

# Regional Resilience Dashboard Project Stakeholder Outreach Seminars

Prepared for  
The Office of the Secretary of Public Safety and Homeland Security



## MISSION

The Office of the Secretary of Public Safety and Homeland Security has tasked the Center for Innovative Technology (CIT) with engaging Virginia experts and stakeholders in developing a dashboard to help regions better define and measure resilience. The goal of this project, funded by a grant from the U.S. Department of Homeland Security, is to develop a model process for communities to assess their overall resilience by considering their policies, threats, and other factors.

## WHAT IS RESILIENCE?

Participants of the Virginia Regional Resilience Dashboard project have defined resilience as the ability of a community to withstand, rapidly recover, and strengthen following the effects of an acute or chronic event or incident.

## WHY IS IT IMPORTANT?

A variety of internal and external forces are constantly being applied to a community; these forces, whether acute or chronic, may impact the community's ability to serve its citizens. Through proper resilience planning, a community should be able to prepare for, react to, endure through, recover from, and even grow following an event.

## PROJECT STRATEGY

CIT initially conducted market research to capture resilience best practices and identify key stakeholders at the local, state, national, and international levels. Leveraging this knowledge, the Office of the Secretary of Public Safety and Homeland Security and CIT engaged stakeholders to participate in the Resilience Dashboard Project.

A series of seminars was developed to gather stakeholders in order to define and investigate those issues influencing resilience at the local and regional levels. The first session, held in December 2015, focused on identifying state governance structures, programs, and overarching policies contributing to resilience.

In early 2016, three regional seminars were designed to reach a broad group of stakeholders and to expand the resilience dialogue, to identify and analyze region-specific resilience requirements, and to understand the key indicators needed to develop a resilience dashboard.

## SEMINAR 1: 12/08/2015 (Glen Allen, VA)

The first seminar was hosted centrally in the state and engaged over 75 regional, state, and federal resilience stakeholders. Stakeholders were recruited to represent five domains that influence resilience: Program, Policy, Community, Smart Practices, and Knowledge Management. Stakeholders were led through a series of exercises to identify applicable strategies, policies, programs, threats and opportunities that contribute to community resilience. A summary of initial feedback:

The **program domain** identified the federal, local, state, and non-governmental agencies that are available to assist communities in improving their resilience indicators.

- A categorization of programs and funding available to communities should be developed. Consider customizing a current framework.
- Develop statewide standards (relative measurements) that allow projects and communities to specify their own measures.

The **community domain** outlined factors to be considered when evaluating the resiliency of a community understanding that there are essential and unique indicators in every community.

- A framework of resilience and risk indicators were developed with the following categories:

**Risk/Threat Indicators:**

- Natural
  - Environmental/Weather
  - Pandemic/Epidemic
- Man-made
  - Act of terror
  - Cyber attack
  - Catastrophic accident
  - Act of violence

**Resilience Indicators:**

- **Infrastructure/Essential Services**
  - Utilities
  - Transportation
  - Communications
  - Safety facilities/Medical
- **Contingency Planning/Preparedness**
  - Communications
  - Community wide planning
  - Citizen Preparedness
- **Economic Vitality**
  - Poverty rate
  - Industry diversification
  - Educational attainment
  - Per capital income
  - Insurance coverage ratios
  - Renter vs. home owners
  - Population growth rate
  - Regional GDP growth rate
  - Number of physicians per population
- **Social Indicators/Demographics**
  - Population/density of an area
  - Age
  - Community network availability
  - Language barriers (ESL percentage)
  - Health/ability challenged population
  - Rural vs. urban vs. suburban
  - Public services density (fire, ems, healthcare)
- **Other**

- Community partnerships
- Volunteer vs. paid emergency responders
- Social cohesion

The **smart practices domain** outlined success stories to replicate at the federal, state, and local level and summarized the following take-aways:

- It is essential to have a unity of purpose and a common goal in bringing people together.
- It can be tough to get people together – complacency is the enemy.
- Communication is key/Complacency is the enemy.

The **knowledge management domain** initiated requirements gathering and identified high level components of a resilience tool. Initial feedback included:

- Tools must drive towards outcomes.
- Understand what products/data is available and fill in gaps.
- The user groups must be further identified.
- The goal is to develop more than just an IT tool. This process can be viewed as a way to bring community together to establish key networks.

The **policy domain** discussed community resilience programs and whether they are informed and comply with laws and regulations and are in line with strategic guidance.

- Identify the areas needed for policies and develop categories of policies related to resilience and build out from there.
- Ensure that the focus on policy is balanced. (i.e., do not focus on only one component of resilience such as emergency management).
- There are lots of things going on, but not necessarily being done in the name of resilience. Lot of laws, policies, codes, just not in the name of resilience, and not in conjunction with each other.

## **SEMINAR 2: 02/12/2016 (Norfolk, VA)**

The next phase is regional seminars with local, regional, federal, and private sector partners to expand the resilience dialogue and understanding, and include region-specific topics. In February 2016 a seminar was hosted in Hampton Roads to focus on the resilience issues specific to coastal communities, focusing on Coastal Virginia. A high-level summary of the seminar follows:

The seminar kicked off with a keynote introduction from a regional representative of Secretary Moran’s Secure Commonwealth Panel followed by an open discussion.

- Coastal Virginia deals with a chronic inevitable problem, while some regions look at resilience by event (and don’t see the chronic, ongoing problem).
- It’s important to get buy-in from all stakeholders. You must show people in non-coastal communities why sea level rise is an important issue.
- How do you choose to express uncertainties or probabilities – especially with regards to sea level rise? Generally there is an uncertainty with probability, but with sea level rise there is

more predictability. How do we add the management of predictability into that overall model?

- The priorities of certain regions may not be the priorities of other regions. Use the same methodology, but with personalized/localized concept.

### **Breakout Session Group 1: Program and Policy**

The objective of this group was to review the opportunities, programs and policies of resilience and how this can feed into a dashboard tool.

- This group offered feedback on an existing list of 56 funding opportunities.
- It is essential to identify matching opportunities (cash or in-kind services) and fill existing gaps.
- Identify the best strategy – identify all possible projects and look for funding or identify funding and try to create applicable projects?

### **Breakout Session Group 2: Smart Practices**

This group of stakeholders continued discussions on smart practices displayed at the federal, commonwealth, regional and local level.

- Mitigation, not response, is the key to resilience
- Identify a community's resilience priorities and provide the best programs and smart practices from throughout the country for that particular issue as a starting point
- The following are smart practice themes for further consideration:
  - Stakeholder engagement
    - Leverage the common ground between stakeholders – “co-opetition”
    - Show some fiscal benefits to private organizations
    - Get a champion by showing results
  - Technology: Data merge, Data sharing, Maintaining data quality and security
  - Work on legislation or tools that facilitate collaboration between data owners/stewards
  - This program should be more than a dashboard but a data hub/exchange of information with specialties.

### **Breakout Session Group 3: Indicator and Dashboard Outlining**

This group continued to define the factors to be considered when evaluating the resiliency of a community, understanding that there are essential and unique indicators in every community. The stakeholders developed the following outline and highlighted those indicators most critical to a coastal community.

| Risk Indicators   |  |                       | Resilience Indicators |                                    |                                   |                                |                                 |
|---|--|-----------------------|-----------------------|------------------------------------|-----------------------------------|--------------------------------|---------------------------------|
| Natural   |  | Manmade               | Infrastructure        | Planning/Preparedness              | Economic                          | Social/Demographic             | Other                           |
| Chronic   | Event Specific   | Act of Terror         | Utilities             | Communications                     | Poverty Rate                      | Population density             | Partnerships                    |
| Environmental chronic issue (flooding, precipitation, temp) | Environmental - Weather event (tornado, hurricane, storms) | Catastrophic accident | Transportation        | Community wide planning            | Industry diversification          | Age                            | Emergency management status     |
| Population Growth   | Pandemic/epidemic  | IT/cyber attack       | Communications        | Citizen preparedness levels        | Educational attainment            | Community network availability | Social cohesion                 |
| Water/fisheries   |  | Violence              | Safety/medica         | Business preparedness levels       | Per capita income                 | ESL status                     | Awareness/use of existing tools |
|   |  | Utility failure       | Industry Structure    | Evacuation planning and capability | Property insurance coverage rates | Health and ability             |                                 |
|   |  |                       | Banking               |                                    | Renters vs. home owners           | Rural vs. urban vs. suburban   |                                 |
|   |  |                       | Education             |                                    | Growth – GDP/population           | Public services density        |                                 |
|   |  |                       |                       |                                    |                                   |                                |                                 |
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### SEMINAR 3: 03/10/2016 (Roanoke, VA)

The second of three regional seminars was hosted in March 2016 in Roanoke, VA with a focus on the resilience issues specific to rural communities, specifically southwest Virginia. The key discussion points are summarized below:

#### Community Discussion 1: Resilience in Southwest Virginia

Participants were very engaged in a conversation to define resilience in a more rural community specifically Southwest Virginia.

- A recent tornado that occurred in nearby Appomattox, VA served became a timely example in the ensuing dialogue. There were several responders and EM leaders in attendance who remain a part of the recovery efforts in Appomattox. The specific examples shared that relate to resilience in a rural community include:
  - There was an overwhelming response by neighboring communities to send aid.
  - The region is very “Christian-based” and there was an immediate response from churches. The role of religious organizations plays a critical role and their impact is an indicator.
  - Despite of the scale, there has to be a way to manage/coordinate the response/offers of help.
  - Technology/social media introduces a new category of relief/aid in the form of instant and direct fundraising through Go-Fund Me/Kick-start campaigns. This can be measured as an indicator, but also should be monitored for fraud. Less technology-savvy individuals may not be aware of this support.
- There were several themes that ran through the community discussion:
  - Community – stakeholders felt that community was a key component of resilience in a rural area.
    - One measure might be a simple question, “Do you know your neighbors’ first and last names?”
    - The response to the tornadoes in Appomattox was so great that donations had to be turned away.
    - Some planners see a limitation to “community.” Community has barriers when it comes to property owners in rural communities. It may be a resistance to change.

- Volunteerism is a significant factor in community response. VOAD may have data that can be measured.
    - Small communities are more aware of their makeup. For example, there are some families who can't "stock" an emergency kit.
  - Coordination – A lack of coordination causes missed opportunities for partnerships.
  - Communication -
    - Citizens should understand the role of resilience/Emergency Management leaders.
    - A community needs to be aware of its acceptable risks and costs.
  - Conflict – Sometimes a disconnect with economic development planners or developers can result in a less resilient future. Emergency managers need to be brought to the table in planning.
- There were several specific resilience categories to a rural community including:
  - Poverty
  - Drug abuse (which feeds into the poverty cycle and vice versa)
  - HIV numbers are spiking
  - Behavioral and mental health
  - Access to broadband/technology

## **Community Discussion 2: Indicators and Dashboard Requirements**

Participants reviewed the outline of indicators developed by their counterparts at previous meetings and offered feedback with regards to their regions.

- There were additional (or more specific) indicators suggested for inclusion (or emphasis) including:
  - Poverty
  - Agricultural drought or disease
  - Endangered species
  - The impact of tourism or cultural/historic districts
    - Recovery may include different processes, timelines or regulations.
  - Environmental events –
    - High winds
    - Earthquakes (and the ensuing landslides and sink holes)
    - Winter weather
    - The topography makes wildfires a greater concern.
  - There should be some consideration on the infrastructure and whether a community's self-reliance (more generators, etc.) can be an indicator.
  - Mass Gatherings (ball games, NASCAR, conferences, university events)
  - Train derailment
  - Civil unrest (strikes)
  - The availability of food (especially the effect of point-of-sale)
  - The access of hospitals
  - Fueling stations (and their dependence on power)
  - Pharma distribution
  - Single head of household
  - Availability of and access to behavioral health
    - On a regular basis
    - Following crisis
  - Access to employment

- Transient population/migrant workers
- Per capital human service organizations
- Number of businesses at LEPC meetings
- Number of historical buildings/sites
- Number of vacant buildings/structures/brown fields
- Number of manufactured homes versus permanent homes
- Chronic illness
- Hotel/motel space available
- Data that should be examined for inclusion includes:
  - ISO ratings/fire-wise/storm ready data
  - Employment data and workforce trends
  - Planning districts
  - Economic development plans
  - Workforce development plans
  - Weldon Cooper
  - GIS data
- Who needs a dashboard tool?
  - Business owners/developers
  - Workforce/economic development planners
  - Emergency management planners

#### **SEMINAR 4: 03/17/2016 (Fairfax, VA)**

The final regional seminar was hosted in March 2016 in Fairfax, VA with a focus on the resilience issues specific to high-population, metropolitan communities, specifically northern Virginia. The key discussion points are summarized below:

##### **Community Discussion #1:**

- The culture of expectation. There is a cultural expectation that the government will take full control of a disaster situation and supply supplies. Population and government take this for granted and we've built ourselves into that culture of expectation.
  - Need to set a culture of realistic expectations (realism).
- Let's be more predictive especially with special needs/particular needs.
- The National/Capital region has unique characteristics:
  - There is extreme coordination among its sub-regions.
  - The transient population is high (military, government, immigrants).
  - DC is a target and Virginia is 8 miles away.
  - The high population and traffic conditions create a challenge at rush hour, let alone a catastrophic event.
  - There are few access/evacuation points.
  - There are two airports.
  - The region is second most diverse region in terms of language use (more diverse).
  - Northern Virginia has been the target of a major terrorist attack.
  - There are many different cultures.
  - The housing affordability is a challenge.
  - The rate of growth is much greater than the growth of resources and there is already disparity – is this being tracked/addressed?
  - Region has dependency on the federal government...cut backs on spending at the local level.

- Northern Virginia thinks about itself and they think of competing on a global perspective
- There should be focused study on the impact of Military bases to the surrounding communities' resilience.
  - There are opportunities and risks:
    - Can extra space be utilized in an emergency situation (can you store on the base?)
    - Do military bases create an elevated risk for communities?
- There are particular “resilience personalities” of the various Virginia regions:
  - Coastal – heavily economic stakeholders (maritime, shipyard). Aware of resilience.
  - Southwest – while there is not corporate interest, there is a personal awareness.
  - Northern Virginia – corporate interest is in your services/hotels, tourisms and has an economic state. They don't tie resilience to their success?
- Resilience needs to be monetized for adoption.

### **Breakout Session – Resilience Indicators and Dashboard Requirements**

- Potential Users
  - Individual family Resilience starts with families and neighborhoods
  - Emergency planners
  - Communities (in order to report up to help the state make budgetary decisions)
  - Planning district level
  - Economic developers
- A regional dashboard can be compared to a Swiss Army knife. There will some element of base standardization (all Swiss Army knives have the big knife), but each community will have a few tools/indicators that are unique to that community.
- Some solutions can be illuminated through the dashboard.
- Planning districts – there are extreme gaps in their abilities. The dashboard should be a “levelizer.”

### **Breakout Session - Smart Practices**

- Planning District Commissions [www.novaregion.org](http://www.novaregion.org)
  - 2008 Coastal zone planning programs
  - 2010/2011 reports
- Plain language is a smart practice in data operability
- Work on resilience through a grass roots efforts from a community of users
  - Standardize and incentivize
- Take the politics out of it
- Allow communities to tweak their benefits
  - How many partners do you have at the table?
- What's the problem to be solved?
  - We need to define this first
  - Start small and build out larger
- Some options
  - Customer-centric
  - Outcomes driven

- Dating website business cases
  - Don't ask them what they want, but get conversation started and profile them in order to identify what categories they fall into and then present the with recommendations