



# Home Elevation

## Flood Mitigation Assistance (FMA)

# *FEMA Mitigation Programs*

- Hazard Mitigation Grant Program
  - Post Disaster
- FMA
  - Annual program, flood mitigation of NFIP insured properties, Nationally competitive, \$120M in 2014, \$150M this year

# *FMA Program*

- **Project Grants** to implement measures to reduce flood losses, such as acquisition & demolition, relocation, elevation, mitigation/reconstruction, minor flood reduction projects, and dry flood proofing (non residential).

# *FMA Program*

Mitigating Severe Repetitive Loss (SRL) and FMA Repetitive Loss (FMA RL) properties are a focus of FEMA and the State

A severe repetitive loss property is a structure that:

- **Is covered by an NFIP flood insurance policy**
- Has incurred flood related damage –
  - For which 4 or more separate claims payments (building and contents) have been made with the amount of each such claim exceeding \$5,000, **Or**
  - For which at least 2 separate claims payments (building only) have been made, with the cumulative amount of such claims exceeding the market value of the insured structure

# *FMA Program*

Mitigating Severe Repetitive Loss (SRL) and FMA Repetitive Loss (FMA RL) properties are a focus of FEMA and the State

An FMA repetitive loss property is a structure that:

- **Is covered by an NFIP flood insurance policy**
- Has incurred flood related damage –
  - Has incurred flood-related damage on 2 occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and
  - At the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

# *Federal Funding*

- Percent of Federal funding provided based on categorization of home
  - SRL – 100% Federal funding
    - No homeowner required match for grant eligible costs
  - FMA RL – 90% Federal funding
    - 10% homeowner required match for grant eligible costs
  - Insured Non-SRL, Non-FMA RL – 75% Federal funding
    - 25% homeowner required match for grant eligible costs
  - If substantially damaged, ICC may be able to be used to cover homeowner local match

# *Elevation*

- One of the most common retrofitting methods is elevating
- When a house is properly elevated, the living area will be above all but the most severe floods (such as the 500 year flood).
- Almost any home can be elevated
- Most elevations in TX are slab on grade

# Elevation


- Raise existing structure at or above base flood elevation (BFE) or alternate elevation
- Project must be cost-effective
- Elevation methods:
  - Elevating on continuous foundation walls
  - Elevating on open foundations such as piles, piers, posts, or columns
  - Elevating on fill
- Prior flood loss or depth in the flood plain determine benefit
- Method of elevation drives cost





# *Benefit Cost Analysis (BCA)*

- **BCA:** A quantitative procedure that assesses the cost effectiveness of a hazard mitigation measure by taking a long-term view of avoided future damages as compared to the cost of a project.
- **Benefit-Cost Ratio (BCR):** A numerical expression of the cost effectiveness of a project calculated as the net present value of total project benefits divided by the net present value of total project costs.



- In addition to a greater peace of mind, advantages to elevating include the following:

- Elevation to or above the Base Flood Elevation (BFE) allows a substantially damaged or substantially improved house to be brought into compliance with your community's floodplain management ordinance or law. (The Base Flood is a flood having a 1% chance of being equaled or exceeded in any given year)
- Elevation reduces the flood risk to the house and its contents.
- Except where a lower floor is used for storage, elevation eliminates the need to move vulnerable contents to areas above the water level during flooding.
- Elevation techniques are well known, and qualified contractors are often readily available.
- Elevation reduces the physical, financial, and emotional strain that accompanies floods.
- Elevation provides homeowners with additional parking and storage space within their home.
- Elevation often reduces flood insurance premiums and avoids increases coming to SRL properties (Biggers Waters Act)

# *Eligible Costs*

- ▶ Architectural and engineering fees associated with a design for elevating an eligible insured building
- ▶ Permitting
- ▶ Clearing necessary vegetation and preparing path for installation of lifting supports
- ▶ Excavation around the dwelling
- ▶ Lifting or jacking building
- ▶ Additional cost of elevating the risk above the minimum required height
- ▶ Temporary support cribbing

# *Eligible Costs*

- ▶ Disconnecting utility connections
- ▶ Extending or modifying utility connections
- ▶ Reconnecting utility connections
- ▶ Constructing a compliant foundation
- ▶ Code upgrade requirements not related to state or local floodplain ordinances
- ▶ Cost associated with elevating the insured building out of a SFHA
- ▶ Restoring the lawn
- ▶ Restoring walks, driveways, and other surfaces outside the perimeter exterior walls of the insured

# *Ineligible Costs*

- Elevating structures that were not in compliance with current NFIP standards at the time of construction
- Costs related to building additions or auxiliary structures
- Construction of new decks or porches
- Any improvements for purely aesthetic reasons, unless required by the EHP compliance review
- Costs to replace or repair utility service components that are undersized, inadequately designed, or unsafe, unless required by code (except utility rooms noted as eligible costs)
- Exterior finish on the exposed foundation of the elevated building, unless required by EHP compliance review and or local code
- Additional landscaping for ornamentation beyond what existed on the site prior to construction of the project (e.g., trees, shrubs)

# Reference Documents

- FEMA 347 - *Above the Flood: Elevating your Flood Prone House*  
(<http://www.fema.gov/library/viewRecord.do?id=1424>)
- FEMA P-312 - *Homeowner's Guide to Retrofitting Second Edition*  
(<http://www.fema.gov/library/viewRecord.do?id=1420>)

# *What's Next*

- City now needs to identify interested homeowners
  - Voluntary program
  - Increase in Flood Insurance rates are coming for all SRL property Owners
    - More to follow

# *What's Next*

- ▶ Complete Benefit Cost Analysis
  - ▶ Elevation Certificates needed
  - ▶ Aggregate BCR has to be greater than 1.0
- ▶ Completed application for interested/cost effective homes
- ▶ Submit application by Due date
- ▶ Wait for results of national review
  - ▶ Timing to be determined..... but months



Texas Water Development Board Flood Mitigation Assistance Grant Program  
Americans with Disabilities Act (ADA) Compliant Access Facilities

This form should be used by the community and the homeowner who is seeking ADA access facilities under the Flood Mitigation Assistance Grant program for elevation mitigation. The signature of the homeowner with the disability (or authorized caretaker) is required below prior to submitting this request to the community and the Texas Water Development Board for review and processing.

Homeowner must:

1. Provide a Physician's written certification that meets the following requirement per FEMA's Hazard Mitigation Assistance Unified Guidance dated June 1, 2010.

*In a case where an owner or member(s) of the owner's family have a permanent physical disability, a physician's written certification is required before ADA access facilities can be allowed as an eligible cost. Only one ADA-compliant access is allowable for funding unless specified otherwise in applicable State or local codes (for more information on ADA see: <http://www.ada.gov/>). If ramps are not technically feasible to build, a mechanical chair lift may be installed.*

The physician's written certification should contain, but is not limited to the following information:

- name of person requiring Access Facilities and relationship to the homeowner.
  - description of the disability,
  - whether it is temporary or permanent, and
  - the type of ADA access facilities required as a medical necessity.
2. Provide a cost breakdown for the ADA access facilities that meets the minimum industry standards as described in the physician's written certification and the applicable community's codes. Any costs above the minimum requirements are the responsibility of the homeowner and are not subject to reimbursement by the grant program.
  3. \_\_\_\_\_ authorizes the City of Houston and Texas Water Development Board personnel associated with the Flood Mitigation Assistance grant program to review

(Name of homeowner as on deed)

\_\_\_\_\_

(Name of person requiring the Access Facilities and the relationship to the owner)

Physician's written certification as it relates to the request for approval of ADA access facilities for the structure at \_\_\_\_\_

(Address of the structure as on deed)

The City of Houston Flood Mitigation Assistance grant program.



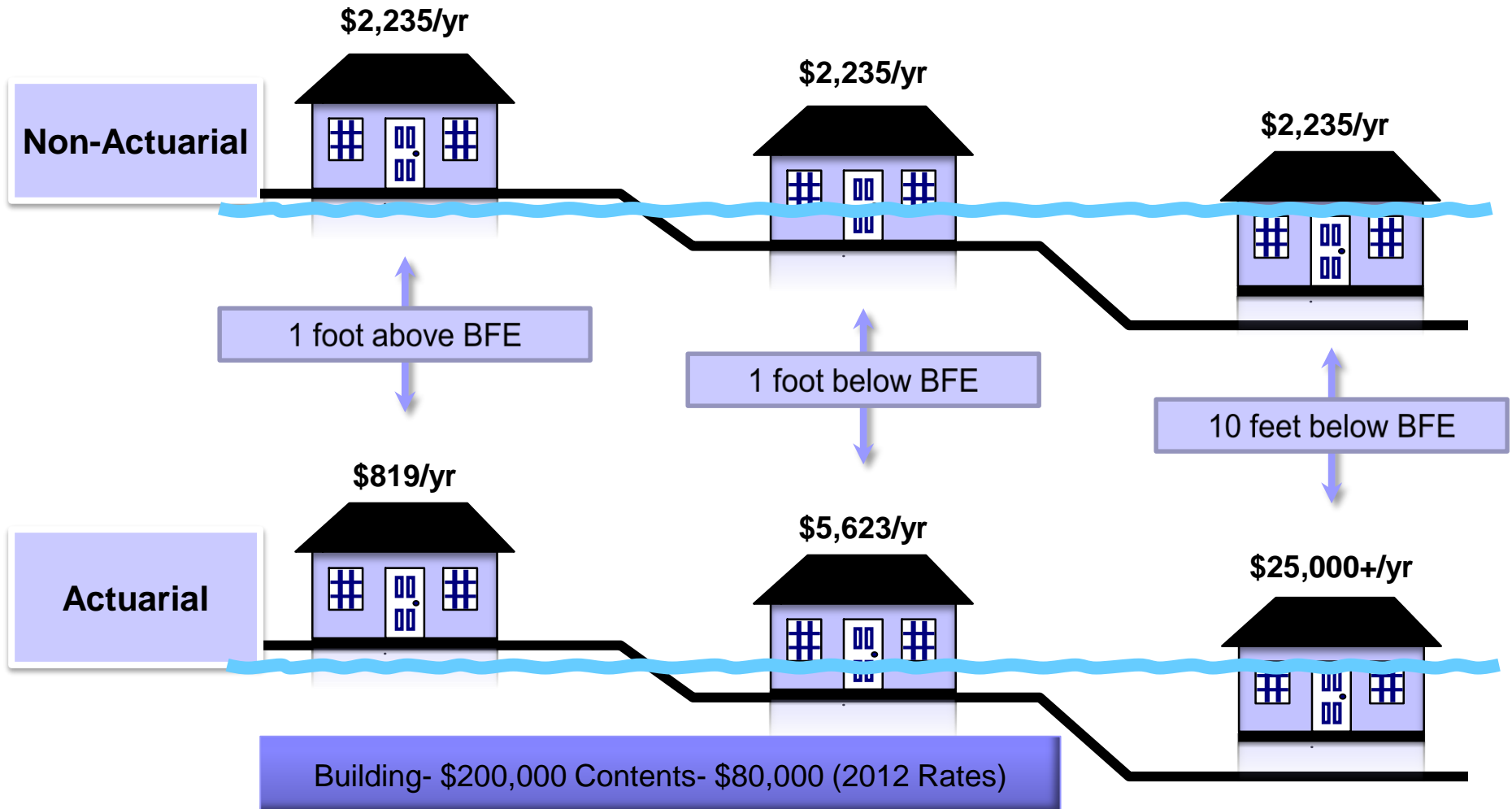
\_\_\_\_\_  
Homeowner Signature

\_\_\_\_\_  
Date

# Duplication of Benefits

- Flood insurance structural payments MAY have to be accounted for in the grant eligible expense
- Increased Cost of Compliance may be able to be use for non federal share
  - For those that are non-SRL
    - In SFHA
    - Coverage D in policy

## Rate comparisons





# What's Changing

- **Subsidies to be phased out**
  - Non-primary residences
  - Business properties
  - Severe repetitive loss properties
  - Properties affected by map changes
- **New policies to be issued at full-risk rates**
  - After a lapse in insurance coverage
  - For properties uninsured as of the law's enactment

# *Questions?*

