



STRATEGIC PLAN July 2017- June 2021

**Accelerating resiliency planning with communities
across Virginia.**

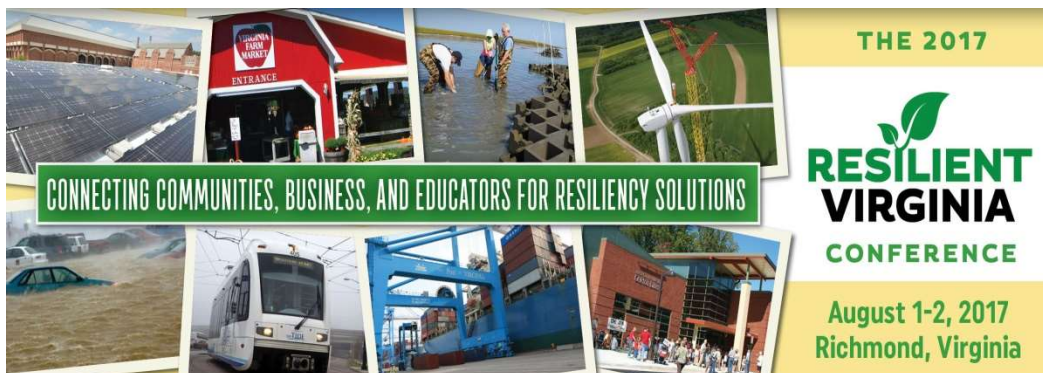




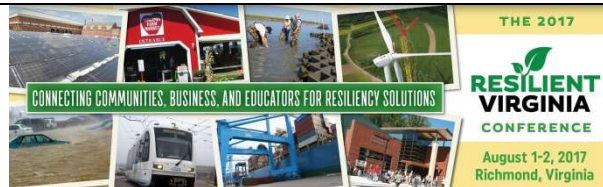
TABLE OF CONTENTS

● Executive Summary.....	2
● Organizational Description.....	4
● Mission, Vision and Values.....	8
● Goals and Objectives.....	9
● Action Plan Summary.....	12
● Organizational and Financial Support.....	13
● Communication of Plan.....	15
● Evaluation of Plan.....	15
● Appendix	
A - Strategic Analysis of Resiliency Activities in Virginia	



RESILIENT VIRGINIA

Executive Summary



Governor Terry McAuliffe's comments (excerpts) from the 2017 Resilient Virginia Conference:

"It is critical that we collaborate at every single level in order to continually recognize and respond to the needs of our current environment and this conference is a great opportunity to do just that...We cannot rely on others to respond for us and we absolutely cannot stand by and do nothing.... It is our responsibility and our duty to create a more resilient Commonwealth." *(The complete statement can be viewed at www.resilientvirginia.org.)*

Who We Are

Leaders from local and state governments, the private sector, academia, and Virginia Sustainable Building Network came together in 2014 to form a new organization with the mission of accelerating resiliency planning in Virginia communities

Resilience Defined

Resilience can be defined as the capacity to maintain or regain functionality and vitality in the face of natural or man-made disturbances. For the long term, community resiliency provides the ability to adapt and thrive despite changing climate, environmental, social, and economic conditions.

What We Offer

Resilient Virginia's staff and Board of Directors, working in collaboration with a wide range of public and private partners at the state level, bring the capacity to assemble diverse audiences to engage in learning about new concepts, enhance interaction between different community sectors, and promote understanding of how to utilize a range of tools for resiliency planning. At the local level, Resilient Virginia has the capacity to assess and address the particular needs of a community, whether they are urban, coastal or rural, and assist them in developing their course of action towards resiliency.

Mission, Vision, and Goals

Mission Statement: Our mission is to accelerate resiliency planning in communities across the Commonwealth.

Vision Statement: Virginia communities, including local governments, institutions, businesses, and households, will have gained the ability to better adapt to climate, environmental, social, and economic challenges while remaining healthy, vibrant, and safe places to live, work, and raise future generations.

Our goals are to **inform** diverse community representatives around the Commonwealth about natural, climate-related, and man-made challenges; to **educate** key groups about models for community resiliency planning; and to **activate** these communities to engage in strategic plan development.

Accomplishments (2014-2017).

Our accomplishments in the first three years include:

- **Created a website and newsletter** with information on and links to key resiliency topics.
- Organized the **2016 and 2017 Resilient Virginia Conferences**.
- Carried out **Resiliency Presentations** on a range of topics, including microgrids, community resiliency plans, resiliency in buildings, and infrastructure adaptation, in collaboration with diverse partners.
- Developed a **Comprehensive Resiliency Checklist** at the invitation of the VML/VACO GoGreen Virginia Program that delineates actions local governments can take toward resiliency.
- Worked with the Science Museum of Virginia to develop their **PrepareAthon events, resiliency workshops, and the Family Resiliency Checklist**.

Moving Forward in 2018 and Beyond

Resilient Virginia has moved into the next phase of program activities in 2018 and beyond, with an emphasis on resiliency and rural/urban interdependence, and with program goals that include:

- A Rural Resiliency Forum,
- Resiliency workshops for local governments,
- The 3rd Resilient Virginia Conference,
- Presentations and webinars with partners including the Science Museum of Virginia, Virginia Renewable Energy Alliance, US Green Building Council, and Leaders in Energy,
- Expansion of the website resources and newsletter production,
- Working with VML and VACO to connect local governments with the Resiliency Checklist, as part of the GoGreen Local Government Challenge.

Resilient Virginia Board of Directors (2018-2019)

Chairman - Andrew Sorrell, Deputy Director, Virginia Tobacco Commission

Vice-Chair - Ellen Graap Loth, Principal and Senior Project Manager, Cardno

Secretary – Jane Frantz, AICP, PMP, CFM, Associate Vice President, Dewberry

Treasurer - Vestal Tutterow, PE, Program Manager, Lawrence Berkeley National Laboratory

Jerry Eastridge, LLA, BPI, Principal, GSPH LLC

Rebecca Joyce, Community Program Manager, Central Shenandoah Planning District Commission

Steve Sunderman, RA, LEED AP BD+C, BPI, President, Terrazia PC

Erin Sutton, MS, CEM, PMP, Director, Office of Emergency Planning, City of Virginia Beach

Past Chair - Nell Boyle, LEED AP, Sustainability and Outreach Coordinator, City of Roanoke

Managing Director - Annette Osso, LEED AP (osso@resilientvirginia.org)

##



Organizational Description

I. Background

Resilient Virginia was formed to build on the successes of a prior organization, Virginia Sustainable Building Network (VSBN), which was carrying out educational activities in Virginia, centered around sustainability, since 1995. In 2014 the staff and Board of Directors of VSBN decided to leverage the extensive experience and state-wide networks of that organization to reformulate a new entity that could facilitate a wider mission of enhancing resiliency planning. Resilient Virginia's Board of Directors and staff together bring to the organization a 20 plus-year history and wide range of experience, from our prior organization.

As VSBN, which had the mission of promoting Green Building and Sustainable Development, we initiated a wide variety of educational programs, including:

- technical training for architects, builders, engineers, energy auditors, and facility managers;
- informational and networking forums for local governments, community leaders, and K-12 and higher education managers; and
- insightful seminars on cutting edge ideas, including "one planet living", "sustainable real estate development," "clean-energy-powered communities", "policies for sustainable growth", and "net-zero buildings", which took place around the state as well as in the mid-Atlantic region.

We have worked with public, private, and academic partners to organize statewide sustainability conferences since 1999. These have included:

- the Virginia Sustainable Future Conference Series (1999, 2001, 2003);
- the 2008 Commonwealth of Virginia Energy and Sustainability Conference: Meeting the Climate Change Challenge; and
- the 2013 Virginia Commonwealth University Energy and Sustainability Conference, which focused on business sustainability.

We have also developed and carried out state-level programs, working as contractors with the Energy Division of the Virginia Department of Mines,

Minerals and Energy, as well as with funding support from other federal agencies and foundations. VSBN program accomplishments included:

- Initiation of a voluntary Green Building program, Earthcraft Virginia, that was adopted by the Home Builders Association of Virginia;
- Creation of a mid-Atlantic “Sustainable Development” workshop series for developers and builders;
- Success in moving local governments, school districts, universities, and private companies to adopt sustainability policies and practices in their building design, construction and operations;
- Incentivizing of community energy efficiency and sustainability initiatives through a small grant program for public and non-profit entities; and
- Development and implementation of a state-wide network of trained and Building Performance Institute (BPI)-certified Energy Auditors and Contractors.

II. The Need for Resilient Virginia

In the United States, and globally, there are increasing numbers of risks to the normal functioning of communities. These challenges are more frequently taking the shape of climate-driven and natural disasters, such as tornadoes, floods, hurricanes, wildfires, heat waves, and earthquakes. Human-induced stressors also abound, including acts of terrorism, economic crises, and social unrest.

The U. S. government, as well as national organizations and state governments, have recognized that dealing primarily with post-disaster or post-crisis provision of emergency services and rebuilding efforts is costly and inadequate. In contrast, communities that proactively take steps to address basic resiliency preparedness will be most successful in strengthening community relationships that bolster the ability to function in the event of disruptive events and long-term environmental or economic conditions.

While the term resilience has a number of interpretations, resilience is commonly defined as the capacity to maintain or regain functionality and vitality in the face of natural or man-made disturbances. For the long term, community resiliency provides the ability to adapt and thrive despite changing environmental, social, and economic conditions.

Resilient Virginia recognizes that Virginia, as part of the Southeastern United States, faces environmental and climate challenges, as reported in the National Climate Assessment (<https://nca2014.globalchange.gov/>) that include:

- **Sea level rise**, which poses widespread and continuing threats to both natural and built environments, as well as the regional economy.

- **Rising temperatures** and the associated increase in frequency, intensity, and duration of extreme heat events, which will affect public health, increase mortality, and will affect natural and built environments, energy, agriculture, and forestry.
- **Decreased water availability**, exacerbated by population growth and land-use change, which will continue to increase competition for water and impact the region's economy and unique ecosystems.
- An increase in **extreme weather events**, such as the derecho which struck in 2012, hurricanes and severe thunderstorms, and even tornados, which result in flooding, property damage, and power outages.

In addition our communities deal with a variety of man-made stresses.

- As part of the international community, we face the possibility of **man-made threats**, such as acts of terrorism, as well as **health emergencies** and pandemics.
- Globalization of businesses, national recessions, and shifting state economics result in **societal stresses** that can manifest themselves in loss of employment opportunities, increased neighborhood violence, homelessness, a decline in medical services, and local food insecurity.

The program concept for Resilient Virginia is based on a variety of federal and private initiatives including:

- the Homeland Security Advisory Council's Community Resilience Task Force Recommendations (<https://www.dhs.gov/xlibrary/assets/hsac-community-resilience-task-force-recommendations-072011.pdf>)
- National Academy of Sciences Resilient America Roundtable <http://sites.nationalacademies.org/PGA/resilientamerica/>
- Resiliency initiatives of the National Association of Counties, National League of Cities, Urban Land Institute, and other national organizations,
- Private initiatives such as the Resilient Design Institute (www.resilientdesign.org) that address resiliency in buildings and communities,
- The urban resiliency initiatives supported by the 100 Resilient Cities program (www.100resilientcities.org), and
- Community and state initiatives being undertaken throughout the United States.

There is basic agreement among these sources about the need for:

1. building a national campaign to strengthen and sustain national resilience;

2. working with key stakeholder groups to develop and share models for resilience;
3. building the knowledge and talent base for resilience;
4. building public awareness and motivating individual and community engagement;
5. facilitating community-based resilience assessment by developing a community-based, all-hazards methodology and toolkit, and
6. enabling community-based resilient infrastructure initiatives.

III. Resilient Virginia's Approach

Resilient Virginia's capacity to bring together diverse audiences to engage in new concepts, enhance interaction, and promote learning was proven over the past 20 years to have increased the sustainability of Virginia communities, businesses, and governments. We are continuing this legacy of effectively working across institutional silos as Resilient Virginia develops effective education approaches and tools for resiliency planning.

Resilient Virginia works to integrate the best national and local resiliency resources and tools to formulate a Virginia-based toolkit that can be used by communities to be better prepared for climate or economic uncertainties, while adapting to changing long-term conditions.

Resilient Virginia will utilize its expert staff and partner resources to reach out to normally disaggregated groups – such as the chambers of commerce, faith groups, local government and schools, higher education, civic and environmental groups, the healthcare sector, disadvantaged and minority populations, and major corporations - within a community, to engage them in mutually beneficial educational initiatives focused on resiliency strategy development.

By educating diverse elements of communities and building collaborative relationships, community structure will be more inclusive, cohesive, and resilient. These resilient communities, whether in coastal, urban, or rural areas, can more successfully continue to function as centers of production and sources of essential services and resources despite challenges they face..

IV. Resilient Virginia's Accomplishments (Fiscal Years 2014 - 2017)

- **Launched a Community Resiliency Initiative in Virginia** to bring resiliency planning tools and resources to communities across the state.
- **Created a website and publish a bi-monthly newsletter** with information on and links to key resiliency topics, including energy, infrastructure and buildings, food and water security, emergency preparedness, economic risk management, social equity, and public policy.

- Organized a **Community Resiliency Initiative Launch** event in February, 2015, which brought together key stakeholders and launched initial discussions on the diverse concerns of communities in coastal, rural, and urban areas.
- Organized the **2016 and 2017 Resilient Virginia Conferences** to:
 - inform community members, business leaders, and state and local officials about resiliency concepts,
 - provide outstanding examples of communities moving toward resiliency in Virginia, the nation, and internationally, and
 - carry out participatory sessions to teach resilient community goals and strategies.
- Carried out **Resiliency Presentations** on a range of topics, including microgrids, community resiliency plans, resiliency in buildings, and infrastructure adaptation, in collaboration with diverse partners.
- Engaged with local organizations, local government, and businesses, to form a **Resilient Arlington** coalition and carry out the “Be Ready” interactive resiliency learning event.
- Developed a **Comprehensive Resiliency Checklist** at the invitation of the VML/VACO GoGreen Virginia Program, which delineates actions local governments can take toward resiliency, and which is integrated into the Go Green Government Challenge.
- Worked under contract with the Science Museum of Virginia to develop their **PrepareAthon events, Resiliency-themed workshops, and the Family Resiliency Checklist.**

Mission, Vision, and Values

Mission Statement:

Our mission is to accelerate resiliency planning across the Commonwealth.

Vision Statement:

Virginia communities, including local governments, institutions, businesses, and households, will have gained the ability to better adapt to climate, environmental, social, and economic challenges while remaining healthy, vibrant, and safe places to live, work, and raise future generations.

Value Statements:

- *Resilient Virginia supports the concept that healthy, economically sound communities are the building blocks for a strong, resilient statewide economy.*
- *Resilient Virginia supports the idea that an informed and aware public is the best foundation through which to build societal resilience.*
- *Resilient Virginia recognizes that environmental resources provide the natural capital that is the critical foundation for our communities' successful functioning.*
- *Resilient Virginia sees innovation, diversity, and system redundancy as means to greater adaptive capability and risk minimization when facing natural and man-made challenges, whether extreme events or ongoing stressors.*

Goals and Objectives

Organizational Goals

Goal # 1 - Strengthen Board capacity as a “working board” by increasing issue and regional representation.

Objective – Increase Board size to nine+ members making sure strategic sectors and geographic diversity are taken into account.

Action Item (Years 1-2): Existing Board and Staff will recruit 3 to 4 new board members for a total of no more than 15 by the end of Fiscal Year 2019.

Goal # 2 - Strengthen organizational capacity by establishing an Advisory Board whose members represent priority subject matter and geographic areas.

Objective – Recruit an Advisory Committee of 12 members

Action Item (Years 1-2): Existing Board and Staff will recruit Advisory Board members by the first quarter of Fiscal Year (FY) 2019.

Goal #3 – Recruit individual, organizational, and business memberships to improve the financial foundation of the organization

Objective – Provide increased financial support for core educational activities of the organization by raising at least \$2,500 annually through memberships.

Action Item (Years 1-2): Enhance outreach through social media and other marketing to achieve a goal of \$2,500 in memberships in FY 2019, with a 10% increase in subsequent years..

Goal #4 – Recruit annual corporate sponsorships to improve the financial foundation of the organization.

Objective – Develop annual sponsorships to reach \$10,000 annually.

Action Item (Years 1-2): Enhance outreach through Board and Staff communications with potential sponsors to reach the goal in year two (FY 2019).

Goal #5 – Continue to research and develop grant, contract, and program sponsor opportunities, that will fund program work and staff.

Objective – Funding must be identified for long term organizational viability, both to provide paid staff and to fund program work

Action Item (Years 1-2): Board and staff, with related partners, will pursue options for funding for short term priorities and longer-term viability in the first two years of this plan.

Action Item (Year 3): The organization will hire a paid part-time Executive Director.

Resiliency-Related Program Goals

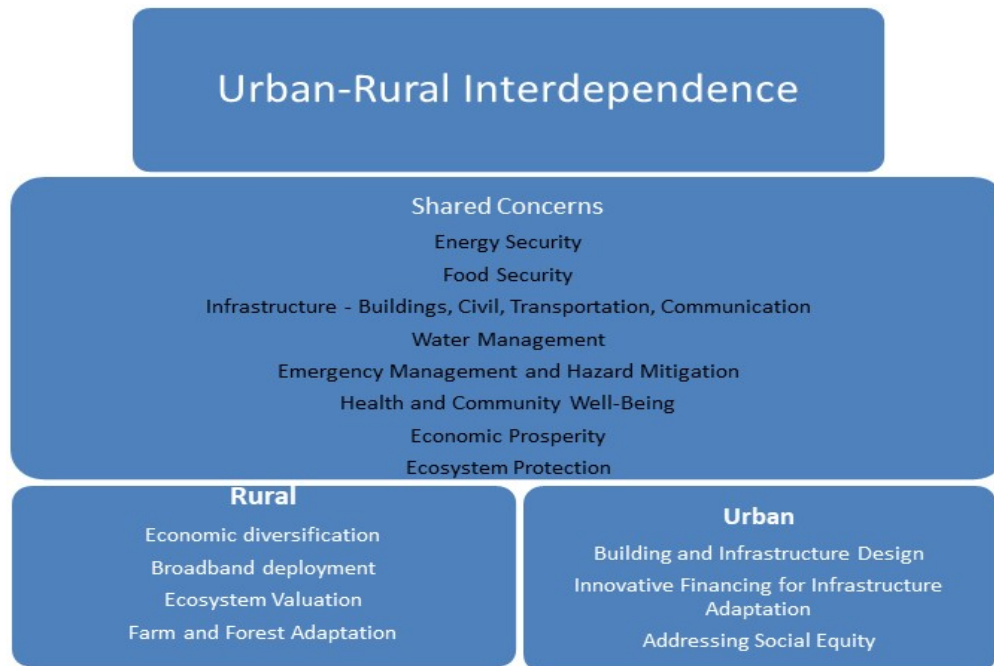
Our overall program goals are:

- to **inform** diverse community representatives around the Commonwealth about natural, climate-related, and man-made challenges;
- to **educate** key groups about models for community resiliency planning; and
- to **activate** these communities to implement resiliency action plans.

Areas of focus:

Based on our February 2018 strategic development meeting, Resilient Virginia has developed a focus that emphasizes **Rural-Urban Interdependence**. Resilient Virginia recognizes that there is a robust set of programs taking place in the Hampton Roads area, and plans to both communicate about their successes and be involved as opportunities arise. We will focus our program development in two other areas: Urban Areas in Northern Virginia and other urban communities, and in the Rural/Agricultural Areas of the state. Additional results from the outcomes of the Strategic Development Meeting are in Appendix A: Strategic Analysis of Resiliency Activities in Virginia.

The graphic below provides a summary of shared and regional resiliency-related issues for urban and rural areas.



Program Goals and Objectives

Goal # 1 – Inform communities on priority topics related to resiliency.

Objective – Bring information on green, blue and grey infrastructure; building design; water management; energy options; economic impact; emergency management; and health aspects to a wide audience of community, business, and government.

Action Item (Years 1-2): Staff, interns, and volunteers continue to add resources, articles, and references to the website and to produce the bi-monthly newsletter.

Goal # 2 - Educate local governments, community organizations, and businesses.

Objective - Bring together information about the economic, social, emergency management, and design aspects of resiliency, and the need for integration of these factors in resiliency planning.

Action Item #1 (Years 1-2) – Board members, staff and partners will develop the concept for and carry out a Rural Resiliency Forum in the Fall 2018 to bring key rural stakeholders together to identify priority resiliency areas. Funding support

for this event and an on-going “rural resiliency solutions conversation” will be sought from public and private sources.

Action Item #2 (Years 1-2) - Plan and carry out the 3rd Resilient Virginia Conference in 2019, with partners, funders, and a Planning Committee. The Conference will bring together participants from government, academic, community, and business sectors with the purpose of highlighting resiliency resources and planning tools, as well as successful case studies.

Action Item #3 (Years 1-2) - Continue to develop opportunities for joint presentations with partner organizations, on priority resiliency topics. Staff, with partner organizations, will carry out at least one workshop series per year.

Goal #3 – Activate communities to develop and implement resiliency action plans.

Objective – Conduct resiliency planning workshops and bring technical assistance to rural and urban communities.

Action Item #1 (Years 1-2) - The “Getting Started with Resiliency Planning” workshop, previewed at the 2017 Conference, will be developed into a full day workshop (with potential expansion into a multi-day training) and carried out in at least two individual jurisdictions or planning districts. Staff and consultants will work on the delivery of this workshop, contingent on funding support.

Action Item #2 (Years 1-2) - Provide direct technical assistance to a jurisdiction, potentially with a planning district commission or other partner. This will be executed by staff and consulting team, contingent on funding support.

Action Plan Summary

Moving Forward in 2018 and Beyond

Resilient Virginia is poised to move into the next phase of program activities that serve to inform, educate, and activate. Working forward from the accomplishments of the first three years, and working from the newly established Rural/Urban Interdependence perspective, the organization is developing activities that include:

- A Rural Resiliency Forum in the Fall 2018,
- Resiliency Workshops for Local Governments, contingent on funding support for development and implementation,
- The Third Resilient Virginia Conference, to be held in Spring 2019
- Presentations and webinars with partners including the Science Museum of Virginia, Virginia Renewable Energy Alliance, US Green Building Council, and Leaders in Energy,
- Expansion of the website resources and newsletter production,

- Working with VML and VACO to connect local governments with the Resiliency Checklist, as part of the GoGreen Local Government Challenge,
- Working directly with local or regional governments to provide technical assistance services for resiliency plan development, contingent on funding support.

Organizational and Financial Support

Board of Directors

The Board of Directors members during the 2018-2019 Fiscal Year are:

- CHAIRPERSON – Andrew Sorrell, Deputy Director, Virginia Tobacco Commission
- PAST CHAIRPERSON - Nell Boyle, LEED AP, Sustainability and Outreach Coordinator, City of Roanoke
- VICE-CHAIRPERSON - Ellen Graap Loth, Principal, Cardno, Inc.
- SECRETARY - Jane Frantz, AICP, PMP, CFM, Associate Vice President, Dewberry
- TREASURER - Vestal Tutterow, PE, CEM, Program Manager, Lawrence Berkeley National Laboratory
- Jerry Eastridge, LLA, BPI, Principal, GSPH LLC
- Rebecca Joyce, Community Program Manager, Central Shenandoah Planning District Commission
- Steven Sunderman, RA, LEED AP BD+C, BPI, President, Terrazia PC
- Erin Sutton, MS, CEM, PMP, Director, Office of Emergency Management City of Virginia Beach

Together these Board members bring extensive expertise in environmental, sustainability, and resiliency planning and implementation; state and local government resiliency; building and infrastructure adaptation, and rural and agricultural programs.

Staffing

For the initial three-to-five years of operations, Resilient Virginia is being managed by a volunteer Managing Director, Annette Osso, LEED AP, who served as the President of VSBN for 18 years, brings 30+ years of experience in environmental, resiliency, sustainability, green building, and energy program development and management to Resilient Virginia.

Partners

Resilient Virginia is pleased to have initially engaged the support and participation of the Governor's office, particularly the Office of the Secretary of Public Safety and Homeland Security, which was a major supporter of the 2017 Resilient Virginia Conference. We are also working with the Secretariats in the Natural Resources, Agriculture and Forestry, and Energy areas.

We also engage with key groups around the state. Our partners include:

- Local public sector representatives, including planning district commissions, city and county governments, emergency management departments, and the state-level associations, the Virginia Municipal League (VML) and the Virginia Association of Counties (VACO).
- State agencies with related programs, which include environment and energy, emergency management, agriculture, health, transportation, and economic and community development.
- Private sector representatives, including the major corporations involved with the mid-Atlantic organization, Alliance for the Chesapeake Bay; trade associations including those representing civil engineers, water and waste water companies, the Green Building industry; and the energy industry.
- NGOs that work in related areas including agriculture groups, clean energy and environmental organizations, health and social welfare groups, grassroots sustainability and affordable housing organizations.
- Academic institutions, including the major state universities, the community college system, and private universities, as well as the capacity to reach K-12 school districts.

Financial Support

Resilient Virginia has received private sector support from several Annual Sponsors over the first three years

- Marion Enterprises Inc.
- Facility Engineering Associates, PE
- Dewberry
- Hazen and Sawyer
- Leaders in Energy
- 2rw Consultants
- Balfour Beatty Construction
- Get Ready!
- Floyd EcoVillage

In addition, a wide range of public and private sponsors have supported the 2016 and 2017 Conferences. Memberships support is also being expanded and serves to strengthen continued growth in educational resources. We are also working to secure new supporters in the private sectors that represent the broader resiliency areas. These include health care organizations, engineering and consulting businesses, insurance and risk management companies, and disaster recovery businesses.

Resilient Virginia events are funded by sponsors and attendee registration. Resilient Virginia will seek federal funds, private business and foundation funding

for new aspects of the program plan, such as educational workshops and direct technical consulting services.

Communication of Strategic Plan

The Strategic Plan will be disseminated in several ways:

- Every board member and Advisory Committee member will receive a copy of the plan;
- A condensed version of the Strategic Plan will be available through the website;
- The Executive Summary will be available in marketing materials, such as newsletters, brochures, ads, etc.;
- Copies of the plan will be made available for major stakeholders, for example, funders/investors, trade associations, and potential collaborators.

Evaluation of the Strategic Plan

Evaluation of the progress being made toward goals and action items outlined in the Strategic Plan will take place on a semi-annual basis by the Board of Directors.

Monitoring and evaluation will consider the following questions:

1. Are goals and objectives being achieved or not? If they are, then acknowledge, reward and communicate the progress. If not, then consider the following items to align goals with progress.
2. Will the goals be achieved according to the timelines specified in the plan? If not, then why?
3. Should the deadlines for completion be changed? If that is a consideration, deadlines should be changed only after fully understanding why they have not been met.
4. Do personnel have adequate resources to achieve the goals?
5. Are the goals and objectives still realistic?
6. Should priorities be changed to put more focus on achieving the goals?
7. Should the goals be changed? If that is a consideration, goals should be changed only after fully understanding why they have not been met.
8. What can be learned from the monitoring and evaluation in order to improve future planning activities and also to improve future monitoring and evaluation efforts?



Appendix A - Strategic Analysis of Resiliency Activities in Virginia



Summary of Outcomes - Virginia Resilient Future Meeting Organized by Resilient Virginia February 2, 2018

On behalf of the Resilient Virginia Board of Directors and myself, we would like to thank you for your participation in the February 2nd Virginia Resilient Future Meeting, held at the VDACS office and hosted by Andy Sorrell, Office of Farmland Preservation.

A range of overall priorities from the meeting included the following:

- 1) the need for a state-level resiliency framework under which to organize state, regional, and local policy and programs;
- 2) the need for education and coalition building to foster the positive public will to support action on resiliency policies and programs;
- 3) investigating innovative financing mechanisms for infrastructure adaptation strategies;
- 4) establishing commonly accepted models for risk assessment and consistent standards for resiliency;
- 5) Creating a clear business case for resiliency actions;
- 6) building an understanding of rural and urban interdependence;
- 7) fostering an understanding of the role of clean energy and resilient building design in providing solutions;
- 8) the role of healthy communities and attention to vulnerable populations as components of resilient communities.

A major message from the meeting was that Resilient Virginia could play a significant role as a third party facilitator to assist communities in both urban and rural areas with understanding the need for resiliency planning and to help them access tools for adopting action plans.

Meeting Agenda

An initial overview of Resilient Virginia's accomplishments over its first three years, and presentations by experts on eight resiliency topics were carried out in the morning session. The eight topics we focused on are:

- Energy Security
- Infrastructure
- Water Management
- Emergency Management
- Resilient Buildings
- Rural Concerns
- Economic Development
- Healthy Communities

The powerpoint presentation with this information can be found on the website: resilientvirginia.org.

Breakout Groups that focused on Coastal, Rural, and Urban Regions met in the late morning and their reports were delivered after lunch. Notes from these groups follow.

Rural Topics

Priority recommendations to address rural resiliency concerns included:

- 1) a need for regional cooperation between rural communities in developing resiliency plans,
- 2) development of a better understanding by urban community members of the value the rural areas bring in terms of food security, natural resource protection, and recreational and health benefits,
- 3) educate rural community members about their role in regional sustainability and resiliency, and
- 4) economic development, including more broadband connectivity, to help with job creation, healthcare, and agriculture/forestry enterprises.

Additional topics discussed in this group included:

- the need to focus on vulnerable, underserved and low-income rural communities,
- develop recommendations for college curriculums – what jobs associated with resiliency can young people learn – to bring new opportunities to rural areas,
- work with utilities to harden the grid, set up microgrids, and allow for/incentivize storage,
- involve banks and insurance companies in understanding the value of resiliency measures,
- educate community members on what to do to prepare for, to prevent, and how to take action in the midst of a disaster, including how to manage farm animals,
- educate absentee landowners about resiliency issues and responsibilities,
- highlight ecosystem value to promote farm and forest retention, biodiversity and soil health.

Urban Topics

Priority recommendations included:

- 1) focus on understanding community needs, risks, and priorities,
- 2) educate across business, government, and community sectors,
- 3) provide legislators with a vision, steps to be taken, and model language for policy adoption,
- 4) bring together partners to address resiliency aspects,
- 5) recognize the role of buildings and energy sector in addressing climate mitigation/adaptation,

Additional topics discussed in this group included:

- building codes, land use planning, zoning should be addressed going forward to mitigate flood and extreme weather impacts,
- working with private sector is important, with lenders, appraisers, and insurance companies highlighted, to help make the business case for resiliency,
- affordable housing and social justice concerns should be addressed,
- work with existing initiatives, such as the VML/VACO GoGreen program.

Coastal Topics

Priority recommendations included:

- 1) innovative financing mechanisms needed for infrastructure adaptation,
- 2) coalition building to support policy changes that move toward more extensive resiliency initiatives,
- 3) agreement is needed on risk assessments, mitigation/resiliency standards, and the business case for resiliency,
- 4) public education across all sectors in order to create public demand to support programs and policy initiatives.

Additional topics discussed in this group included:

- lack of common baseline and risk assessments for future land use planning,
- the need for stronger building and development standards,
- addressing ways to help vulnerable and rural populations with mitigation efforts,
- need to build more connections with private businesses, especially lenders, real estate companies, builders, and tourist industry, in order to support program and policy changes.