Update to the Discount Rate Used in Benefit-Cost Analysis of Hazard Mitigation Assistance and Public Assistance Projects

FEMA is issuing FEMA Policy 206-23-001 Benefit-Cost Analysis Discount Rate and Streamlined Cost-Effective for Hazard Mitigation Assistance and Public Assistance Programs to implement federal guidance provided by the Office of Management and Budget (OMB) Circular A-94, Appendix D (Nov. 9, 2023) to update the discount rate used in Benefit-Cost Analyses of hazard mitigation projects.

This guidance states that when discounting future benefits and costs in a benefit-cost analysis, a social discount rate of 3.1% should be used. Applicants will not need to take a specific action for this policy change as the 3.1% discount rate is now set as the default rate in the BCA Toolkit. For projects that were already developed in the BCA Toolkit, the new rate will be applied as soon as a project is opened.

What is a Discount Rate and How Does it Impact FEMA programs?

To be eligible for funding under FEMA's Hazard Mitigation Assistance (HMA) and Public Assistance (PA) programs, hazard mitigation projects must demonstrate cost-effectiveness. Most Hazard Mitigation Assistance and some Public Assistance projects demonstrate cost-effectiveness by using the Benefit-Cost Analysis (BCA). A BCA is a quantitative analysis used to assess the benefits and costs of a hazard mitigation project by comparing the disaster impacts avoided by the mitigated project, to the cost of the project over its useful life.

The BCA compares the present value of future benefits and costs of a hazard mitigation project through a BenefitCost Ratio (BCR). FEMA considers a project to be cost-effective when the BCR is 1.0 or greater. Since different discount rates have been used for different Hazard Mitigation Assistance grant programs, the impact on a specific project BCR depends on the discount rate used. Compared to projects recently evaluated using a 7% discount rate, the decrease to a 3.1% discount rate should result in an increase in the BCR (all else equal), and an increase in the likelihood that a project is determined to be cost-effective. Alternately, compared to projects recently evaluated using a 3.0% discount rate (e.g., FY23 BRIC and Flood Mitigation Assistance notice of funding opportunities), the small increase to a 3.1% discount rate should result in a small decrease in the BCR (all else equal) and a small decrease in the likelihood that a project is determined to be cost-effective.
The Impact of a Lower Discount Rate on FEMA Hazard Mitigation Projects

A lower discount rate of 3.1% will make it easier for many applicants and subapplicants to demonstrate cost-effectiveness of hazard mitigation projects, including infrastructure projects that address long-term climate-related challenges.

By making it easier to demonstrate cost-effectiveness for hazard mitigation projects, applicants and subapplicants can more effectively implement and fund critical resiliency initiatives that will save lives and protect infrastructure and property.

Applicability of New Discount Rate

The new 3.1% discount rate is effective immediately upon signature of FEMA Policy 206-23-001. FEMA’s Benefit-Cost Analysis Toolkit has the discount rate built into its calculations and is updated automatically. Applicants do not need to perform separate calculations or redownload the BCA Toolkit to use the new discount rate.

- For the Building Resilient Infrastructure and Communities (BRIC) Program, the Flood Mitigation Assistance (FMA) Program, and Congressionally directed Pre-Disaster Mitigation (PDM) program, this policy will apply to application periods that open on or after the signature date of the policy. FEMA has established a set discount rate of 3.0% to be used in a BCA for hazard mitigation projects for the FY 2023 BRIC and Flood Mitigation Assistance cycles, including Flood Mitigation Assistance Swift Current. Phased projects that fall under the 3.0% discount rate identified by FY 2023 funding opportunities may use the funding opportunities discount rate for both phases of the project if the phased projects fall under the same grant award. However, if phase 2 is awarded as a new grant and is under a future funding opportunity, then the discount rate established in A-94 must be used.

- For the Hazard Mitigation Grant Program (HMGP), this policy applies to open major disaster declarations and to major disasters declared on or after the signature date of this policy.

- For HMGP Post Fire, this policy applies to any open Fire Management Assistance Grant (FMAG) declarations and to FMAGs declared on or after the signature date of this policy.

- For the Public Assistance (PA) Program, this policy applies to disasters declared on or after the date of this policy. For open disasters, this policy will apply to unobligated projects and to obligated projects that do not have an approved Hazard Mitigation Proposal included.

- This policy does not affect any other programmatic eligibility requirements for projects proposed through FEMA programs, including Hazard Mitigation Assistance and PA programs.

PREVIOUSLY SUBMITTED PROJECTS NOT MEETING THE COST-EFFECTIVENESS REQUIREMENT

Applicants and subapplicants may have submitted projects that had BCRs of less than 1.0 and thus did not meet FEMA’s cost-effectiveness requirement. With the updated discount rate, some of these projects may now have BCRs of 1.0 or greater. If applicants and subapplicants want these projects to be considered for funding, they will need to update their project BCAs in the BCA Toolkit (see the “How to Update Projects in the BCA Toolkit” section below for
instructions). If the updated BCR is 1.0 or greater, the project may be considered cost-effective pending FEMA review of the BCA and associated documentation.

- For Hazard Mitigation Grant Program and HMGP Post-Fire projects:
  - If the application period remains open and the application was previously denied, applicants may resubmit the BCA using the 3.1% discount rate for FEMA to re-evaluate only the cost effectiveness of projects within the application.
  - For projects that were denied by FEMA based on BCA review and for which the application period is closed, applicants may request that FEMA re-evaluate those projects for cost-effectiveness under the 3.1% discount rate, provided the appeal time frame has not passed and the appeal requirements in Title 44 Code of Federal Regulations 206.440 are met.
  - For projects that are currently under review, FEMA will consider the 3.1% discount rate if no final determination on the project award has been concluded as of the signature date of FEMA Policy 206-23001.
  - FEMA will not reopen any application periods for HMGP or HMGP Post-Fire due to the discount rate policy change. For declarations with closed application periods, applicants and subapplicants may not submit any new subapplications. Any changes to the scope of work must align with the parameters established in Part 8 of the Hazard Mitigation Assistance Program and Policy Guide (fema.gov).

- Public Assistance Mitigation projects:
  - This policy applies to disasters declared on or after the date of the policy.
  - For open disasters, this policy will apply to unobligated projects and to obligated projects that do not have an approved Hazard Mitigation Proposal included.
  - Hazard mitigation specialists should use the 7% discount rate for any BCAs conducted on obligated projects that had a hazard mitigation proposal associated with it prior to the issuance of the Discount Rate Policy.

**How to Update Projects in the BCA Toolkit**

Applicants and subapplicants (Recipients and Subrecipients, for Public Assistance) will not need to take a specific action for this policy change as the 3.1% discount rate is now set as the default rate in the BCA Toolkit and will automatically be applied to updates of existing projects. Please see below for more details.

Previously created Hazard Mitigation Assistance Grant Projects (HMGP, HMGP Post Fire, BRIC, Flood Mitigation Assistance, and Pre-Disaster Mitigation and unobligated Public Assistance Hazard Mitigation Proposals), will display an exclamation point symbol at the righthand side of the project row on the home screen noting that the project contains outdated mitigation actions (see Figure 1). However, projects will not update with recalculated benefits and costs unless the user opens the project. An illustration of the process is provided below.
To update a previously created project with the new discount rate:

1. Click on the project title on the home screen within the BCA Toolkit¹.
2. Click the mitigation action title on the Project Summary screen. You will see a sidebar message noting that you are about to open a mitigation action that is inconsistent with the current build of the BCA Toolkit. Click OK.
3. On the Project Configuration screen, ensure the project data is still accurate and click Next.
4. On the second screen, ensure the project data is accurate and click Finish.
5. If there are multiple mitigation actions in your project, you will need to repeat this same process for each one. Once finished, the BCA Toolkit will recalculate the benefits and costs of the project using the 3.1% discount rate and then update the results display on the Project Summary and Home screens.

To attach the updated BCA file in your project application, export the project file as a .zip or .xlsx file type and upload this file, along with any supporting documentation, in FEMA GO or other application system.

Questions

For questions about BCAs or the BCA Toolkit, email the BCA Helpline at bchelpline@fema.dhs.gov or call toll free at (855) 540-6744, 9 a.m. - 5 p.m. Eastern Time, Monday - Friday. Note that the BCA Helpline cannot review or perform BCAs. For assistance with performing or reviewing a BCA, or for obtaining answers to eligibility or policy questions, please visit FEMA.gov to learn more or contact your local State Hazard Mitigation Officer. For policy or guidance related questions, please contact the Hazard Mitigation Assistance Program and Policy Guide team at fema-hmaguide@fema.dhs.gov. For questions related to the Public Assistance Policy, please contact fema-recovery-papolicy@fema.dhs.gov.

¹ For details on how to access and download the BCA Toolkit please visit: How to Perform a Full BCA | FEMA.gov.