



FEMA

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INFORMATION

MEMORANDUM FOR: Regional Administrators
Regions I - X

ATTENTION: Regional Mitigation Division Directors
Hazard Mitigation Assistance Branch Chiefs

FROM: Kayed I. Lakhia, AIA, NCARB, LEED AP, CFM
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SUBJECT: **Update to “Cost-Effectiveness Determinations for Acquisitions and Elevations in Special Flood Hazard Areas Using Pre-Calculated Benefits” Memorandum**

I. Background and Purpose of this Memorandum

In 2013, FEMA’s Hazard Mitigation Assistance (HMA) Division analyzed over 11,000 structures acquired or elevated and found that the average benefits for each project type were \$276,000 and \$175,000 respectively. FEMA is now adjusting these values for inflation.¹

This memorandum supersedes the October 2013 memorandum titled “Cost-Effectiveness Determinations for Acquisitions and Elevations in Special Flood Hazard Areas Using Pre-Calculated Benefits” and updates any values outlined in the 2015 Hazard Mitigation Assistance Guidance, Part IV, I.7, Pre-calculated Benefits for Acquisitions and Elevations in Special Flood Hazard Areas.

II. Scope and Applicability

This memorandum is effective on September 30, 2021.

This methodology is available for all HMA grant programs² and can be applied to new applications as well as pending or selected for further review projects. Additionally, pre-calculated benefits can be used to evaluate cost overruns for approved projects, if a new cost-effectiveness review is being performed.

¹ The Bureau of Labor Statistics’ Consumer Price Index (CPI) Inflation Calculator (<https://data.bls.gov/cgi-bin/cpicalc.pl>) was used to inflate the values.

² HMA grant programs currently includes Hazard Mitigation Grant Program (HMGP); HMGP Post Fire; Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC).

III. Pre-Calculated Benefits for Elevations and Acquisitions

The updated values for use of pre-calculated benefits to determine cost effectiveness of elevations and acquisitions in Special Flood Hazard Areas (SFHA) are:

- Acquisitions: \$323,000 per structure
- Elevations (and Mitigation Reconstruction³): \$205,000 per structure

FEMA has determined that the acquisition or elevation of a structure located in the SFHA (1% annual chance floodplain), as delineated on the Flood Insurance Rate Map (FIRM) or based on best available data, with total project costs⁴ less than or equal to the amount of benefits listed above is considered cost-effective. Alternatively, if the structure's Lowest Floor Elevation (LFE) is lower than the Base Flood Elevation (BFE), the pre-calculated benefits may be used. For projects that contain multiple structures, the average cost of all structures in the project must meet the stated criterion (provided all structures are within the SFHA).

The specific geographic location of structures can increase acquisition and elevation costs. The benefit amounts identified above may be adjusted by using the most current location factors included in industry-accepted construction cost guides. If a multiplier is used, a copy of the source document must be included as part of the grant application.

The applicant or subapplicant must provide a map that clearly identifies the structure's footprint and delineates the SFHA, using the FIRM or best available data. If any part of the structure lies within the SFHA, the applicant or subapplicant can use the pre-calculated benefit value to demonstrate cost-effectiveness. If using the Lowest Floor Elevation (LFE) and Base Flood Elevation (BFE) to qualify, the LFE and BFE should be provided for each structure. No other detailed analysis is required. These pre-calculated benefits can be used in riverine and coastal SFHAs.

Pre-calculated benefits cannot be used to estimate costs. Cost estimates must be based on industry standards, vendor estimates or other acceptable sources. Only documented, eligible, reasonable costs for completed work will be reimbursed.

This memorandum does not replace or supersede the substantial damage BCA waiver for riverine acquisitions.

This determination advances FEMA's strategic goal to reduce complexity and commitment to streamline the HMA programs by eliminating the need for complete benefit-cost analysis for structures meeting the stated criteria. This reduces time and resources needed for data collection, analysis and review, and allows communities to recover from disasters more quickly.

³ Note that the federal share for Mitigation Reconstruction projects is limited. For more information on the federal share limits and other considerations governing Mitigation Reconstruction projects, see 2015 HMA Guidance Addendum, Part D, Mitigation Reconstruction Projects, and any subsequent updates published by FEMA.

⁴ Total project costs include all applicable costs outlined in the 2015 Hazard Mitigation Assistance Guidance and its Addendum, not just the construction costs or federal share.

For additional information on the HMA programs visit <https://www.fema.gov/grants/mitigation>.

If you have any questions, please contact the BCA Helpline. The BCA Helpline contact information can be found on FEMA's Benefit-Cost Analysis website on FEMA.gov, available at <https://www.fema.gov/grants/guidance-tools/benefit-cost-analysis>.