Webinar Series
Building Resilient Infrastructure and Communities (BRIC)

Webinar 1: Infrastructure Mitigation Projects and Community Lifelines
Thursday June 6, 2019 (2 - 4 p.m. ET)
Hazard Mitigation Assistance Programs

30 Years of Hazard Mitigation Assistance

1988

1998

2008

2018

HMGP

HAZARD MITIGATION GRANT PROGRAM

PDM

PRE-DISASTER MITIGATION

FMA

FLOOD MITIGATION ASSISTANCE
In FY 2018 more than $1.3B in pre- and post-disaster Hazard Mitigation Assistance Grants was delivered to states, tribes, and territories, resulting in mitigation actions that will reduce risk.

- **Flood Mitigation Assistance Grant Program**: 7% ($88.2M)
- **Pre-Disaster Mitigation Grant Program**: 4% ($57.7M)
- **406 Mitigation Funding**: 30% ($400M)

*This figure includes legacy PDM program funding.*
Disaster Recovery Reform Act (DRRA)

- Establishes more than 50 new authorities and requirements across FEMA
- Designed to address the rising costs of disasters and reform federal disaster programs
- The Mitigation Directorate is responsible for implementing 26% of the new provisions, over half of which directly impact Hazard Mitigation Assistance programs
DRRA Section 1234: Building Resilient Infrastructure and Communities (BRIC)

- Leverage 6% set-aside funding mechanism
- Encourage community-wide mitigation of critical lifelines
- Prioritize resilient infrastructure projects
- Competitive, risk-informed projects
- Build capacity and capability
- Support building code efforts

Since 2009, FEMA has received approximately $1 billion in Pre-Disaster Mitigation grant appropriations, of which 48% has been in the last 2 years.

Average amount from 2009-2016: $56M/year.

Funds will vary based on disasters. FIMA estimates that annual funds will average $300-500M per year, with significantly greater amounts following years with catastrophic disasters.
BRIC Program Design Process

Stakeholder Engagement

- Research
- Policy and Guidance Development
- Public Comment thru Federal Register
- Notice of Funding Opportunity Development
- Grant Application Period Opens
Infrastructure Mitigation Projects
Eligible Mitigation Activities

FEMA has historically provided grant funding for the following mitigation project types:

- Property acquisition and structure demolition/relocation
- Structure elevation
- Mitigation reconstruction
- Dry floodproofing of historic residential structures
- Dry floodproofing of non-residential structures
- Generators
- Localized flood risk reduction projects
- Non-localized flood risk reduction projects
- Structural retrofitting of existing buildings
- Non-structural retrofitting of existing buildings/facilities
- Safe room construction
- Wind retrofit for one- and two-family residences
- Infrastructure retrofit
- Soil stabilization
- Wildfire mitigation
- Advance assistance
TRADITIONAL MITIGATION PROJECT: Drainage

**Phase 1:**
- Widen /possibly meander creek channel
- Add wetland pond and diversion channel to existing channel

**Phase 2** after permitting requirements are met:
- Improve channel south of pond
- Construct park amenities

$4 \text{M} \quad \text{FED SHARE}$

$7.3 \text{M} \quad \text{NON-FED SHARE}$
Replaces overhead electrical distribution system

- **500** CONSUMERS AFFECTED
- **20,000** OUTAGES MITIGATED
- **2,000** FEET OF UNDERGROUND CONDUIT & INFRASTRUCTURE REPLACING AERIAL TRANSFORMERS & POLES
- **15,000** FEET OF CONDUIT FROM NEW TRANSFORMERS TO BUILDINGS

$3.2M FED SHARE + $1M NON-FED SHARE
6-acre underground resiliency park offers outdoor public recreation amenities such as a natural oasis, athletic fields, play areas, fitness stations, and event space:

- Lowered basketball court provides green stormwater storage
- Rain gardens for capture and filtration

✓ Provides significant mitigation of fluvial and flash flooding for multi-story residential, commercial, and industrial properties.

✓ Reduces economic, environmental, and social impacts.
Infrastructure Mitigation Projects

What is your opinion?

• The amount and type of technical assistance FEMA should provide to applicants applying for and implementing infrastructure mitigation projects

• What challenges do you foresee in implementing these types of mitigation projects
Community Lifelines
Lifeline Considerations

- Project types
- Period of Performance
- Advance Assistance opportunities
- Private sector ownership
- New technical considerations
- Role of planning
- Technical assistance needs
- Funding amounts and caps
- Green infrastructure
Building Resilient Lifelines: Example 1

Public Assistance 406 Hazard Mitigation at work at NYU

The Center not only utilized FEMA’s Public Assistance program to repair the facility, it also took advantage of additional 406 hazard mitigation funding to recover resiliently.

Some of the resulting projects included:

- Constructing a flood barrier to shield campus buildings
- Funding a cogeneration plant to protect the power supply, ensuring uninterrupted medical treatment and research

After Hurricane Sandy caused extensive flooding and the loss of millions of dollars in patient resources and research, New York University’s Langone Medical Center developed a plan to prevent future, similar damage.
Building Resilient Lifelines: Example 2

USVI

Public Assistance 406 Hazard Mitigation
Will Save $2.3 Billion in Future Disaster-Related Losses

Following several historic hurricanes, the U.S. Virgin Islands
used FEMA’s Public Assistance Program (Robert T. Stafford Act,
Section 406) for mitigation funding
to protect their facilities from future, similar damage while
repairing them.

Currently, the U.SVI has spent more
money on hazard mitigation than
on permanent disaster repairs.

In fact, for every $1 they spend on
repairs...

They expand $1.1 on Public Assistance 406
Hazard Mitigation

This will help build safer,
stronger communities
and save future
disaster-related losses of
$2.3B

Completed mitigation projects include...

Installing underground electrical lines

Strengthening flood-prone roads

Installing impact-resistant roofs

FEMA
Building Resilient Lifelines: Example 3

DC Water Blue Plains Wastewater Facility

- Vulnerable to flooding because it’s adjacent to the Potomac River.

- A PDM grant provided $2.4 million towards building a 17.2 ft. high sea wall that will surpass the recommended 1-500-year storm level.
Lifelines

How can FEMA best incorporate lifelines into BRIC?

What is your opinion?

• What lifelines (if any) your community considers during the mitigation planning process
• What steps communities can take to mitigate risks to lifelines
• What resources or support FEMA can provide that would improve the resilience of lifelines in your communities
Questions on Infrastructure Mitigation Projects and Community Lifelines?

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Additional BRIC Webinars

June 13, 2019 (2 – 4 p.m. ET)
Hazard Mitigation Planning, Grant Application and Evaluation, and Risk Informed Funding

June 20, 2019 (2 – 4 p.m. ET)
Funding & Resource Management and Benefit-Cost Analysis

June 25, 2019 (2 – 4 p.m. ET)
Building Codes and Enforcement and Capacity and Capability

https://www.fema.gov/drra-bric

Additional Resources

Disaster Recovery Reform Act (Full Act)

Disaster Recovery Reform Act (FEMA Requirements)

FEMA IdeaScale

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