Grantee: Virginia

Grant: B-13-DS-51-0001

October 1, 2016 thru December 31, 2016 Performance
Executive Summary:
The Commonwealth of Virginia has embraced the opportunity to apply to the US Housing and Urban Development’s (HUD) National Disaster Resiliency Competition (NDRC). Virginia seeks to: (1) address unmet recovery needs in the most impacted and distressed areas of its Hampton Roads region, which suffered damage from the qualifying disaster, Hurricane Irene, in 2011, and (2) facilitate the longer-term resilience of the region in response to extreme weather events, recurrent flooding, and sea level rise. Innovation is found in Virginia’s holistic regional resiliency approach that extends beyond infrastructure to encompass community and economic development. That is, the development of infrastructure and water management approaches will be informed by, and work in concert with, enhancing the health and wellbeing of citizens and stimulating economic growth. We will be building resilience in our population and leverage these changes as an economic accelerator. This innovative living with water approach, called “thRIVe: Resilience In Virginia,” aligns with HUD’s National Objective to directly benefit low- and moderate-income persons and households by focusing on unmet recovery needs, as well as build regional resilience capacity to manage extreme weather events and adapt to sea level rise.

Governor Terry McAuliffe has selected the Commonwealth’s Department of Housing and Community Development (DHCD) to coordinate development of its NDRC application. DHCD encompasses a wide range of services and frequently collaborates across disciplines to serve vulnerable populations. The agency has partnered with state, regional and local government, academia, business and nonprofit entities to design an approach that will cultivate resilience. Under the leadership of DHCD, the Commonwealth, its qualifying localities and stakeholders have collaborated to create such an approach to resilience. Since Phase II of the NDRC competition, HUD has awarded the Commonwealth of Virginia $120,549,000 to implement Norfolk’s Ohio Creek Watershed project and a Business Incubator / Accelerator (called Costal Community Resilience, Inc. doing business as RISE) to support resiliency efforts and spur economic development for the entire region. In addition to NDRC HUD award, between Norfolk and the Commonwealth of Virginia $69,232,862 in Direct Leverage and $70,923,836 in Supporting Leverage has been committed to the region and the commonwealth’s various resiliency efforts.

Rising sea level and increasing frequency and severity of storms and rain will necessitate the redesign of coastal communities to more effectively manage water. This redesign provides an opportunity for cities, like Norfolk, to use water and water management system (to block, hold, channel, absorb, clean and release water) as catalysts to economic development and community revitalization. The Ohio Creek Watershed project selected for the NDRC funding involves a layered approach to dealing with the impact of flooding and sea level rise in a coastal area. The project will show how green and grey infrastructure, working together can create a community that can live with water in a future of rising tides.
RISE’s mission is to accelerate global market activity by developing a regional “living laboratory” to test innovation, and to facilitate partnerships and collaboration in the resilience and coastal adaptation fields that

Executive Summary:
eado economic growth in the Hampton Roads region.

See Supplemental Document for DHCD’s Fair Housing Policy Virginia’s under the Administration Activity (01-NDR-ADMIN01).

MID-URN Areas:
The Ohio Creek Watershed project located in the city of Norfolk was selected for the NDRC funding. The area contains census tracts 46 and 47 which include two fully built-out neighborhoods of Grandy Village and Chesterfield Heights. The area is bounded by the Eastern Branch of the Elizabeth River to the south, Norfolk State University area to the north, Capital Concrete industrial site to the east and a shipyard along with South Brambleton area to the west. The area contains a total population of
3,270 persons. Of this population, approximately 76% households are LMI. In this area Norfolk will use the increasing exposure to significant flood and rising sea levels that necessitates physical change as an opportunity to remake the landscape to live and thrive with water. Both neighborhoods and surrounding areas experience regular flooding from river water washing over the coast line and heavy precipitation events. This in area, as in many others in the region, river water is pushed up the drainage system in storms, flooding low-lying areas and preventing rainfall from draining out of neighborhoods. Even during normal tide conditions in the river, these very old, undersized and submerged storm water pipes cannot convey run-off to the river in one of the increasingly frequent heavy rainfalls. The result is water ponding in streets, sidewalks and residents’ basements on a monthly basis. In extreme high tides with heavy rains, streets in the area are impassible and houses flood. During Norfolk’s multi-year community engagement process, “residents were clear” that the area’s additional unmet needs for resilience go beyond repair to water damage from Hurricane Irene to include their physical, economic, and social disconnection from the rest of the city. Residents further identified concentrated poverty, environmental degradation, risk to historic housing and lack of access to waterfront parks and other amenities among key challenges. To address the area challenges, the Ohio Creek project will implement distributed, replicable, and community-oriented approach to resiliency. It includes a system of innovative parcel- street- and neighborhood-level solutions such as green and grey infrastructure projects combined with the development of coastal living shoreline to address the area’s current and future flooding issues. In addition, this integrated flood control system will make coastal residents active participants in water management, create green spaces to hold and absorb excess water while filtering it to remove pollutants, and create natural walking trails that reconnect the neighborhoods. The expanded green and open space needed to hold water will provide residents with recreational amenities, creating neighborhoods where people choose to live. Residents are working with City staff to ensure that the grant does more than just improve the infrastructure, but ensures connectivity, economic opportunity and amenities for all the residents of the neighborhood and the city. While the adjacent Newton’s Creek Watershed project was not selected for the NDRC funding, the City and its partners are committed to implementing the plan proposed in the NDRC application over the long term. The adjacent Newton’s Creek Watershed will also continue to be part of the overall NDRC program due to its hydrological interconnectivity with the NDRC-funded census track 47 located in the Ohio Creek project area.

MID-URN Areas:

RISE, the second project selected for the NDRC funding, will serve as a regional economic development center that supports technical and organizational help businesses respond to sea level rise, recurrent flooding, and extreme weather events while ensuring access to and better management of water resources. RISE’s vision is to position Hampton Roads as the global leader in addressing these threats by developing strategies, policies, and products that allow the region to continue to grow.

Key Agencies, Partners, Positions, Personnel:

THE COMMONWEALTH OF VIRGINIA. The Commonwealth of Virginia brings many years of proven experience successfully managing disaster recovery to its National Disaster Resilience Competition (NDRC) grant funding application. Virginia ranges from the Blue Ridge Mountains to the Chesapeake Bay, and this geographical diversity engenders a variety of natural disasters including hurricanes, tornadoes, severe winter storms, and geological hazards like landslides and earthquakes. Within the Hampton Roads region, a main consequence of weather disasters is flooding. Virginia must also be prepared for manmade threats, such as radiological and HazMat problems, and terrorist incidents, given its concentrations of military installations, and major port and rail operations.

The Virginia Department of Emergency Management (VDEM) is responsible for disaster management and building resiliency, including addressing Climate Change and Sea Level Rise. In 2008, Governor Tim Kaine created the Virginia Commission on Climate Change to study climate change, increasing extreme weather events, and SLR. It found a decline or disappearance of key Chesapeake Bay species, increased damage from more frequent and severe storms, and the spread of vector-borne diseases like West Nile virus. In July 2014, the current governor, Terry McAuliffe, convened the Governor’s Climate Change and Resiliency Update Commission, which developed these recommendations: 1) Establish a Climate Change and Resilience Resource Center, 2) Create a Virginia Trust for Energy and Resilience, 3) Establish a renewable energy procurement target for Commonwealth agencies, 4) Adopt a zero emission vehicle program, and 5) Leverage federal funding to make coastal communities more resilient. Decision-making is also informed by the Secure Commonwealth Panel’s Recurrent Flooding Subpanel, the Center for Coastal Resources Management at Virginia Institute of Marine Science (VIMS), the Coastal Policy Clinic at William & Murrell Program, and the Floodplain Management Program.

Additional Actions. In 201

Key Agencies, Partners, Positions, Personnel:

or McAuliffe appointed the Secretary of Public Safety and Homeland Security, Brian Moran, as the Commonwealth’s first Chief Resiliency Officer and the single point of contact for resiliency issues. Secretary Moran’s office subsequently began to revamp emergency planning and disaster relief in eastern Virginia, addressing deficiencies identified by the governor.

Innovation and Entrepreneurship. Virginia also recognizes the critical role of the economy in building resiliency. Virginia universities generated 1.94 startups per million residents in 2013, and Governor McAuliffe has made building a strong entrepreneurship support system a priority. Recently, the Governor announced the winners of the first-ever Virginia Velocity
Business Plan Competition, which provided $850,000 to five bioscience and energy companies planning to expand their business in Virginia. DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (DHCD). Governor McAuliffe has designated the Virginia Department of Housing and Community Development (DHCD) as the lead agency for Virginia’s NDRC application. DHCD has significant experience with major projects and will also serve as grant administrator and project implementation manager upon award. As the primary point of contact for programmatic and contractual obligations, DHCD will be responsible for grant oversight, fiscal and budgetary controls, and inter-community coordination.

DHCD partners with Virginia communities to develop their economic potential, regulates the state’s building and fire codes, provides training and certification for building officials, and invests more than $100M each year into housing and community development projects throughout the state – and most are designed to support low-to-moderate income citizens. The department also runs a number of programs aimed at preventing homelessness and advancing homeownership, and provides a range of multi-purpose community development grants for a variety of community needs.

Past Experience of the Applicant. DHCD is committed to creating safe, affordable, and prosperous communities in which to live, work and do business in Virginia. The agency strategically invests financial and technical resources into affordable housing and development projects to attract private sector development and further investment. By promoting regional economic collaborations in economically distressed areas, DHCD stimulates job creation, builds community capacity, and empowers residents. DHCD also supports small business and entrepreneurs, incorporating community assets into revitalization strategies to restructure economies and create vibrant and competitive communities.

The agency serves many of Virginia’s most vulnerable individuals, including the homeless and special needs populations, and collaborates with partners to offer more creative community-based housing response systems and to provide integrated community housing options for persons with intellectual, developmental, and physical disabilities.

General Administrative Capacity: DHCD has extensive experience managing federal resources, including HUD-funded programs to such as the HOME, the State Community Development Block Grant Program (CDBG), Neighborhood Stabilization, Emergency Solutions, Housing Opportunities for Persons with AIDS, and when appropriated, Disaster Recovery Grant Reporting System.

Key Agencies, Partners, Positions, Personnel:

- Rams, along with other federally funded programs including Weatherization Assistance, Low-Income Home Energy Assistance Program, and the Rural Community Development Initiative. DHCD staff are well-equipped to navigate federal crosscutting and housing-related requirements, including the Environmental Review Process, Section 3, Labor Standards, Lead, the Uniform Allocation Act, and Fair Housing. Staff have significant experience working in both the Integrated Disbursement and Information System, and the Disaster Recovery Grant Reporting System, and are cross-trained to provide back-up coverage as needed. DHCD staff are currently working with the Council of State Community Development Agencies and HUD on the development of an Affirmatively Furthering Fair Housing assessment tool for use by states.

- The HUD Neighborhood Stabilization Program (NSP) is a high profile program developed to help communities stabilize neighborhoods impacted by foreclosure and abandonment that illustrates DHCD’s ability to effectively carry out a highly leveraged, time-sensitive priority program. The Virginia NSP successfully acquired, rehabilitated, and resold over 300 homes, generating close to $50M in program income that is reinvested to sustain program operation. DHCD provided resources and coordinated the efforts of 25 local governments and nonprofits that assist homeowners facing foreclosure.

- Another program, the Virginia Enterprise Zone, a state and local government partnership, incentivizes job creation and private investment in designated Virginia Enterprise Zones. In 2014, it attracted $245.6M in new private investments in distressed communities, a 21% increase over 2013.

- Cross Disciplinary Capacity. DHCD is responsible for managing state CDBG funds, federal and state housing programs, disaster recovery assignments, and other state and federal programs; all require cross-disciplinary work. Agency projects depend on effective coordination of multiple public and private sector functions, teams, and disciplines, including planning, design, engineering, environmental, and socio-economic approaches. DHCD also oversees many of Virginia’s storm disaster management, public works, environmental quality, building and fire code regulation, and economic revitalization projects.

- DHCD’s approach to the innovative Building Collaborative Communities program coordinates the resources of multiple state agencies, private sector partners, educational institutions, community groups, and individuals. These partners focus on strategic economic development outcomes, such as job creation, economic development, and increasing community capacity and leadership in economically distressed areas. Experience with Collaboration and Coordination for Large Projects. DHCD’s approach to pojemnaagtmehetseommoenofobrojctmangernntemompseofrojctskoktorwhoarehdedctblosvmshty. Citizen participation is key to the team’s success, and each management team includes area residents. DHCD is an active member of the team and facilities development of the project work plan and contract.

- An example of a large-scale community revitalization development strategy and systems change is DHCD’s leadership in transforming delivery of homeless services from a strictly shelter-based system to a collaborative community-based system that is responsive to emergency homelesseanunusnest.
Technical Capacity. Norfolk has a long record of successfully implementing a variety of projects similar in scale, scope and complexity to those Project. The city also has extensive experience with successful neighborhood revitalization and affordable housing through its long partnership collaboration with neighboring cities to improve resilience at the regional level. and on the resultant economic impact on the nation. This far reaching research has helped to inform planning for SLR in Norfolk and the Norfolk's Resilience Strategy, which will guide the city in its shift to a successful coastal community of the future.

stakeholders to understand the city's needs, challenges and opportunities. The project culminated in October 2015, with the launch of and a need to build strong, healthy neighborhoods. The CRO and her team conducted extensive research and consultations, engaging challenges. Norfolk's 100RC efforts focused on analyzing the city's three major challenges: SLR and recurrent flooding; a shifting economy, commerce, and innovation, most recently as a national leader in the field of resilience. In 2008, Norfolk city administrators began to analyze its HRPDC, regional universities, and community organizations.

Cross Disciplinary Capacity. Norfolk routinely coordinates implementation of its wetland and shoreline restoration projects, as well as hard infrastructure projects, with federal, regional and local partners such as the US Army Corps of Engineers (USACE) and the Elizabeth River Project. The city also has extensive experience with successful neighborhood revitalization and affordable housing through its long partnership with the Norfolk Redevelopment and Housing Authority (HRRA).

Norfolk has a long record of successfully implementing a variety of projects similar in scale, scope and complexity to those the Commonwealth proposes. The city's Department of Public Works, in close collaboration with Norfolk’s
Resilience Office, will primarily be responsible for NDRC project management. In the past three years, Public Works has managed $267M in infrastructure projects, including construction of the Court House and the flagship Slover Library. Since Hurricane Irene, the city’s storm water department completed 27 storm water-related Capital Improvement Projects (CIP) and city-wide flood vulnerability assessments valued at over $17M. Norfolk invested $3.5M to raise a tidal flood-prone arterial road to the Midtown Tunnel and ensure the Sentara Norfolk Hospital complex, the area's only level-one trauma center, is accessible during flooding. The city further improved resiliency by tripling its wetland areas from 60,846 ft² in 2011, to 217,070 ft² in 2014. Since September 2014, the city has also undertaken several major living shoreline restoration projects valued at over $9.3M, with pathway elevations that are a recreational amenity. Capacity for Community Engagement and Inclusiveness Although a new organization, RISE has ensured input from residents, especially low income and other vulnerable residents, through extensive outreach via full-time Neighborhood Specialists who are assigned to city neighborhoods. Recent examples of extensive stakeholder engagement include a 100RC resilience assessment, nw bikmasterplan,oning cde revision, and th

Key Agencies, Partners, Positions, Personnel:

- **Evans McMillion**, Board Member, attorney.
- **Anne Conner**, Board Member, President at Towne Bank.
- **Paul Robinson**, Executive Director of RISE, has over 25 years in engineering and product commercialization.

Management Team and Key Staff. Management positions and staff responsible for day-to-day operations, implementation, and monitoring CDBG-NDR projects include:

- **City of Norfolk Staff:**
  - Christine Morris, Chief Resilience Officer, will be responsible for the overall program management. She has over 25 years’ experience in community development and revitalization. The CRO’s Office will be an integral part of the project management team.
  - Katerina Oskarson, Ph.D., Deputy Resilience Officer, will assist CRO with the overall program management.
  - David Ricks, P.E., Director of Public Works, will oversee project management. He has over 34 years in both program and construction management, infrastructure planning, and financial administration.
  - Scott Smith, PE, LS, Coastal Resilience Manager, will be responsible for project management. He has over 28 years of extensive experience in storm water management, infrastructure design, and construction.
  - Karen Colombo, Manager of Budget & Accounting, Public Works Department, will manage financial aspects of the grant administration.

- **Shenette Felton**, Assistant Director, Finance Department, will manage financial aspects of the grant administration.

Key Consultant Staff:

- **Amy Courville**, Project Manager, CB&I, and her team will assist the City with the overall project management, including communications and project team coordination, administration of project management software, schedule development, timesheet and budget tracking.
- **Phillip Kash**, Project Manager, HR&A Advisors, and its main sub-contractor GCR will assist the City with CDBG-DR/NDR regulatory compliance, CDBG administration, development of organization framework, financing strategies, and project design.
- **Kyle Graham**, Project Manager, Arcadis and its main sub-contractor Waggonner & Ball represented by David Waggoner, Design Director, will be responsible for design and engineering services.

RISE Partner’s Pat Experience. RISE is a no-profit organization establishing a series of strategic initiatives in the resilience field. RISE’s vision is to position Hampton Roads as the global leader in addressing the impacts of sea level rise, recurrent flooding, and extreme weather events by developing strategies, policies, and products that allow the region to continue to grow. RISE was incorporated in June 2016, and filed for 501(c)3 Status in January 2017.

RISE’s mission is to accelerate global market activity by developing a regional “living laboratory” to test innovation, and to facilitate partnerships and collaboration in the resilience and coastal adaptation fields that lead to economic growth in the Hampton Roads region. The region is galvanizing to address these impacts. Significant work by regional academic, public, and private sector actors to find solutions to evolving conditions is underway. There already exists examples of extensive stakeholder engagement include a 100RC resilience assessment, nw bikmasterplan,oning cde revision, and th

Key Agencies, Partners, Positions, Personnel:

is making significant investments to mitigate the impacts of sea level rise. Investors in these efforts include residents, businesses, municipalities, state and federal agencies, and non-profit organizations. RISE will work regionally with these entities to foster collaboration and partnerships in the fields of resilience and coastal adaptation.

Cross Disciplinary Capacity RISE’s mission is cross-disciplinary, combining abilities in technical, financial, planning, and community awareness. The Executive Director has demonstrated abilities in those areas and will add staff to augment, grow, and diversify these capabilities.

Technical Capacity RISE’s Executive Director has a track record of planning and executing complex technical programs. Specialized knowledge in water management and resilience areas may be required and will be acquired through consultant or other arrangements.

Capacity for Community Engagement and Inclusiveness Although a new organization, RISE has begun the process of community outreach. The Executive Director has briefed community groups, business groups, and the City Managers of all the regions in Hampton Roads. The RISE Board draws from local business leaders, philanthropists, and thought leaders.

Management Team and Key Staff/Board Members:

- **Paul Robinson**, Executive Director of RISE, has over 25 years in engineering and product commercialization.
- **Paul McMillion**, Board Member, is a local business leader and investor.
- **Anne Conner**, Board Member, President at Towne Bank.
- **Evans McMillion**, Board Member, attorney.
Drew Ungvarsky, Board Member, CEO & Executive Creative Director at GROW.

Overall

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Progress Toward Required Numeric Targets

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Overall Progress Narrative:
No Activities to Report. Grant Agreement was not executed until 01/18/2017.

Project Summary

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