

Coastal Resiliency Program Update

Hampton Roads Planning District Commission

July 19, 2018

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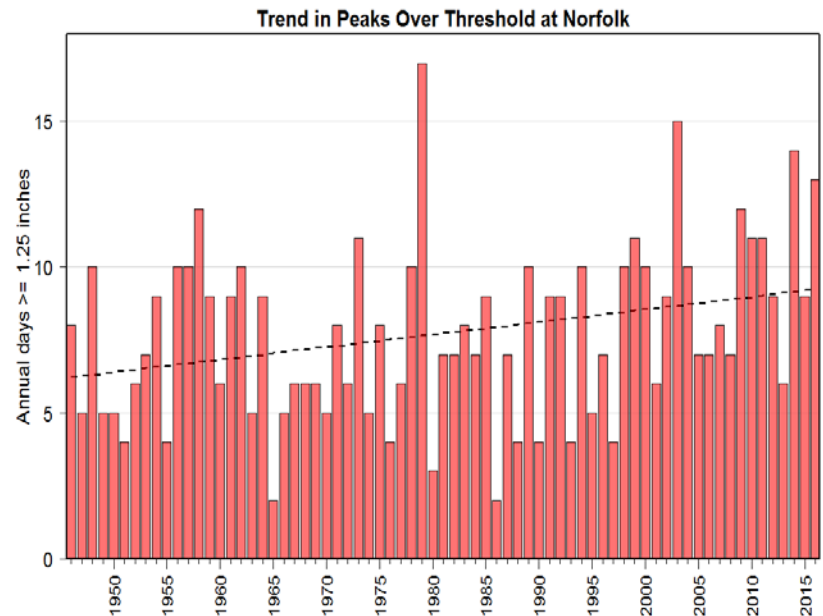
Program Goals

Develop	Coordinate	Advocate	<i>Implement</i>
Develop policy recommendations for local governments	Coordinate with state and federal agencies and academic institutions	Advocate for additional state and federal support	<i>Implement projects where regional cooperation has tangible benefits</i>

Policy Recommendations

Design Storms

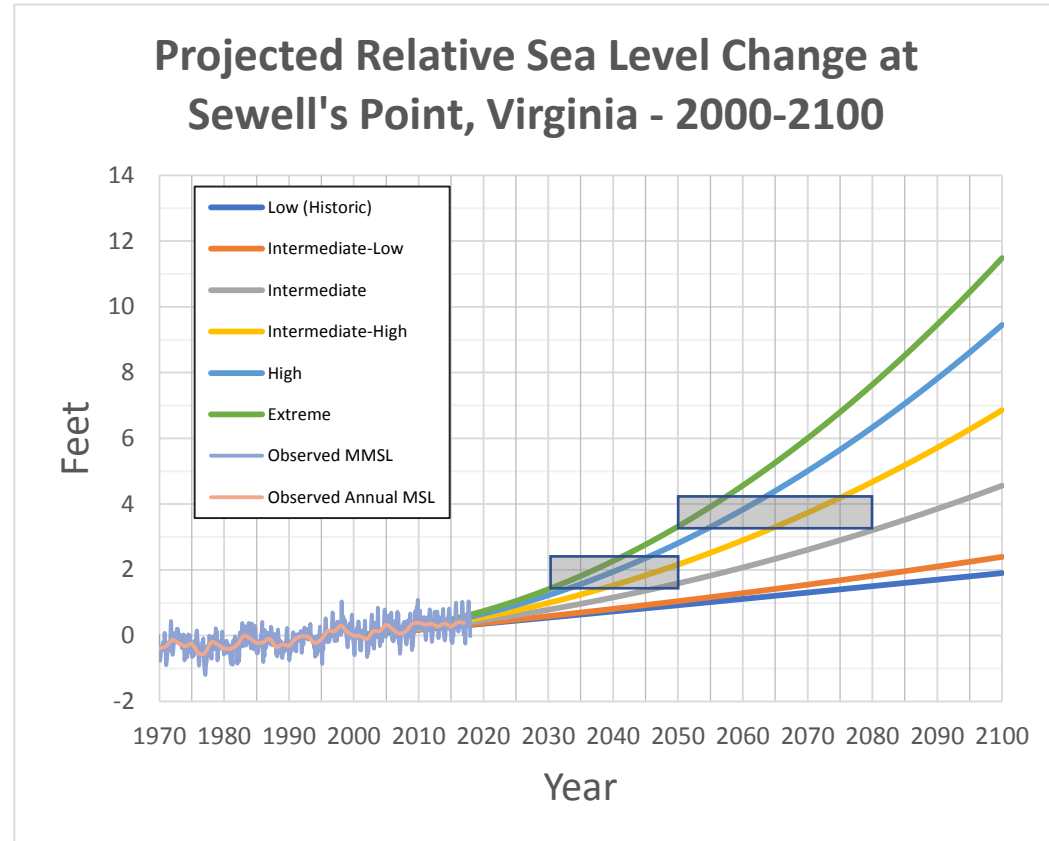
- **What is the problem?**
 - Design standards based on old data and precipitation patterns are changing
 - Stormwater infrastructure is undersized
- **What are we doing?**
 - Developing updated local design standards for stormwater infrastructure
 - Having conversations with VDOT about updating state standards
- **Why regional?**
 - Level playing field for development
 - Push the state to adopt similar standards



Source: Dewberry

Sea Level Rise

- **What is the problem?**
 - Sea level is rising, but not always factored into project design
- **What are we doing?**
 - Screening values for planning to help estimate the scale of the problem
 - Updated curves for conducting benefit-cost analysis of different adaptation options
- **Why regional?**
 - A regional approach presents a strong message and makes working across jurisdictions easier

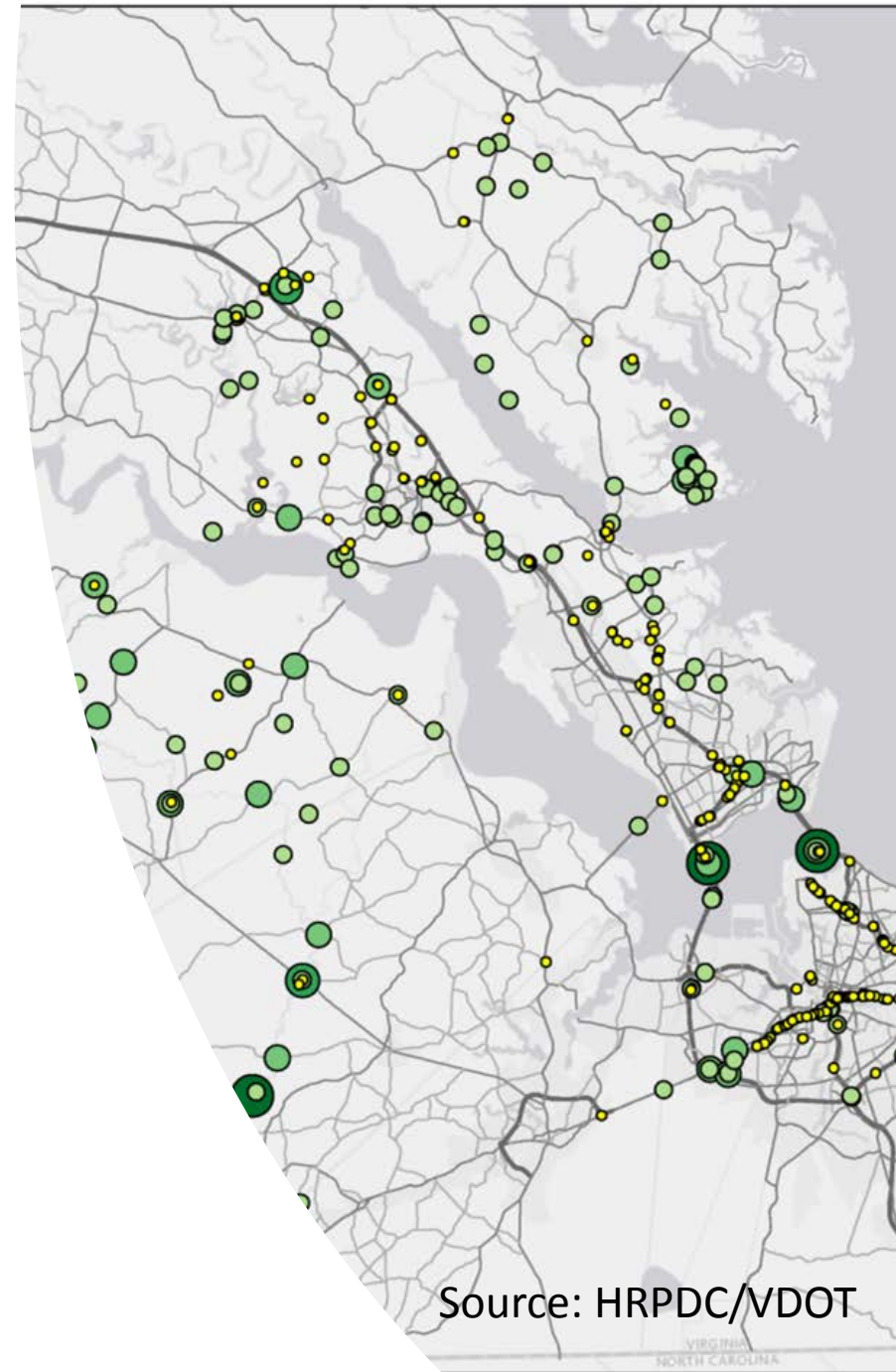


Source: HRPDC/NOAA

Coordination

Flooding and Water Level Sensors

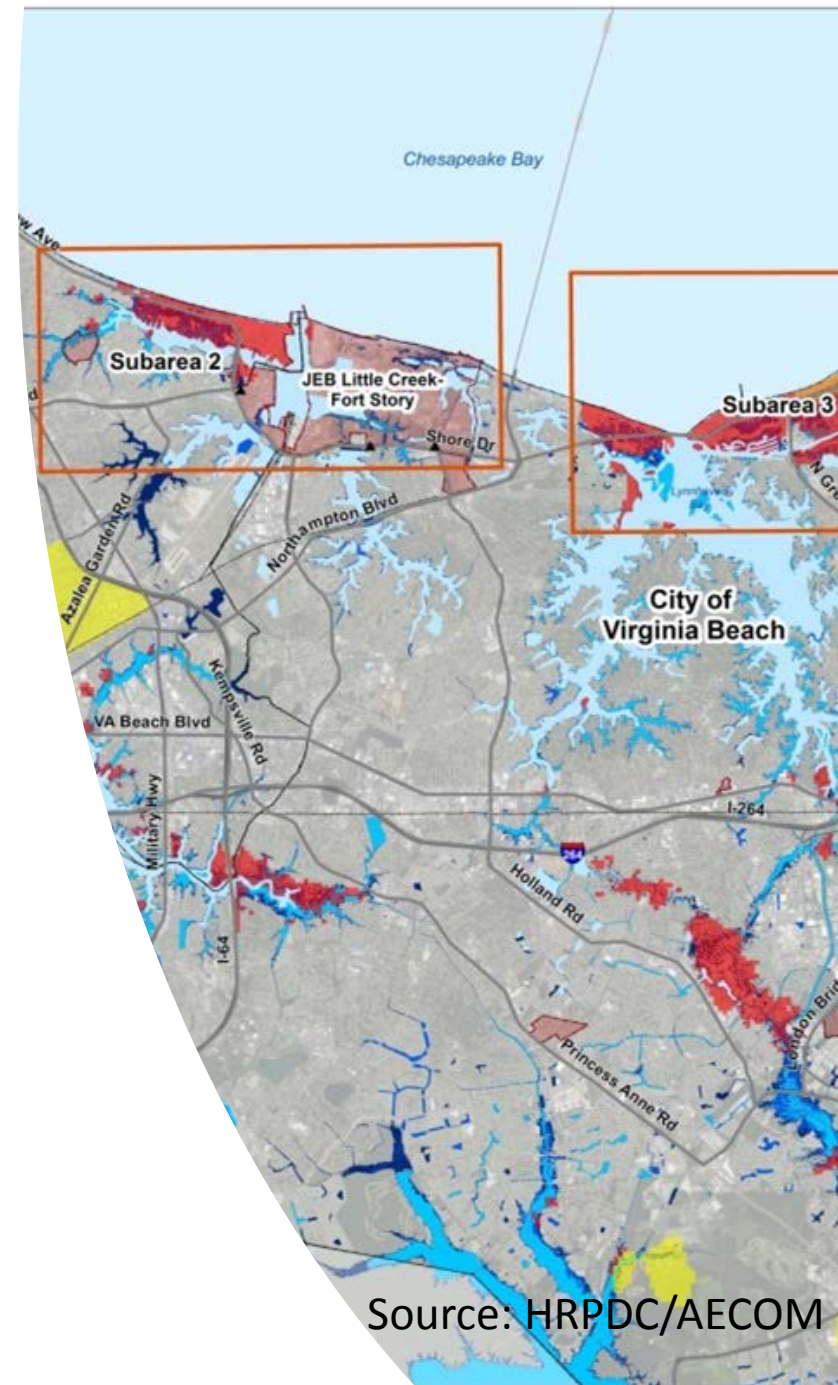
- **What is the problem?**
 - Localities do not have a good source of data on which areas flood and under what circumstances.
- **What are we doing?**
 - Developing proposal for sensors that would detect flooding on roads and report that information in real time
 - Working with area universities to improve predictive modeling
- **Why regional?**
 - Many Hampton Roads residents do not just stay in one community – they travel around. A regional network provides information for how people in Hampton Roads would actually need it.



Source: HRPDC/VDOT

Joint Land Use Studies

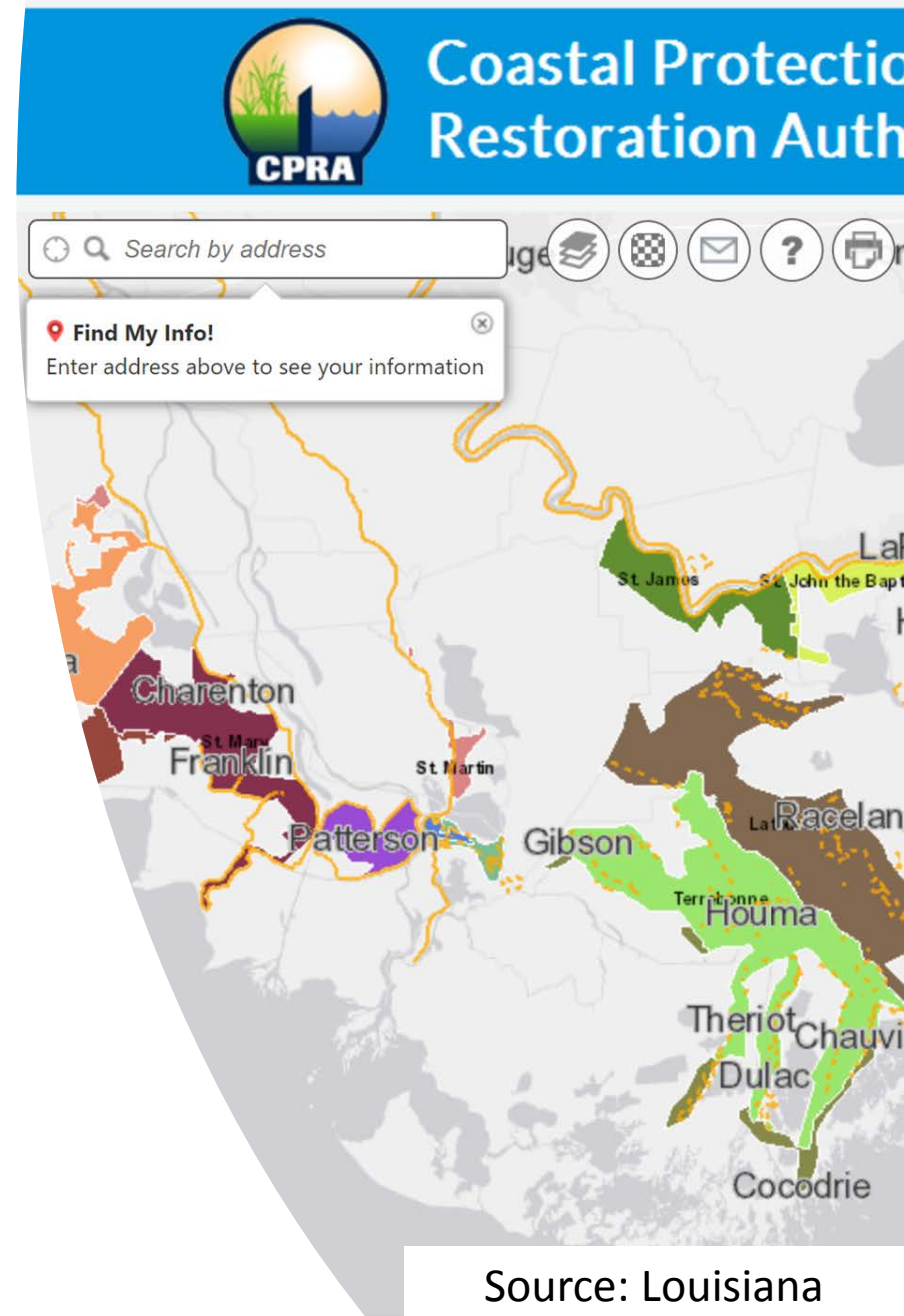
- **What's the problem?**
 - Access to military facilities suffers as a result of flooding, reducing readiness
- **What are we doing?**
 - Identifying local resiliency projects that have benefits for area military facilities
- **Why regional?**
 - Active duty and civilian employees travel from across the region
 - Common issues affecting different facilities means a regional approach will reduce duplication of efforts



Source: HRPDC/AECOM

Tracking Resiliency Projects

- **What is the problem?**
 - No comprehensive assessment of what is being done or what is planned for resiliency
- **What are we doing?**
 - Compiling information on local efforts (flood mitigation, building elevation projects, policy changes, etc.)
 - Developing a regional picture of work being done by localities and identified needs
- **Why regional?**
 - Regional tracking would demonstrate widespread need for assistance to state and federal governments
 - Reassure the public that local governments are making progress on addressing flooding



Source: Louisiana Coastal Protection and Restoration Authority

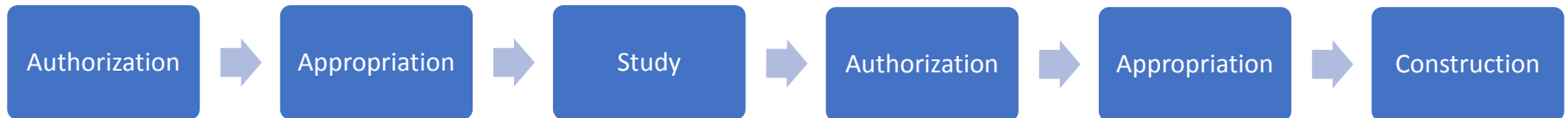
Advocacy

Federal Program and Legislative Updates

- **What is the problem?**
 - Existing federal programs provide some avenues for local assistance, but most are directed towards other issues. Amending these programs would be a good first step to obtaining federal resources for Hampton Roads.
- **What are we doing?**
 - Defense Access Roads
 - Would make roadways serving the military that flood eligible for funding
 - Included in Military Construction, Veterans Affairs, and Related Agencies Appropriations Act, 2019
 - Defense Community Infrastructure Program
 - Would provide DOD Military Construction funds for local infrastructure that military facilities rely on (roads, water, wastewater, schools, etc.)
 - National Defense Authorization Act for FY 2019 (H.R. 5515 and S. 2987)
- **Why regional?**
 - Although projects are local, the programs are meant to address national needs and priorities. Need to convey the importance of Hampton Roads to the nation in order to justify these changes.
 - More influence as a region than as individual localities

Water Resources Development Act

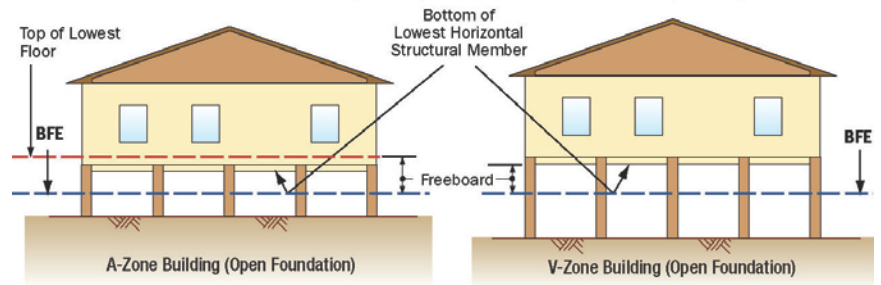
- Feasibility studies are the first step on the pathway to significant federal funding from the U.S. Army Corps of Engineers for flood mitigation projects
- 2018 WRDA would authorize coastal flood risk management studies for Tidewater localities
 - Passed House (H.R. 8)
 - Reported from committee in Senate (S. 2800)



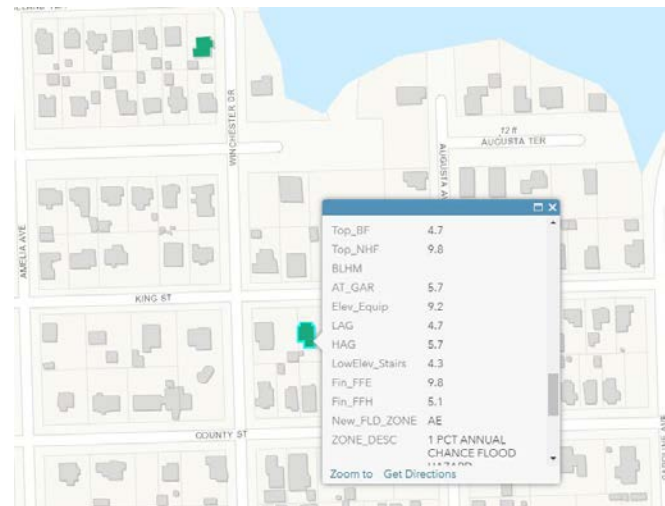
Implementation

First Floor Elevation Data

- What is the problem?
 - First floor elevation is the primary driver of vulnerability to flooding
 - FFE of most structures in Hampton Roads is unknown
- What are we doing?
 - Collecting existing data to use in a regression analysis to estimate FFEs for all residential structures in floodplain
 - Developing GIS database for regional analysis and local planning
- Why regional?
 - Cost benefits for collecting data and avoid duplication of analysis
 - Take paper records and turn into GIS dataset that is useful



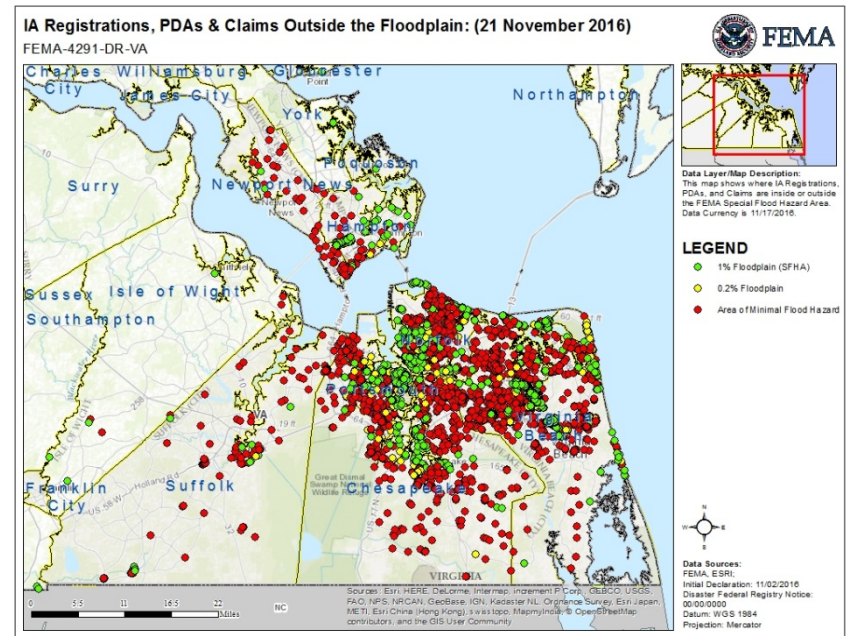
Source: FEMA



Source: HRPDC

Flood Insurance Outreach

- **What is the problem?**
 - Many residents of Hampton Roads live in areas vulnerable to flooding, but do not have flood insurance
- **What are we doing?**
 - Media campaign to encourage people to buy flood insurance
 - Social media, website, radio, resident testimonials, etc.
 - Specific to Hampton Roads
- **Why regional?**
 - Message (“buy flood insurance”) is the same across jurisdictions
 - Regional media buys are more cost-effective



Source: FEMA/VDEM

Unresolved Issues

What Role Should the State Play?

- General Assembly considered several bills last session that address resiliency

