

Project Opportunity
These efforts will support the revitalization of aging infrastructure while mitigating risks to shocks such as hurricanes and flooding. Given that Waikīkī (pre–COVID–19) accounts for both 8% of gross state product and 8% of island-wide employment, making it a major economic center for both the City and the State, these efforts will also help protect against short- and long-term economic damages. By pursuing these flood mitigation and risk reduction strategies, the City hopes to avoid catastrophic damage to the canal infrastructure as well as to the surrounding communities of Mānoa, Pālolo, Makiki, Ala Moana, and Waikīkī, which account for 20% of O‘ahu’s total population. The project’s main objective is to reduce flood risks, therein reducing loss of life and economic damages across the public and private sectors while contributing to overall improvements in the safety, livability, and livelihoods of these neighborhoods.

Impact
The project will save an estimated $1.14 billion in structural damages in the event of flooding while protecting Waikīkī, a major economic center accounting for 8% of gross state product.

Budget
Ultimate project features and potential budget undergoing a reevaluation (cost-share split will be 65% Federal, 35% non-federal match)
City (and/or future Improvement District partnership) responsible for ongoing operations and maintenance of system components
City responsible for any betterments of the designed and funded project

Timeline
The study is expected to be completed in less than three years.

Partners
United States Army Corps of Engineers (USACE)
State of Hawai‘i Department of Land and Natural Resources
Ala Wai Watershed Collaboration
Cesspool Replacement Assistance
Honolulu, Hawaii

CONTACT – Matthew Gonser, matthew.gonser@honolulu.gov | Project Lead: Alex Yee, alexander.yee@honolulu.gov

Project Description
The Cesspool Replacement Assistance Program will help combat environmental pollution while protecting our precious groundwater supply, our public health, and our environment more broadly by upgrading and replacing outdated wastewater infrastructure island-wide. Through a coalition of key partners, the City is leveraging the provisions of State Act 120 to streamline shovel-ready cesspool replacement projects in the highest priority areas on O’ahu. These high priority areas are determined by susceptibility to flooding (i.e., system failure) in addition to risks to human health, drinking water, infrastructure, and at-risk streams and coastal water ecosystems including: coral reefs, impaired waterways, waters with endangered species, or other vulnerabilities.

Project Opportunity
Cesspools are underground holes used throughout Hawai‘i for the disposal of human waste. Statewide, Hawai‘i has eighty-eight thousand cesspools, resulting in approximately fifty-three million gallons of raw sewage leaking into the groundwater every day. This leakage harms both our environment and our people, polluting our drinking water, public recreational spaces, and coral reefs while threatening the economy, shoreline, recreation, fisheries, and native species that depend on these resources. Approximately 740 cesspools are considered highest priority replacement projects across O‘ahu, with an additional 10,760 possible cesspools to replace. The Cesspool Replacement Assistance Program will make a sizeable impact in targeting the highest priority cesspools and protecting O‘ahu’s people and environment.

Response to COVID-19
In the face of the COVID-19 pandemic, the importance of and interconnection between public and environmental health has never been more obvious. Not only is COVID-19 present in the feces of infected persons, it can survive in wastewater and potentially spread to new persons via gastrointestinal infection. Eliminating cesspools, which discharge untreated sewage into our groundwater, will help prevent against current and future disease outbreaks, protecting public health while simultaneously reducing risks to our environment.

Impact
The Cesspool Replacement Assistance Program will build capacity for current and future cesspool conversion and replacement programs to protect environmental and public health. In addition to protecting large swaths of the city’s population and vulnerable natural environment.

Budget
$73,000 in CARES Act funding to supported project staffing
Potential ARPA expenditures for staffing and physical work (in-whole or in part via grants/program)

Timeline
Initial outreach, education and scoping on-going since November, 2020, with on-going work through 2021 and potential larger scale effort late 2021 into 2022

Partners
Hawai‘i State Department of Health
Wastewater Alternatives & Innovations (WAI)
Laulea Engineering LLC
Alexander Pacific Inc
Houston, Texas
United States

Resilience Strategy Goals
While the future is uncertain, we can expect that Houston will only face increasing challenges over the next 30 years. We want Houston to be:

- A healthy place to live
- An equitable, inclusive, and affordable city
- A leader in climate adaptation
- A city that grows up, not out
- A transformative economy that builds forward

We will achieve this vision by addressing resilience through a different scale of impact:

- Prepared & Thriving Houstonians
- Safe & Equitable Neighborhoods
- Healthy & Connected Bayous
- Accessible & Adaptive City
- Innovative & Integrated Region

Why Your City
After six major flooding events with federal disaster declarations in five years, the Bayou City is becoming known as the Flood City. Flood events believed to have less than a 2% chance of occurring have occurred annually. These events were worsened by the region’s rapid urbanization and the effects of climate change. We are expecting exponential population growth and more extreme weather events. Our resilience and ability to enable all Houstonians to thrive will depend on how we prepare for and adapt to this new normal.
Project Description
This project achieves Resilient Houston’s Action 19 – Grow equitable access to quality food to nourish Houston's status as a culinary capital.

We will invest in Houston’s food ecosystem through education, economic and workforce development, and local agriculture. Fundamentally, Houston lacks the capacity to move this action forward without designated staff resources and a prioritized plan to work with local partners. This project will address this gap by hiring a FUSE Corps Fellow for one year to develop a prioritized plan.

Shocks and stresses this project addresses include inequity, environmental degradation, environmental injustice, and disparities in health.

Project Opportunity
Many of Houston’s neighborhoods are food deserts without access to quality fresh foods. These conditions have persisted for years despite successful collaborations to address them. Research suggests that in addition to food access, increased nutritional awareness and urban farming education in neighborhoods may help increase the adoption of healthier food choices. By fostering investments in local sustainable agriculture practices, urban farming, community gardens, and food forests that are integrated into neighborhoods, community members will have greater access to fresh foods as well as opportunities for economic and workforce development.

Response to COVID-19
COVID-19 has exacerbated underlying issues for at-risk and vulnerable populations in Houston; key among those issues are food access and food security.

Resilient Houston’s COVID-19 Addendum (May 2020) stated, “Given that access to food has become more limited during the COVID-19 outbreak, it will be more necessary to invest in Houston’s food ecosystem, not only to combat food insecurity by also to provide new pathways to employment.”
Comprehensive Environmental Justice Strategy
Houston, Texas

CONTACT – Priya Zacharia, AICP | Priya.Zachariah@houstontx.gov

Project Description
This project achieves Resilient Houston’s Action 20 – Prevent, mitigate, and recover from the effects of environmental injustice in our communities.

The city will develop and adopt a comprehensive environmental justice strategy, leveraging and expanding upon existing mapping and monitoring tools. Fundamentally, Houston lacks the capacity to move this action forward without designated staff resources to and a prioritized plan to work with local partners. This project will address this gap by hiring a FUSE Corps Fellow for one year to develop a prioritized plan.

Shocks and stresses this project addresses include hazardous material emergencies, inequity, poor air quality, environmental degradation, environmental injustice, and urban sprawl.

Project Opportunity
Neighborhoods in Houston have suffered environmental injustices for generations. The petrochemical and refining industry in the city has boomed as the health and well-being of poor people and people of color have suffered. Houston’s land-use patterns of sprawling development and urban highway systems have amplified pollution and environmental concerns in many neighborhoods, directly impacting public health and safety.

The city will work with community and industry representatives to develop and prioritize preventive and protective actions that will ensure every resident has a safe and healthy environment including clean air, clean water, and pollution-free waterways.

Response to COVID-19
Environmental injustice concerns have emerged as one of the most important issues for at-risk and vulnerable populations in Houston as the underlying conditions have been exacerbated by COVID-19.

Resilient Houston’s COVID-19 Addendum (May 2020) stated “After understanding the geographic distribution of COVID-19 cases in Houston, the City can ensure that all Houstonians have the same degree of protection from health hazards.”

Impact
Neighborhoods in Houston that have an excessive concentration of hazardous uses will have a coordinated plan to align city, county, state, and federal resources with private and philanthropic resources to improve health equity conditions.

Budget
$150k for a FUSE Corps Fellow to promote and improve environmental justice initiatives.

Timeline
1-year fellowship to begin pending funding.

Partners
City of Houston and Harris County joint environmental justice working group (announced)
Community organizations
Oil and gas industry partners
State and federal partners
Academic institutions
Private sector
Neighborhoods
Project Description
This project achieves Resilient Houston’s Action 16 – Make Houston neighborhoods greener and cooler to combat extreme heat.

We will be preparing for rising temperatures through neighborhood-based interventions that combat extreme heat and the urban heat island effect. This will be done by initiating a Resilience Accelerator that will consist of the following tasks:

- Urban Heat & Health Equity Research
- Communications and Engagement Strategy Development
- Resilience Accelerator Workshop
- Demonstration Projects Selection
- Demonstration Project Implementation

Shocks and stresses this project addresses include extreme heat, drought, climate change, environmental degradation, urban sprawl, and poor air quality.

Project Opportunity
We can address escalating temperatures and extreme heat waves through a neighborhood-based approach. By mapping areas at greatest risk and with the highest level of vulnerability, the city can work with communities to strategically mitigate urban and extreme heat through proven tactics, such as light-colored roofs and pavement, green roofs, shade trees, and evaporative cooling from plants and vegetation. By focusing on planting trees and vegetation in areas with minimal green space and improving the share in areas without it, Houston can address environmental injustice and improve neighborhood equity.

The Resilience Accelerator is a catalytic process to design, demonstrate, and bring to scale proven tactics to address urban heat and health equity in a relatively short amount of time. The process is also intended to engage governmental and non-governmental partners to support these efforts.

Response to COVID-19
Houston must learn from multidimensional shocks and stressors experienced during the last year. In the summer of 2020 and 2021 Houston saw extreme heat combined with Covid-19 complicating each individual response. Unexpected severe storms displayed that our infrastructure is ill-prepared for severe weather and changing climates.

We are integrating a multi-hazard approach to response, relief, and recovery that includes at minimum these three resilience challenges that Houston is now very familiar with. At the intersection of urban heat and health equity are opportunities to address land use and urban planning, urban design for public spaces, and climate mitigation and adaptation strategies that increase or decrease vulnerability.

Impact
The Accelerator will promote collaboration between our departmental CROs and external partners, catalyze tactical projects, and enable us to maximize co-benefits while we combat urban heat and improve health equity. The Accelerator has the potential to reduce threat of urban heat effects on communities with the most vulnerability and demonstrate the effectiveness of tactical actions that can be replicated at scale.

Budget
$500,000 for mini-implementation grants and research to develop and plan the Accelerator workshop

- $100k mini-implementation grants
- $100k for staffing and resources in exchange between Houston and Tel Aviv
- $300k for research and staffing resources to set up accelerator

Timeline
Ideal start in January 2021 pending funding, duration expected to be approximately 1 year.

Partners
Center for Resilient Cities and Landscapes
HARC
Tel Aviv-Yafo
Houston’s Departmental Resilience Officers
Mayor’s Office of Complete Communities.

CONTACT – Priya Zacharia, AICP | Priya.Zachariah@houstontx.gov

Urban Heat & Health Equity Resilience Accelerator
Houston, Texas
Minneapolis, Minnesota
United States

**Resilience Strategy Goals**

Minneapolis is no stranger to adversity – from water borne illnesses in the late 1800s to the effects of systemic racism that have come to bear in 2020. We understand that the only way to ignite the change required in the city is to work together to build shared resilience.

We need to invest in our people, change how we govern to prepare for the future. Resilient Minneapolis 1.0 allowed us to take a hard look at the past and lay a roadmap through resilience to shape the city of the future that we need.

Systemic racism and civil unrest was identified in the strategy and while projects and policies have been implemented city officials and residents are eager to make large scale change to improve equity, climate preparedness, and economic opportunity. The city of Minneapolis is equipped and ready to move past identification and planning to come together to improve our community.

**Why Your City**

Minneapolis is a thriving, growing, progressive community with a robust and diverse economy, but with some of the worst disparity gaps regarding access to housing, employment, health insurance, and education outcomes.

The murder of George Floyd and the resulting Uprising put a spotlight on just how inequitable our city is and how the stress of inequity exacerbates almost every other shock. Minneapolis can set an example for cities across North America of what an equitable, just, and resilient recovery looks like.

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**Key Shocks and Stresses**

- Civil unrest
- Aging infrastructure
- Structural racism
- Homelessness
- Climate Change
- Affordable Housing

**Chief Resilience Officer**

Ron Harris
Chief Resilience Officer
Resilience Hub at Sabathani
Minneapolis, Minnesota

CONTACT – Ron Harris, Chief Resilience Officer | ron.harris@minneapolismn.gov

Project Description
A Resilience Hub is a community-serving framework for building leadership capacity for residents so that communities can adapt and respond to emergencies, however it can also play a critical role in developing resilience communities daily. This project will build upon the City’s recent investment in the Resilience Hub (made possible by ARP funds) that begins to construct the organizational and physical infrastructure needed. However, much support is required to conduct research into the needs of the community and to develop the long-term programming that is needed to create a resilient community. This project will include:
1. Economic opportunity review: conduct a survey to identify strengths and gaps in economic opportunity
2. Community outreach: investing in the leadership of people by holding a series of community engagement and leadership development programs
3. Communications planning: assemble a team of program administrators to develop strategic roll-out plan
4. Emergency management: oversee emergency response and conduct regular trainings to ensure preparedness

Project Opportunity
This program provides funding for community-based, community-run facilities supporting people before and after disruptions through resilient energy systems, community-oriented emergency management plans and resources, and increased access to mobility options.

Implementation and support of Resilience Hubs are prime examples of how local governments and partners can work to counter these broken systems. Resilience Hubs provide an opportunity for local governments to shift power to residents and community-based organizations to determine their own needs, identify how to meet those needs, and build relationships that will increase their influence on future decision-making processes. Local governments can provide support.

Resilient communities are equitable communities. Resilience Hubs provide an opportunity to consider communities’ social, economic, and physical needs in normal/everyday mode which, in turn, enhances their ability to anticipate, accommodate and more quickly recover during disruption. Hubs are a way to solve for multiple different problems in all three resilience modes by enhancing community cohesion, building trust, shifting power, and enhancing quality of life.

Response to COVID-19
The Resilience Hub concept, by its’ very nature, allows a community to respond, recover, and adapt to shocks and stresses. The COVID-19 pandemic limited the community’s access to traditional services. However, once a Resilience Hub is established, residents within the surrounding neighborhood will have access to informed leaders from within the community, services and supplies to help improve health outcomes.

Impact
This Minneapolis neighborhood is home over 16,000 people, with 50% identifying as people of color. The Resilience Hub will not only provide direct services to the community, but it will have positive effects on employment rates, property values, and the local economy extending across the local geographic region and the city as a whole.

Budget
$1M – to support programming and development including project management, economic needs assessment, and community outreach, engagement and empowerment.
$1.3M – committed by the City of Minneapolis through ARP funding for infrastructure upgrades

Timeline
Infrastructure upgrades in progress.
Programming and development pending funding.

Partners
Resilient Cities Catalyst
Sabathani Community Center
Additional local community partnerships in progress
Resilience Index
Minneapolis, Minnesota

CONTACT – Ron Harris, Chief Resilience Officer | ron.harris@minneapolismn.gov

Project Description
The Resilience Index will provide a baseline to measure progress as Resilient Minneapolis Strategy actions are implemented. There is currently a gap between conceptual planning and design, and the use of data analytics to analyze, inform and track successful resilient settlements; and to do this across varied sectors that carry unreconciled, inconsistent data sets. This gap requires a platform to normalize and standardize data across sectors and geographies, to provide a consistent set of outputs that can inform processes with a high level of specificity.

We know there is a great deal of data available, and that there is value in creating a Resilience Index. Without this platform, we will continue to advance plans that are untested and further, plans that are not tracked and evaluated for post-implementation performance. The Resilience Index allows the City of Minneapolis to create and analyze current baseline data and run potential future scenarios which inform decision-making processes.

Project Opportunity
The Resilience Index allows the city of Minneapolis to create and analyze current baseline data and run potential future scenarios which inform decision-making processes. This will equip our leaders and policymakers with the capacity to make data-informed decisions as they pertain to the physical environment, for example, the location of capital improvement projects, among others. The neutral, agnostic, and scientific nature of an index builds trust among all stakeholders due to this dispassionate process. This can lead to city leaders and their constituents working more closely together, which is a key element of building and advancing more long-term resilience.

There is also an opportunity to combine resources across the GRCN network and to create a tool that suits the needs of multiple cities.

Response to COVID-19
The Resilience Index will be used to assess the efficacy of our existing COVID-19 response initiatives and their ability to build back and build back better.

Impact
The Resilience Index will help guide internal city decisionmakers to prioritize resilience in our attempts to recover from the COVID-19 pandemic and the co-occurring shocks and stressors of the past two years.

Budget
Asking for $250,000 to fund the research and development of the Resilience Index platform

Timeline
Start date Spring 2023 (12-18 month project)
Montréal, Québec
Canada

Resilience Strategy Goals

Vision for Montréal: An alert, proactive, and inclusive community acting on social, economic, and environmental challenges.

Take action:
1. In support of a unified and safe community
2. To protect our living environment
3. To maintain a diversified and innovative economy
4. To promote integrated governance in the service of the community

Main objectives: Resilient Community
• Strengthen the community’s capacity to adapt and react to risks
• Preserve an environment that meets Montrealers’ essential needs
• Develop mechanisms to promote solidarity between citizens and social and environmental equity

Main objectives: Resilient Territory
• Improve consideration of climate risks in land use, municipal buildings and infrastructure planning
• Adapt green and gray infrastructures to protect and maintain essential systems
• Main objectives: Resilient Economy
• Support innovation, sustainability and preparedness in businesses for a green and just recovery
• Ensure the effective and secure movement of people and goods and a resilient supply logistic chain

Why Your City
Montréal is a creative, innovative city that welcomes one of the highest concentrations of post-secondary students among large North American cities. Montrealers are socially and environmentally conscious, paving the way for the city’s bold climate objectives with their impressive mobilization on environmental issues. Accustomed to weather extremes, Montrealers have resilience in their DNA. They cherish green spaces and the community infrastructure that is the foundation of their quality of life.


Key Shocks and Stresses

- Climate hazards
- Major industrial accident
- Pandemic
- Aging infrastructure
- Climate Change
- Social inequalities

Chief Resilience Officer
Sidney Ribaux, Director, Ecological Transition and Resilience Office
Data-driven Social Capital Building and Resilience Hubs
Implementation
Montréal, Québec

CONTACT – Irène Cloutier, Planning Advisor – Resilience | irene.cloutier@montreal.ca

Project Description
This project involves developing and implementing five Resilience Hubs in vulnerable and disadvantaged neighborhoods. We would like to base the development and implementation of these hubs on ongoing work of local organizations. As of January 2021, planning and implementation is underway.

To support this project, a study was done to support city decision-making on social capital building, coping capacities in communities and resilience hubs best-practices. The study pursued work on four previously piloted projects (2018-2019) with an academic partner, Cité ID Living Lab, that have developed knowledge and know-how on social capital and measurement tools for community organizations.

The social capital data output from the study will inform the development of the Resilience Hubs.

Project Opportunity
Data-driven social capital and resilience hubs will increase social cohesion, health and wellbeing and emergency preparedness in vulnerable and disadvantaged neighborhoods.

Through the development and implementation of resilience hubs the city of Montreal will begin to build structure in communities that will address future shock ranging from heat waves and pandemics as well as social equity and safety issues. By increasing the health and well-being of individual communities alongside the social cohesion and emergency preparedness across a network of communities city stressors will be reduced, lessening the severity of future shock effects and communities will be better equipped to respond quickly and effectively respond in the future.

We know that through the development of equity through resilience in our most disadvantaged communities we will increase the bottom line across our entire city – lessening the human and financial impact when shocks inevitably occur. This project will address shocks and stresses ranging from extreme heat, pandemics, terrorist attacks, climate change, and social inequalities to providing for aging population.

Response to COVID-19
By analyzing the role, impact, and adaptability of community organizations across our city throughout the COVID-19 pandemic we will be able to improve performance and cohesion between individuals, organizations, and government agencies. This will be beneficial when considering operations on a typical day as well in the case of an extreme shock. While we hope to never see a COVID-19 style event again, we will use the lessons learned from this extreme event to better prepare for the future.

Impact
This project will address gaps and challenges, scale up impactful initiatives, develop resilience hubs, and measure and build social capital to support city decision making. This project has the potential to improve the day to day lives in time good and bad for our most vulnerable residents.

Budget
Partially funded through a regional three-year grant. Extra funds needed to complete the budget: $242 000 CND
$200,000 USD

Timeline
Pending funding: approximately 3 year duration

Partners
Ecological Transition and Resilience Office
Social Diversity Department
Civil Security Centre
Public Health Department
TANDEM Community organizations
Climate Risk Financial Disclosure Tool  
Montréal, Québec

**Project Description**
For the city to make informed financial decisions related to infrastructure management, it is necessary to assess costs based on several interdependencies including critical infrastructure, climate change scenario planning, and infrastructure risk assessments.

The Climate Risk Financial Disclosure Tool will be a decision-making tool utilized to quantify the cost of retrofits and upgrades versus the do-nothing alternative, screened against the interdependencies. This will support city decision-making and financial support from other government entities.

This project is in development with Toronto and Vancouver, based on recent work within the Task Force on Climate-related Financial Disclosures (TCFD Guide, 2019) and with the Chartered Professional Accountants Canada (CPA).

**Project Opportunity**
This project will lead to a common climate change costing methodology for 3 Canadian cities (Montréal, Toronto and Vancouver) that will outline the expenses of retrofitting. In order to do this, we will integrate past work done in Montréal on critical infrastructure interdependencies, risk assessment on municipal infrastructure, and climate change mappings and scenarios. This methodology has the potential to be scaled up to other Canadian cities and integrate resiliency across the country as well as address shocks and stressor including flooding, destructive storms, heat waves /aging infrastructure, climate change, and economic livelihood.

**Response to COVID-19**
New city budgeting constraints post COVID-19 will have a long-term impact on the city’s capacity to adapt new and existing infrastructure. A coordinated and collaborative Canadian effort on climate change costing will help to determine priorities during these unprecedented, fiscally straining times.

**Impact**
The main benefit of this project will be long-term economic resilience to climate change and adaptation needs that have been exacerbated by COVID-19.

**Budget**
- $100,000 CND
- $80,300 USD

**Timeline**
Pending funding: approximately 3 year duration

**Partners**
- City of Montréal (Finance Department 
  Ecological Transition and Resilience Office)  
- City of Toronto (Finance Department 
  Environment & Energy Division) 
- City of Vancouver (Finance Department 
  Planning)

**CONTACT** – Irène Cloutier, Planning Advisor – Resilience | irene.cloutier@montreal.ca
Business continuity capacity building for SMEs (Small and Medium-Sized Enterprises)
Montréal, Québec

CONTACT – Irène Cloutier, Planning Advisor – Resilience | irene.cloutier@montreal.ca

Project Description
This project will entail working with locally based and city-led PME-MTL network to reach out, study, and influence business continuity practices of SMEs (up to 500 employees) in Montréal. PME-MTL is a city-financed network of organizations covering 6 sectors across the island of Montréal with the main goal of supporting SMEs in their business development and local entrepreneurship through training and financing programs. After identifying gaps and challenges of SMEs, we will use the data-driven findings to support the development of targeted training on critical assets, supply-chain redundancy, and organizational resilience to climate hazards and other risks.

Project Opportunity
SMEs represent a portion of the business sector that are largely overlooked when it comes to business continuity planning. This is an opportunity for the city and the local network organization to learn about the needs of SMEs in Montréal and to provide support to organizations that would otherwise not have the skills or capacity to undertake business continuity planning. The city of Montreal has the ability to improve green and circular economic development, diversify the local economy, and create an opportunity for a more just, resilient, and equitable pandemic recovery through the implementation of this project.

Response to COVID-19
Economic relief for SMEs has been front and center during the COVID-19 crisis. By developing evidence-based knowledge centered around the impact of the pandemic on business continuity, we have an opportunity to boost resilience amongst these businesses.

Post COVID-19, our city needs to aim for a resilient, green, inclusive, and circular economy. Business continuity is an essential piece of the future we are seeking to build.

Impact
Benefits and outcomes of this project include economic resilience of SMEs, climate preparedness of economic sectors, and circular economy development through local supply chain and waste management. This would improve conditions for business owners, employees, and the population at large through economic development.

Budget
$75,000 CND
$60,500 USD

Timeline
Pending funding: approximately 3 year duration

Partners
Ecological Transition and Resilience Off.
Economic Development Department
PME-MTL network
Academic partner, business continuity association, local chamber of commerce
New York, New York
United States

Resilience Strategy Goals
Through science-based analysis, policy and program development, and capacity building, The Mayor’s Office of Climate Resiliency (MOCR) leads the City’s efforts to ensure that New York City (NYC) is ready to withstand and emerge stronger from the multiple impacts of climate change in the near- and long-term. MOCR strives to adapt NYC the unprecedented challenge of climate change, creating a more resilient, equitable and vibrant city for the New Yorkers of today and generations to come.

Why Your City
With a population of over 8.6 million, it’s impossible to have a one-size-fits-all approach to resilience. Due to its size and diversity, projects and programs implemented have the potential to improve the lives of many across the City. The incredible variety of the City’s residents, neighborhoods, buildings, and climate hazards means that New York has been at the forefront of developing customized resiliency strategies.


Key Shocks and Stresses
- Racial Inequity
- Aging Infrastructure
- Affordable Housing
- Heat Waves
- Destructive floods (heavy rains & hurricanes)
- Disruptive floods (tides & overflows)

Chief Resilience Officer
Jainey Bavishi
Scenarios for an Equitable Future
New York, New York

CONTACT – Jainey Bavishi | Director, NYC Mayor’s Office of Climate Resiliency | jbavishi@cityhall.nyc.gov

Project Description
Scenarios for an Equitable Future proposes to adapt the Shared Socio-economic Pathways (SSP) framework, used in both the Intergovernmental Panel on Climate Change (IPCC) and the Paris agreement, to the NYC metro area. Working with agencies, community-based organizations, and scientists, we will situate rigorously defined population, energy, transportation, and other system trends in the context of culture and values. Scenarios for an Equitable Future will build on this experience, incorporating community visions from historically excluded neighborhoods into NYC SSP storylines. Those storylines will then directly influence the New York City Panel on Climate Change’s climate assessments, which are the basis for billions in infrastructure improvements. Through this process we will create a direct channel for feedback between community culture and values and institutional understanding for change.

Project Opportunity
Racial inequity is the root cause of many of NYC’s climate vulnerabilities. While climate impacts grow, historically excluded people have no incentive to talk about the future if they cannot be assured it will be better than the present. City, state, federal, and regional authorities lack an analytically grounded, socially meaningful process to plan and act at multiple scales for all climate hazards. For example, in spring 2020, NYC faced the impending threat of compound and cascading risks posed by the COVID-19 pandemic and extreme heat. The City placed equity at the forefront of the pandemic response by providing 74,000 air conditioners (AC) to low income seniors, but is now grappling with the long-term energy prospects of expanding AC as a response to extreme heat. Scenarios for an Equitable Future will close the gap between community needs and agency understanding by building a framework for collaboration between individuals and officials.

Response to COVID-19
Recovery from COVID-19 will be a decade-long process. Throughout, to ensure recovery efforts make NYC more resilient, we must thoughtfully balance tradeoffs between urgent recovery actions – like providing shelters and rent assistance – with longer-term priorities like waterfront adaptation. Scenarios for an Equitable Future will create storylines, grounded in science and community engagement, that provide a point of reference for evaluating and explaining tradeoffs, like where to site shelters outside the floodplain.

Impact
Billions of dollars in infrastructure, open space, and community resiliency measures will be more resilient. Climate literacy will be improved for 5,000 people in historically excluded neighborhoods.

Budget
This program will be a new initiative, and currently has no dedicated funding.
Community engagement = $400,000
Project management (($80,000 salary + $40,000 fringe)*50% FTE) for 3 years = $180,000
Scenario analysis = $320,000
Communications (website or dashboard) = $100,000
Approximate Total: $1,000,000 for 3 years

Timeline
Pending funding: approximately 3 year duration

Partners
NYC Mayor’s Office of Climate Resiliency (MOCR)
New York Panel on Climate Change
Climate Change Adaptation Task Force
Be A Buddy
New York, New York

CONTACT — Jainey Bavishi | Director, NYC Mayor’s Office of Resiliency | jbavishi@cityhall.nyc.gov

Project Description
NYC would like to extend Be a Buddy at the original three organizations and expand to one to three additional communities, after undertaking a robust evaluation of the pilot to capture the experience and knowledge of project participants and community organizations to improve the model and document best practices for expansion to additional at-risk communities in NYC and elsewhere. NYC has identified preliminary positive monitoring and evaluation results that reveal that participation in Be a Buddy was beneficial not only for the at-risk residents, but also for the volunteers or “buddies” and the CBOs. For the CBOs, the flexibility to implement the model in a way that worked best for their communities allowed for creativity in connecting to existing programming and priorities.

Additional funding will leverage the lessons learned in the two-year pilot to engage more individuals and further embed climate resiliency into community organizations.

Project Opportunity
Be A Buddy is a community-led program to increase climate resiliency by strengthening social cohesion, combating social isolation, and protecting the health of vulnerable New Yorkers. It is one of several initiatives to adapt to the adverse impacts of extreme heat, outlined in Cool Neighborhoods NYC. Three Community Based Organizations (CBO) in NYC communities impacted by extreme heat carried out a two-year pilot, and this hyper-local program quickly and effectively pivoted to respond to the COVID-19 pandemic.

Be A Buddy goals are to:
• Identify and engage community residents at risk of health consequences from extreme heat and other emergencies during non-emergency times.
• Train staff, volunteers, and other community members on risks of extreme heat and other emergencies, and how to prepare for these events.

Develop and activate “Be a Buddy” networks to check on at-risk individuals during extreme heat events and other emergencies.

Response to COVID-19
The Be a Buddy model takes advantage of the near certainty of annual heat emergencies to “practice” for the range of climate impacts and other emergencies that disproportionately impact some communities. When the COVID-19 pandemic struck in spring 2020, Be a Buddy organizations were prepared by design to respond — and did so voluntarily and without initial funding — safely offering critical resources and comfort through their volunteers’ already established relationships with their “buddies”.

Impact
Be a Buddy currently serves over 1300 heat-vulnerable New Yorkers with the help of 66 local volunteers across three neighborhoods. Expanding to 1 to 3 new communities could engage and protect and estimated additional 1,300 heat-vulnerable New Yorkers and 66 volunteers.

Budget
• Continued 2022 support for 3 Community Based Organizations of $60,000/year each = $180,000/year
• Onboarding and establishing Be a Buddy in 3 new neighborhoods at $90,000 in year 1, $180,000 in years 2 and 3 = $450,000/3 years
• Project manager at NYC DOHMH at $77,000/year
• Supplies at $6,000/year
• Approximate Total: $1,200,000 for 3 years; $350,000 for 1 year

Timeline
Pending funding: approximately 3 year duration

Partners
• Union Settlement (East Harlem)
• The Point CDC (South Bronx)
• Brooklyn Community Services (Central Brooklyn)
Norfolk, Virginia
United States

Resilience Strategy Goals

• Design the coastal community of the future
• Create economic opportunity by advancing efforts to grow existing and new industry sectors
• Advance initiatives to connect communities, deconcentrate poverty, and strengthen neighborhoods

Why Your City
We are a coastal city whose 66 square mile area is approximately one third water. This makes us more vulnerable to the negative effects of sea level rise and subsidence, but also gives us the opportunity to live and thrive with the water. We are home to the largest naval station in the world, the third largest port on the East Coast, and NATO’s Allied Command. Strengthening resilience in Norfolk benefits not only our residents, but people all over the world.


Key Shocks and Stresses

- Sea level rise including subsidence
- Recurrent flooding
- Non-diversified economy
- Concentrated poverty
- Food insecurity
- Disconnected communities

Chief Resilience Officer
Doug Beaver
Chief Resilience Officer
Ohio Creek Watershed Project
Norfolk, Virginia

CONTACT – Doug Beaver, Chief Resilience Officer | Douglas.Beaver@norfolk.gov

Project Description
The Ohio Creek Watershed Project, which broke ground in January 2020, uses a layered approach that combines several coastal defense strategies such as earthen berms, raised roads, living shorelines, and floodwalls with innovative stormwater management design to reduce the increased risk of flooding while expanding neighborhood connectivity and supporting economic opportunity.

Project Opportunity
This community design provides an opportunity for Norfolk to use water and water management systems as catalysts to economic development and community revitalization. A successful implementation of this coastal community of the future design will serve as a model for future projects not only in Norfolk communities, but in cities around the world.

Response to COVID-19
This project addresses health inequities; 76% of the households it impacts are low and moderate income (LMI), a demographic that is experiencing a disproportionate impact of the COVID-19 pandemic.

Impact
This redevelopment will protect two communities of over 3,000 people from nuisance flooding and sea level rise, while reconnecting and beautifying the neighborhoods and creating economic opportunity.

Budget
$112M – Project Budget is fully funded through US Housing and Urban Development’s (HUD) National Disaster Resiliency Competition (NDRC). Current ask is for project add-ons for approximately $100,000/project

Timeline
• Several funded project components are ongoing and dependent on funding.
• Project add-ons are pending funding.

Partners
Norfolk Redevelopment and Housing Authority
Elizabeth River Project
Wetlands Watch
Hampton University
Old Dominion University
Retain Your Rain
Norfolk, Virginia

CONTACT – Doug Beaver, Chief Resilience Officer | Douglas.Beaver@norfolk.gov

Project Description
An initiative (active for the past three years) that encourages residents to use small scale green infrastructure and other techniques to hold the rainwater where it falls. This reduces the amount of water that goes directly into the stormwater system, and thus eliminates some of the flooding caused by stormwater runoff.

Project Opportunity
This parcel-level stormwater runoff mitigation initiative contributes to the overall green infrastructure of the city by increasing the tree canopy, promoting biodiversity, and improving environmental health.

This project facilitates community engagement; projects funded by mini grants provide the community the opportunity to come up with a plan that works for their site. They also host a volunteer day centered around the project installation in order to teach the community and promote the idea of retaining your rain. Providing agency to our people promotes a sense of empowerment and a desire to be a part of the solution, which are important concepts that extend beyond flooding issues.

Response to COVID-19
Home projects that improve parcel level rainwater management while allowing social distancing simultaneously aid in recovery efforts.

Impact
This project reduces flooding caused by stormwater runoff, improves the overall health of local waterways by allowing the water to be filtered before entering the drain system, and beautifies the community.

Budget
Seeking:
• $5,000 per year for two mini-grant awards of $2,500 each
• $10,000 for promotional material
• $5,000 per year for educational workshops and community events

Timeline
Ongoing project that began in 2017; mini-grants continue to be awarded.

Partners
Virginia Cooperative Extension
St. Paul’s Transformation  
Norfolk, Virginia

CONTACT – Susan Perry, Director, susan.perry@norfolk.gov  |  Doug Beaver, CRO, douglas.beaver@norfolk.gov

Project Description

The St. Paul’s area is home to the region’s highest concentration of public housing, comprised of three adjacent neighborhoods and 1,674 units that are now obsolete. The area floods regularly, a problem worsened by crumbling infrastructure. Lack of connectivity to the rest of the city creates a sense of physical, social, and economic isolation in the community.

Residents in partnership with the City of Norfolk and the Norfolk Redevelopment and Housing Authority (NRHA) developed a vision for the St. Paul’s area. This resident-led neighborhood transformation will ensure that all families are stable and thriving through an investment in family supportive services. Further, the community will be physically transformed into one of Norfolk’s most desirable, resilient, connected, mixed-income, mixed-use neighborhoods of choice where all residents can thrive.

Project Opportunity

The St. Paul’s Transformation presents the City with the opportunity to improve the lives of thousands of residents through public-private partnerships and lead the nation in comprehensive, resilient neighborhood redevelopment that puts people first.

The transformation is driven by three key goals:

1. Increase life outcomes through People First, a transformational human services initiative that is strength-based, family-focused, and provides supportive services around economic mobility, education, health, and housing stability.

2. Deconcentrate poverty and develop high quality mixed-income, mixed-use communities of choice that provide access to excellent educational opportunities.

3. Re-imagine what it looks like to live on the coast over the next 100 years by innovatively managing water. The crown jewel of the neighborhood will be the transformation of the low-lying area often devastated by flooding into a blue-greenway amenity comprised of connected parks, green spaces and a dynamic living laboratory to provide research, educational, and recreational opportunities for Norfolk residents, the region, and the world.

Response to COVID-19

People First case managers quickly identified COVID-19-related needs through the administration of a survey and then began connecting residents with services and benefits. Needs identified in the community include food, especially during the weekends when food distributions sites are closed; housing stability and the ability to continue to pay rent and utilities during a loss of income; health concerns related to high density housing and previously diagnosed health conditions that make residents vulnerable; loss of income, and; access to computers and internet to allow children to adequately engage in remote learning. Barrier removal funds have been tapped for rent and utility payments and partnerships with community partners have resulted in donations of computers, food, household items and mental health counseling.

Indirectly, the transformation will improve the overall resilience of the community to better withstand and recover from a pandemic economically, physically, and socially.

Impact

Life outcomes will be improved for more than 4,200 residents; 1,900 high quality, mixed-income housing units and supporting infrastructure will be developed outside the floodplain and built upon a connected and resilient 200-acre community with best-in-class amenities.

Budget

Transformation of entire St. Paul’s Area is estimated at a total cost of $1B.

Funding has been secured from various sources. There are additional opportunities and needs in the following areas: Resilient Neighborhood Development / Flood Mitigation; Green Infrastructure; Historically Focused Landscaping & Lighting; Housing / Housing Access; Infrastructure; Schools

Timeline

First phase of Tidewater Gardens: 2025.
St. Paul’s area transformation: over next 10 years.

Partners

The US Department of Housing and Urban Development  
Norfolk Redevelopment and Housing Authority  
Brinshore Development, Inc.  
Urban Strategies, Inc.  
BANC of America  
Norfolk Public Schools  
The Franklin Johnston Group
Pittsburgh, Pennsylvania
United States

Resilience Strategy Goals
Though Pittsburgh has made significant progress in improving environmental stewardship and transitioning from a city in decline to a thriving hub of innovation, technology, education and medicine, we recognize there is still a need for focused, inclusive efforts to ensure all Pittsburgh residents and visitors live well and succeed.

Pittsburgh’s resilience strategy is centered around 4 P’s: People, Place, Planet, Performance.

Why Your City
The “Steel City” finds itself in a pivotal moment as we are managing issues ranging from population and economic decline to growth and prosperity. Pittsburgh has been growing over the last decade, anchored in a broad variety of new industries spanning technology, finance, higher education, and advanced manufacturing. However, not all in Pittsburgh have felt this rebirth equally. The City now seeks to provide inclusive, sustainable, and welcoming opportunities for all its residents.

As a concrete step forward in improving sustainability, the City passed a net-zero facilities ordinance for new City buildings in May 2020.


Key Shocks and Stresses
- Climate Change & Extreme Weather
- Hazmat Accident
- Economic Collapse
- Economic & Racial Inequity
- Fragmentation
- Aging Infrastructure

Chief Resilience Officer
Grant Ervin
Chief Resilience Officer
grant.ervin@pittsburghpa.gov
Project Description
Deep retrofits must be completed on the nearly 300 existing public facilities owned by the city that are in a state of decay, due in part to deferred maintenance and municipal fiscal distress. Fortunately, much of the research to identify the types of projects required has already been completed and documented in existing city studies and plans. Furthermore, the City has created a prioritization list that ranks the City’s buildings and determines where upgrades and retrofits are needed most urgently. In thinking about this work, the City wants to facilitate deep retrofits that incorporate new infrastructure and provide workforce, technological, and environmental benefits.

The City is seeking the funding to implement a Public Facilities Retrofit Program that will not only address the existing deficiencies in buildings due to the city’s fiscal distress and lack of a routine building maintenance program, but will enhance the user and worker experience in the buildings, create job opportunities and incorporate new technological advancements into the designs. Funds will be used to support the initial staffing and programming for this critical initiative.

Project Opportunity
Investments in building energy efficiency will improve cash flows through lower operating costs, reduce GHG emissions and encourage workforce development opportunities for local contractors.

Response to COVID-19
The COVID-19 Pandemic has changed the way people will need to work and interact. Building retrofits, that are responsive to the new workplace environment needs, will positively impact Pittsburgh’s employees and residents who visit the facilities. By taking a holistic resilience approach to designing building retrofits, the city will ensure that all retrofits undertaken will maximize the opportunity to address building deficiencies with respect to health, including air circulation and physical distancing measures. Deep retrofits will also eventually reduce energy costs, allowing the City budget to be more resilient in times of economic uncertainty.

Impact
This project will help Pittsburgh meet its ambitious climate mitigation and sustainability goals to eliminate waste and reduce building energy use and greenhouse gases by 50%, and to achieve 100% renewable energy electricity.

Budget
$500k– $1M to establish the structure (i.e, initial staffing and programming)
$15–25M cash infusion to allow for the buy-down of project costs and to reduce debt concerns
Through the city of Pittsburgh Capital Budget and the Pennsylvania Sustainable Energy Finance (PennSF) Program, nearly a third of the approximately $64M required budget has been slated for possible funding.

Timeline
Pending funding: approximate durations 1 year

Partners
The Green Building Alliance
Parking Authority
Sports and Exhibition Authority
Allegheny County
Port Authority
Others
ONEPGH Fund Development
Pittsburgh, Pennsylvania

CONTACT – Grant Ervin, Chief Resilience Officer | grant.ervin@pittsburghpa.gov

Project Description
In 2018, we created the ONEPGH Investment Prospectus, a measure of 47 key projects (identified in our resilience strategy) that can build resilience across the City of Pittsburgh. This project entails the establishment of an administrative body for a new 501c3 entity that will foster cross-sector collaboration and investment alignment to implement the ONEPGH Resilience Strategy.

In Pittsburgh, medical and university sectors have become the backbone of the local economy, much like the steel mills before them. However, unlike the steel mills, these sectors are tax exempt and do not financially contribute to the public sector via real estate tax revenue – the primary revenue source for local government. Contribution to the ONEPGH Fund enables cross sector integration, encourages strategic co-operation and will leverage capital to solve shared civic challenges from infrastructure to human capacity building.

We are aiming to partner with 4 large investors in the area to allow for collaborative partnerships.

Project Opportunity
The ONEPGH Fund will exist to leverage public assets to create measurable benefit for Pittsburghers. This process was intentionally designed to break down fragmentation across government, academia, jurisdictions, and nonprofits by fostering collaboration around shared goals to deliver services more efficiently and effectively. The investments chosen will not only serve as a social safety net for vulnerable Pittsburghers, but will create the stability to properly maintain and leverage the natural, built and cultural assets that distinguish Pittsburgh. Overall, these investments will foster a healthy, safe, and enriching environment for everyone to call home.

Projects are organized across 10 strategic topic areas, each examined through a holistic resilience lens to ensure that co-benefits are identified to maximize outcomes. Topic areas include:

- Our children
- Workforce and Entrepreneurship
- Affordable Housing
- Health and Wellbeing
- Environmental and Recreational Assets
- Green Infrastructure
- Climate Action
- Mobility
- Critical Infrastructure
- Art, Historic, and Cultural Assets

Response to COVID-19
Hospitals in the Pittsburgh area have been hit hard by COVID-19. As they face declines in patients, and barriers to fundraising their revenue sources have dried up. Similarly, universities are experience a vast reduction in revenues through tuition and an increasing need for student financial support. Membership in the ONEPGH Fund is a chance for these institutions to generate new opportunities (through collective action) while giving back to the community they have operated in, and benefitted from for decades.

Impact
Projects in the ONEPGH Prospectus align with city services and support the needs of vulnerable residents (e.g., food hubs, all purpose shelters, residential energy burden) and opportunities of universal benefit including access to parks and workforce development.

Budget
$300k–500k annually in start-up capital to hire a Fund Administrator and begin programming.

Timeline
Pending funding: approximately 3 year duration
Inland Climate Adaptation Planning
Pittsburgh, Pennsylvania

CONTACT – Grant Ervin, Chief Resilience Officer | grant.ervin@pittsburghpa.gov

Project Description
In-land communities like Pittsburgh are not at the forefront of climate adaptation and climate readiness discussions. Most energy is focused on coastal communities. However, the lack of exposure to ‘shock’ events like hurricanes or sea level rise, doesn’t minimize the threats of increased precipitation or extreme swings in temperature which have direct implications on city infrastructure and city budgets. Integration of climate impact analysis into city budgeting is needed for fiscal and service delivery planning.

We wish to collaborate with a planning partner who can perform an impact analysis and develop a strategy for municipal operations. Such a strategy must (1) be informed by climate scenario planning and (2) empower cities to reform policies and budgeting processes that set them up for a more resilient future.

Finally, we are aiming to create a cohort of inland cities who can share knowledge, learn from one another, and create solutions together.

Project Opportunity
Climate scenario planning is an opportunity to change the trajectories of inland cities around North America. Forming a cohort of inland cities is a powerful, effective way to share information and proactively address threats to our urban centers. Threats such as extreme heat/cold, drought, decline in agricultural production, stresses on city resources due to migration, extreme rainfall and vector borne diseases cannot go unaddressed if cities are to be resilient.

The risks due to climate change for inland cities need to be prioritized, and yet, there is a lack of awareness and/or lack of urgency among inland cities to allocate budgets toward climate change adaptation. This project will provide the necessary knowledge, network support and tangible tools to prepare inland cities to adapt.

Response to COVID-19
There is an increased demand for access to park and open space systems due to the pandemic. The City’s Greenway system is currently a safety and financial liability due to lack of funding and maintenance – as evidenced by dumping, invasive species and costly landslides. The climate adaptation strategy and resulting budgeting tool will help to make informed, data driven decisions about budgets. It will allow for the selection of projects that provide co-benefits for the environment and health, driving the city toward choosing equitable health outcomes for all residents.

Impact
This project sets us up for an economically and environmentally sustainable future – one in which our City is resilient to climate threats that lie ahead. The city cohort approach allows for impact at scale.

Budget
$1M for consulting services to develop climate adaptation strategies (budget tool) for a cohort of up to 5 inland cities.

There is an opportunity for ‘in-kind’ service or philanthropic grant contributions.

Timeline
Pending funding for scoping and deployment
San Francisco, California
United States

Resilience Strategy Goals
San Francisco’s resilience goals are to:

• **Plan and prepare** to handle today’s challenges and tomorrow’s disasters.
• **Retrofit, mitigate, and adapt** to confront the pressing realities of an imminent large earthquake, a changing climate, and rising seas, all while building a stronger city today.
• **Ensure housing** for all San Franciscans before and after a disaster.
• **Empower neighborhoods** by being effective government stewards of resilient, healthy, and cohesive neighborhoods based in trust, equity, and partnership.

Why Your City
San Francisco is leading the way towards transformational resilience that benefits all people. Recently, programs to improve the quality of soft-story structures for 111,000 residents, efforts to address homelessness, and efforts to improve infrastructure show our ability to tackle large-scale challenges. We consistently support innovative technologies, tools, and strategies; by doing so, we create stronger, more resilient, more equitable communities and are better able to address current and future shocks and stressors.


Key Shocks and Stresses
- Earthquakes
- Climate change
- Extreme heat
- Sea level rise
- Social inequality
- Aging infrastructure

Chief Resilience Officer
Brian Strong, Chief Resilience Officer Director, Office of Resilience and Capital Planning
Downtown Resilience Strategy
San Francisco, California

CONTACT – Brian Strong, Chief Resilience Officer Brian.strong@sfgov.org | Melissa Higbee, Project Lead, Melissa.Higbee@sfgov.org

Project Description
The Downtown Resilience Strategy will identify a prioritized list of actions to increase the resilience of Downtown and consequently both its neighboring communities that are among the most vulnerable in San Francisco, the city, and the entire region. Downtown plays a critical role as an employment center, urban living neighborhood, transit hub, and tourist basecamp. It faces unique challenges posed by its population density, range of building types, and mix of uses. While the strategy will focus on earthquakes, it will also look at sea level rise, flooding, and other hazards. Ultimately, the strategy will create a place-based resilience strategy for the workers, residents, businesses, and vulnerable populations that coexist in this vital part of San Francisco.

Project Opportunity
The Downtown Resilience Strategy is identified in the Tall Buildings Safety Strategy, the Hazards and Climate Resilience Plan, and Mayor London Breed’s Executive Directive 19–01. This is an opportunity to knit together existing studies that have tackled different components of risks in Downtown, including Tall Buildings Safety Strategy, the Port’s Multi-Hazard Risk Assessment, and the Sea-Level Rise Vulnerability & Consequences Assessment. It is also an opportunity to consider changing market trends due to the COVID-19 crisis, the value Downtown provides for the residents of San Francisco, and the role downtown stakeholders can play to reduce racial and social disparities in the City.

Response to COVID-19
COVID-19 has had a major impact on downtown as the region has shed over 136,000 jobs, most office workers are telecommuting, conferences and events are cancelled for the foreseeable future, and tourism is limited. Businesses have had to completely re-think operations for COVID-19 safety or whether they can remain in business at all. While the COVID-19 crisis won’t last forever, long-term shifts in telecommuting and travel patterns may change demand for space in Downtown.

Impact
The millions of people who live, work, travel through, and visit this area will benefit from a more resilient area. The Strategy will lead the way for other place-based resilience programs.

Budget
Approximately $250k
• Secured: $100k
Seeking: $150k

Timeline
Approximately 18-month project. Ready to start pending funding.

Partners
This project will be led by the Office of Resilience and Capital Planning with input from downtown Stakeholders and City departments that own/manage assets in the area, including the Port, SFMTA, SFPUC, and Public Works.
Resilient Building Guidance
San Francisco, California

**CONTACT** – Brian Strong, Chief Resilience Officer | Brian.strong@sfgov.org

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**Project Description**

Capital planning design guidelines rooted in the current and future needs of a climate-resilient city are essential to meet San Francisco’s aggressive sustainability and climate action goals. The Resilient Ready Building guidelines developed for this project will build on the recently updated Sea Level Rise Guidance, the Sea Level Rise Vulnerability and Consequence Analysis, the Port Multi-Hazard Threat Assessment, and other studies that inform capital planning priorities and improve the resilience of municipal buildings to seismic, tsunami, flooding, extreme heat, and drought hazards.

The strategy will also consider risk analysis and adaptation tools, along with architectural/engineering standards (such as building electrification systems, solar and energy storage, heating, venting, and air conditioning system coordination across units in large buildings, etc.). The guidelines will provide a cost–benefit analysis process to help project managers decide what resilience strategies to pursue, including non-capital-intensive considerations. These guidelines will be adaptable for use by other public and private building owners.

**Project Opportunity**

Resilient Ready Building Guidance is an identified strategy in the City’s recently approved Hazards and Climate Resilience Strategy. It provides an opportunity to strategically improve the performance of municipal buildings for seismic and climate hazards.

**Response to COVID-19**

COVID-19 highlights the critical importance of having municipal facilities that can be flexible and rapidly deployed to address acute shocks and cascading hazards. Resilient facilities that allow for emergency operations, social distancing, safe collection and deployment of PPE, health care clinics and hospitals, respite centers, and infrastructure to keep employees and the clients they serve safe are critical in navigating this pandemic.

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**Impact**

San Francisco has over 3,000 municipal buildings that will benefit from multi-hazard guidance to be better prepared for shocks and stresses. These guidelines will be used to make more informed capital planning and budget decisions for municipal buildings. They will also provide a test case for improving building performance for all buildings.

**Budget**

- Approximately $250k
- **Secured:** $50k
- **Seeking:** $200k+

**Timeline**

2-year project. Ready to start pending funding.

**Partners**

This project will be led by the Office of Resilience and Capital Planning with input from key departments that own and design city buildings, including Port, SFMTA, and Public Works.
Resilient Buildings for Vulnerable People
San Francisco, California

CONTACT – Brian Strong, Chief Resilience Officer Brian.strong@sfgov.org | Melissa Higbee, Project Lead, Melissa.Higbee@sfgov.org

Project Description
Older buildings are not designed to accommodate flooding, heat impacts, poor air quality, and power outages due to wildfires and other natural and climate hazards. Vulnerable populations are disproportionately impacted by these hazards and have fewer resources to make climate-resilient home and business improvements. Disproportionately, these older, poorer quality residential facilities and homes are occupied by the poor, elderly, and people of color.

The project will study the overlap between vulnerable populations and the vulnerable buildings in which they live. This analysis will help identify property types and locations that may be particularly vulnerable (such as permanent affordable housing, SRO’s, assisted care homes, etc.) to hazards and may need public subsidies or technical support to equitably pursue resilience measures. Resilience measures may include seismic retrofitting, flood proofing, weatherization, and energy retrofits.

Project Opportunity
Resilient Buildings for Vulnerable People is an identified strategy in the City’s recently approved Hazards and Climate Resilience Strategy. It provides an opportunity to study the physical structures which house vulnerable populations and address the equity issues that place vulnerable populations in housing that affects their wellbeing. The project will build on previous studies and guidance to better understand and address the overall resilience of these critical buildings.

Response to COVID-19
As summer and wildfire season approaches, and as COVID-19 has confined many residents to their homes for long periods, it is increasingly apparent that sheltering in place is a significant challenge for those residing in housing that lacks adequate cooling and weatherization. Spending more time at home also increases the risk that certain types of housing will injure or kill more people in an earthquake.

Impact
Improve the resilience of permanent and transitional housing for thousands of people living in our most vulnerable neighborhoods such as Chinatown and the Tenderloin.

Budget
Approximately $500k
- Secured: $100k
Seeking: $400k

Timeline
3-year project including implementation. Ready to start pending funding.

Partners
This project will be a joint effort between the Office of Resilience and Capital Planning, Departments of Public Health, Planning, and Building Inspection, and community-based organizations and non-profit housing developers.
Resilience Strategy Goals
The Resilience Strategy sets out a vision complete with goals attainable through actions to help Toronto survive, adapt, and thrive in the face of any challenge, particularly climate change and growing inequities.

Through engagement, residents built a vision of a city where every resident can thrive, where diversity is nurtured and where residents have empathy for each other. One where long-term, “all my relations” thinking is considered in every decision. One where residents know the history of Indigenous peoples and are committed to taking action for truth and reconciliation. One that is efficient, safe and affordable, and led by brave and caring leaders who reflect the communities they serve.

It has a set of 10 goals and 27 actions to deliver on this vision. They are organized into three focus areas: people and neighbourhoods, infrastructure, and leadership.

The Strategy is meant to light a spark – to drive action at the City level from business, academia, non-profit organizations, and residents to build a city where everyone can thrive.

Why Your City
Home to a population of more than 2.9 million people, half of whom were born outside of Canada, Toronto is Canada’s most populous city and the fourth largest in North America. It is one of the most diverse and fastest growing cities in the world and has more cranes in the sky than any other city in North America. However, many neighbourhoods and residents are not benefitting from this growth. The Resilience Strategy is designed to address this challenge head on to enable Toronto to survive, adapt, and thrive for years to come.

Resilient Connected Communities (RCC)
Toronto, Ontario

CONTACT - Amy Buitenhuis | Amy.buitenhuis@toronto.ca

**Project Description**

RCC supports communities to unlock the potential for active local networks of engaged residents, community leaders, community centres, faith-based organizations, libraries, and local not-for-profits and organizations. These connections will provide communities with access to strategies, plans, and teams so they can prepare for, respond to, recover from, and regroup after major shocks.

RCC uses the innovative Connected Community Approach to re-centre City resilience planning on leveraging and resourcing community leadership, aspirations, and initiatives in the City’s most marginalized communities.

Starting with three communities, RCC seeks to develop an understanding of the history of community resilience efforts (e.g. Black-led, Indigenous-led, formal and informal organizations and networks); foster support by the community for the community with resilience planning including developing communications systems; work with communities to uncover ways in which City emergency/resilience planning and community planning can be mutually reinforcing; and develop plans to mitigate the stresses that make communities vulnerable in times of crisis.

**Project Opportunity**

RCC is an opportunity to implement Toronto’s resilience plans and actions with a focus on equity and community agency. The pilots will use a connected community approach to foster the relationships necessary to ensure that:

- City emergency planning and recovery strategies are influenced by and connected to local, on-the-ground planning
- Coordinated plans are easily enacted before, during and after shocks by local grassroots leaders, community organizations, and the City
- Communication about resilience plans and actions are effectively communicated throughout the preparation, response, recovery and regrouping phases
- Preparing for resilience is on the agenda for multiple groups within the community

**Response to COVID-19**

Without community resilience plans in place, community actors have struggled to respond to the fallout from COVID-19; early data suggests that these responses have been largely unsupported, despite being critical to people’s wellbeing during the crisis. As we enter into the recovery phase, the very people who were disproportionately affected by stresses before the pandemic will become more vulnerable unless we intentionally design for equity and inclusion. By using the Connected Community Approach, RCC is designed to help three communities bounce forward in ways that mitigate the creation or exacerbation of COVID-related stresses.

**Impact**

Three vulnerable communities will have strong local recovery plans and will be better prepared for future shocks.

**Budget**

Approximately $750,000 ($1M CAD) over two years

- Funding will be used to pay a community-based organization to help run the pilots in 3 communities. This includes staff time and resources at the community-based org and funding to hire local leaders in the 3 communities that will facilitate the pilot. The pilot involves multiple workshops in the selected communities. These workshops will need to be online due to COVID.
- Additional funding would allow us to scale up to include more neighbourhoods

**Timeline**

- Phase 1 was completed in Q2 2020
- Phases 2 and 3 will take place over 1.5 years. Phase 2 was slated to begin in September 2020 but is on pause due to COVID.

**Partners**

Centre for Connected Communities
Project Description

The goal of this project is to create a city-wide flood planning tool to convey flood risks to decision makers, prioritize solutions, and develop new policies. The need for this project was identified by the City’s Urban Resilience Flood Working Group, a collaboration of key flooding and infrastructure stakeholders across agencies and sectors.

The tool will build on existing flood risk knowledge on riverine flooding and conduct new analysis on urban flood risk. It will identify areas of the city that, if flooded, would cause the most harm to residents’ quality of life. We will consider property damage and access to critical services such as power, water, health care or transportation. The tool will also use demographic and other data to explore how Toronto’s most vulnerable communities are impacted by flooding.

Using the flood planning tool, the City would identify and design major City-building solutions to reduce flood risks. Such solutions would require inter-agency and inter-sectoral collaboration.

Project Opportunity

Toronto’s risk of heavy flooding from rainfall is evident and growing. The City has experienced five severe storms since 2000, causing widespread damage and disruption. In the summer of 2017, we had extreme amounts of rain which led to Lake Ontario reaching record high water levels, in turn flooding the Toronto Islands. Global climate change will result in increased intensity of these storms, increasing the risk of flooding and its impact, while the city’s growth has put more people and property at risk.

This project is an opportunity to address this issue directly while including equity as a consideration in the process, ensuring that communities disproportionately impacted by flooding are prioritized in decision making.

Response to COVID-19

Flooding remains an issue in Toronto, and the negative impacts are exacerbated by the need for residents to stay home due to COVID-19. This project will also allow the City to build the case for major capital projects that can move forward as part of COVID-19 stimulus funding.

Impact

Many organizations and agencies across the city will better identify and respond to flood risk. Communities most impacted by flooding will benefit from new projects to reduce risk.

Budget

Approximately $750,000 ($1M CAD) over one year

Initial funding to be used for hiring external resources. The first step would be to build the flood prioritization tool and conduct analysis to identify flood risk reduction solutions.

Timeline

Q4 2020: develop scope
2021-2022: develop tool
Pending funding; approximate duration to develop scope and tool is 2 years.

Secured funds to begin the work are currently on pause due to COVID.

Partners

Members of the Flood Resilience Toronto Working Group
Vertical Resilience
Toronto, Ontario

CONTACT – Amy Buitenhuis, Amy.buitenhuis@toronto.ca

Project Description
The goal of this project is to enable wide-scale change in apartment towers to strengthen resilience through the improvement or retrofitting of these buildings and their units.
The overlap of climate risks and vulnerability in Toronto’s aging high-rise rental apartment towers represents the single most pressing priority for the city’s resilience.
Over 500,000 Torontonians live in high-rise apartment towers that are more than 35 years old, and there are key resilience risks in these buildings. Many families, newcomers, and seniors live in these towers; 40% of families living in towers are low income.

Project Opportunity
Deep retrofits of towers can result in improved resilience to extreme weather, conditions that benefit the physical and mental health of residents, improved indoor air quality, improved recycling and organics uptake, and decreased green house gas emissions by 50% or more.

Response to COVID-19
The quality and safety of people’s homes is especially crucial during the pandemic as people are recommended to shelter in place to prevent the spread of COVID-19. Also, a wide scale building retrofit program would create a significant number of construction jobs, which otherwise may be more limited during the pandemic.

Impact
More than 500,000 residents would live in quality, affordable homes, and over 1,000 apartment towers would become healthier, safer and more welcoming places to live.

Budget
TBD but approximately $750,000 ($1M CAD)

Timeline
Phase 1 completed in February 2020
Phase 2 pending funding. Phase 2 is slated to take approximately 8 months

Partners
Social Development Finance Administration (City of Toronto)
Toronto Building (City of Toronto)
Energy and Environment Division (City of Toronto)
Municipal Licensing and Standards (City of Toronto)
Toronto Public Health (City of Toronto)
Toronto Fire Services (City of Toronto)
Toronto Atmospheric Fund
Tower Renewal Partnership
Greater Toronto Apartment Association
Government of Canada
Province of Ontario
Tulsa, Oklahoma
United States

Resilience Strategy Goals

Our Resilient Tulsa strategy is about making our city a place of equity and opportunity for all Tulsans. The 41 actions outlined in the strategy include programs, policies, and events that support residents and organizations in their everyday day lives and others include policies or practice changes that address structural issues within systems of government, institutions, or departments that contribute to inequities. Our vision includes four broad approaches:

• Create an inclusive future that honors all Tulsans
• Equip Tulsans to overcome barriers and thrive
• Advance economic opportunity for all Tulsans
• Transform city and regional systems to improve outcomes for all Tulsans

Why Your City

In the four years that Mayor GT Bynum has been in office, the city has advanced innovative and inclusive projects that reflect our city’s resilience. The City of Tulsa has institutionalized an Office of Resilience and Equity, hired the City’s first Housing Policy Director, embedded resilience and equity principles in the City’s comprehensive plan, trained staff on understanding implicit bias, created a financial empowerment center, and launched an initiative to support the economic mobility of immigrants, among other initiatives.

Municipal Financial Empowerment Efforts: Financial Empowerment as a Public Service
Tulsa, Oklahoma

CONTACT – Krystal S. Reyes, Chief Resilience Officer, Office of the Mayor | kreyes@cityoftulsa.org | 918-596-5238

Project Description
The City of Tulsa has developed a strategy to integrate financial empowerment into city services to ensure that its mission of building a foundation for economic prosperity comes to fruition for all Tulsans. By offering financial empowerment services such as professional 1-1 financial counseling and integrating them within existing city-funded and community programs such as municipal courts, utility billing, workforce development, public housing, or domestic violence protection, we will be better able to serve Tulsans and support them through financial shocks or chronic financial stressors.

Tulsa’s Financial Counseling Program offers one-on-one, professional financial counseling as a free public service. Highly trained financial counselors will help clients take control of their debt, improve their credit, create a budget, connect them to safe and affordable banks, and much more.

Project Opportunity
This project is incorporating resilience principles and promoting inclusion by bringing together a broad set of stakeholders to help us design the program and determine where to target services first. We are also planning to integrate and co-locate financial counseling with key services and supports that help residents stabilize their financial health and increase economic mobility. Further, we are building in spare capacity by training 311 call takers in the event we need to increase services due to new financial or economic shocks.

By offering financial counseling as a public service, we are making it clear that the city’s overall health and wellbeing includes financial health of individuals and families.

Response to COVID-19
Because the City of Tulsa had an existing community-informed strategy for financial empowerment, Our Blueprint for Economic Opportunity, we were positioned to obtain a grant to create a financial navigation program for those experiencing acute financial shocks due to the COVID-19 pandemic. The grant allows us to hire financial navigators within city government and among trusted nonprofit organizations to support residents who experience barriers to accessing city, state, or federal resources, need help determining eligibility for services, and need help understanding or filling out applications. The City of Tulsa has now integrated financial navigation services into our financial empowerment center.

Impact
Through our financial navigation and financial counseling programs, we will provide financial guidance and referrals to over nearly 3,000 individuals.

Previous efforts have provided services to 239 clients with 1,790 referrals given. Since its launch in December 2020, 123 clients have received over 347 financial counseling sessions. FEC clients have reduced over $30,000 in debt and increased their savings by over $40,000.

Budget
$500,000-Financial Empowerment Center program budget of which $300,000 has been secured.

Seeking: $200,000 plus – The more funds we can secure, the more financial counseling we will provide and co-locate financial counselors in areas of need.

Timeline
Pending funding: approximately 2 year duration

Partners
Cities for Financial Empowerment (funder)
Goodwill Industries (lead partner)
Tulsa Area United Way
Financial Empowerment Center Advisory Board
Community Conversations about Resilience and Equity
Tulsa, Oklahoma

CONTACT – Krystal S. Reyes, Chief Resilience Officer, Office of the Mayor | kreyes@cityoftulsa.org | 918-596-5238

**Project Description**

Racial equity is Tulsa’s core underlying resilience challenge. By engaging an increasing number of Tulsans in intergroup dialogue to name the role institutional racism has played in creating and maintaining inequities, we are normalizing and organizing to create institutional transformation and become a world class city.

In 2018, the City of Tulsa hosted a series of 27 dinners of 8–10 people to discuss issues of race, unity, and understanding among groups. The purpose of the dinners was to begin to normalize conversations about race and racism among more Tulsans. The dinners were attended by over 200 Tulsans representing diverse identities and perspectives.

In 2020, the City of Tulsa created additional opportunities for Tulsans to engage in various intergroup dialogues and offered two facilitator trainings to create capacity among partners in Tulsa to foster meaningful exchanges and build community capacity among participants. We have trained 32 residents so far. Our goal is to reach 500 Tulsans through the dinners and to host a culminating city-wide summit to bring participants together for additional training, networking, and community connection. In light of the pandemic, we are planning to host these dinners virtually.

**Project Opportunity**

This action reflects several drivers of resilience, including promoting cohesive, engaged communities and empowering diverse stakeholders.

A key element of the 2018 gatherings was that they were hosted by city government. There were two main takeaways:
1. Tulsans wanted to have these conversations and wanted to continue having them.
2. Facilitators of the conversations needed more support and training.

In 2020 we offered a three-night training to facilitators. Facilitators found the training to be beneficial and helpful and felt that they were supporting in hosting the dialogues. Continuing this project is an opportunity for more Tulsans to participate in these conversations to promote intergroup dialogue and understanding, and ultimately increase social cohesion.

**Response to COVID-19**

We see these dinners as contributing to a resilient recovery; when getting together safely in-person is not possible, it is critical to find innovative ways to stay connected and combat social isolation. These meetings will provide an opportunity for Tulsans to connect and share their feelings and experiences, which is needed more than ever during a pandemic. By making use of technology, we can garner many co-benefits of in-person dinners, including increasing and restoring social cohesion, increasing economic activities for restaurants, including diverse groups of Tulsans, and promoting civic engagement.

**Impact**

- Build cross-cultural communication and awareness
- Generate trust among Tulsans of all backgrounds
- Transform community relationships and individual understanding

**Budget**

Seeking: approximately $25,000 to host 500 participants.

**Timeline**

Pending funding: approximate duration 2 years

**Partners**

Oklahoma State University Center for Public Life
Supporting Justice System Involved Tulsans
Tulsa, Oklahoma

**CONTACT** – Krystal S. Reyes, Chief Resilience Officer, Office of the Mayor | kreyes@cityoftulsa.org | 918-596-5238

**Project Description**
A chronic stress that impacts Tulsa and Oklahoma is high rates of incarceration. Discrimination, systemic barriers to accessing gainful employment, licensing, and educational opportunities are stressors that exist at the individual and community level.

Resilient Tulsa’s actions to support justice-involved Tulsans aim to: 1) remove barriers to employment and destigmatize Tulsans involved with the justice system, 2) successfully implement Ban the Box in the City of Tulsa to remove the criminal history question on most job applications, and 3) support more Tulsa employers to remove barriers to hire and retain justice-involved Tulsans.

This project will propel several City initiatives including banning the box on most city jobs, engaging a diverse group of stakeholders including justice-involved Tulsans, hosting resource fairs and community awareness building events in partnership with justice involved Tulsans, and developing social media material. Our goal is to create empathy among the community at large and among potential employers.

**Project Opportunity**
- Remove barriers for jobs for residents with a criminal record
- Increase awareness among Tulsa employers about justice-involved Tulsans as a viable talent pool
- Foster equity and economic prosperity for a community that has the highest unemployment rate among any group
- Build social cohesion and engaged communities by sharing stories and perspectives of 2nd chance employers and Tulsans who were involved with the justice system

**Response to COVID-19**
Breaking down barriers for Tulsans involved with the justice system addresses both racial and health equity. Justice-involved individuals have high rates of chronic diseases, which put them at greater risk of complications from COVID-19. We also know that employment and income are correlated with improved health outcomes and access to health care. Through the COVID-19 pandemic response, we are developing a financial empowerment strategy and will engage Tulsans involved with the justice system to access financial navigation or counseling services. Ultimately, our goal is to support economic stability of Tulsans involved with the justice system.

**Impact**
We plan to reach over 200 individuals with resources, job fairs and community awareness building events (and many more via social media). A key metric would be the number of businesses who agree to open up opportunities for justice involved Tulsans by banning the box, creating partnerships, and being inclusive.

**Budget**
Seeking: grant funding to support these efforts. Estimated budget is $100,000 which includes:
- A consultant that can coordinate justice related work
- Funds for communications activities and products
- Resource fairs and other community events
- Support for business coalition meetings
- Support for community engagement of those directly impacted by the justice system (stipends, incentives, support for transportation to meetings) so that they may inform and guide the work we do

**Timeline**
Pending funding: approximate duration 1 year
Appendix

Prospectus: Resilience Projects Summary Index
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The Resilient Cities Network consists of cities that are committed to building and investing in urban resilience, located in five geographical regions: Africa, Asia Pacific, Europe and Middle East, Latin America and the Caribbean, and North America.

resilientcitiesnetwork.org