Commonwealth Priorities

Hazard Mitigation Assistance Grants
Pre-Disaster Mitigation Grant

- Annual grant focused on climate resilience, infrastructure, and non-flood related projects.
Flood Mitigation Assistance Grant

- Annual grant focused on mitigation structures that are insured through the NFIP and have sustained numerous flood claims.
Hazard Mitigation Grant Program

• Post-disaster grant, designed to reduced future risk for impacted areas. Available statewide.
Commonwealth Priorities

• Strategic level projects that have multiple benefits
  - Climate resilience mitigation activities
  - Large scale projects with whole community impacts
  - Holistic mitigation measures (protects multiple hazards)
  - Infrastructure protection projects
  - Alert and warning projects
  - State level projects
  - Improved data in mitigation plans to drive project development
HMA Programs

- Designed to reduce long term risk and break the repetitive cycle of damage, repair, damage.
Priority Project Types
Tier 1
Flood Risk Reduction Projects
Infrastructure Retrofit

- Measures to reduce risk to existing utility systems, roads, and bridges
Flood Diversion and Storage

- These projects involve diverting floodwaters from a stream, river, or other body of water into a conduit such as a canal, pipe, or wetland and storing them in an above-ground storage facility.
Floodplain and Stream Restoration

- Projects that restore and enhance the floodplain, stream channel and riparian ecosystem’s natural function.
Soil Stabilization

- Projects to reduce the risk to structures or infrastructure from erosion and landslides.
  - Installing geotextiles
  - Stabilizing sod
  - Installing vegetative buffer strips
  - Decreasing slope angles
  - Stabilizing with rip rap and other means
Green Infrastructure

- Flood risk reduction and drought mitigation actions that also incorporates ecosystem benefits and helps build a community’s resilience to the impacts of climate change.
Aquifer Storage and Recovery

- Drought Management Tool, but can also be used to reduce flood risk.
Wildfire Mitigation

- Creation of defensible space
- Application of ignition resistant construction
- Hazardous fuels reduction
Generator Acquisition and Installation

- Must protect a critical facility
  - Hospitals/Nursing Homes
  - Police/Fire/EOCs
  - Public/Private Utility
  - HazMat production/storage facilities
Priority Project Types
Tier 2
Property Acquisition and Structure Demolition
Property Acquisition and Structure Relocation
Structure Elevation
Mitigation Reconstruction
Floodproofing
Retrofitting for Earthquakes

Protecting against earthquakes

- Foundation and cripple walls
- House slides off cripple walls
- Cripple walls buckle, collapse
- House slides off foundation

Anchoring the mudsill to foundation with Universal Foundation Plate

1. Anchor spacing must be 6'-0" on center or less
2. 12" or greater between plate and mudsill break
3. 12" or greater between plate and corner

Source: Simpson Strong-Tie

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Virginia Department of Emergency Management
Safe Room Construction

- Residential, non-residential, and community safe rooms (hurricane and tornado).
Residential Wind Retrofits

Continuous Load Path To Resist Uplift Forces

Roof to Wall Connection
- Roof member to top plate connections
- Top plate to stud connections

Upper Wall to Lower Wall Connection
- This connection is not required for a single-story home.

Lower Wall to Foundation Connection
- Stud to sill plate connections
- Sill plate to foundation connections

- These connections are not required for uplift but may be required to transfer shear loads.

A continuous load path ties the roof to the foundation and helps keep the roof from blowing off during hurricanes. In the illustration above, a variety of typical connectors used to complete a continuous load path are shown; the actual spacing of the connectors may vary from this example. Newer homes are more likely to have the continuous load path connections. For older homes, it’s possible to retrofit and add the connections shown to complete the continuous load path. Every house is different, but in general, it will be easier and less expensive to retrofit the Roof to Wall Connection than the Lower Wall to Foundation Connection. Check with a licensed building professional to determine what is feasible for your home.
Post Disaster Code Enforcement

- Projects designed to support the post-disaster rebuilding effort by ensuring that sufficient expertise is on hand to ensure appropriate codes and standards, including NFIP local ordinance requirements, are used and enforced.
Hazard Mitigation Planning

Southside Hampton Roads Hazard Mitigation Plan
5% Initiative Projects

- Projects that do not require benefit cost analysis
  - Alert and warning systems
    - Reverse 911
    - River Gauges
    - Tornado Sirens
  - Purchase of generators or quick connects
  - Public awareness or education campaigns
  - Hazard identification/mapping equipment for implementation of mitigation activities
Benefit Cost Breakdown

• Required for all structural projects
• Determines future dollar losses avoided by mitigation activity
• Based on FEMA determined project useful life
• Requires documentation of damage history and/or current conditions (current elevation of structure with respect to 100 year flood levels)
PDM Breakdown

• FEMA Priorities
  – Climate Resilient Mitigation Activities
  – Wildfire Mitigation Activities
  – Non-flood mitigation activities
  – Flood mitigation activities
  – Generator projects
  – Mitigation Planning

• Funding
  – $90M in FY 2016, $4M fed share cap on projects
  – Each state gets a $575k set-aside
FMA Breakdown

• FEMA Priorities
  – Projects that mitigate flood damage for at least 50% of the structures that are Severe Repetitive Loss (SRL)
  – Projects that mitigate flood damage for at least 50% of the structures that are Repetitive Loss (RL)
  – Projects that will mitigate flood damage to the largest number of NFIP-insured properties at the neighborhood level

• Funding
  – $199M for FY 2016, up to 100% fed share
HMGP Breakdown

- State Sets Priorities
- 15% of total disaster costs (PA and IA)
  - 88% of funds must be structural projects (BCA required)
  - 7% of funds may be used for mitigation planning projects
  - 5% of funds may be used for initiative projects (no BCA required)
Mitigation Grant Administrators

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Questions