**Benefit Cost Analysis Overview – Supplemental Material**

**Common Acroynms:**

* ASCE-American Society of Civil Engineers
* BCA- Benefit-Cost Analysis
* BCR- Benefit-Cost Ratio
* BFE- Base Flood Elevation
* BRV- Building Replacement Value
* DFA- Damage-Frequency Assessment
* FFE- First Floor Elevation
* FIRM- Flood Insurance Rate Map
* FIS- Flood Insurance Study
* HMA – Hazard Mitigation Assistance
* FMA- Flood Mitigation Assistance
* H&H- Hydrology and Hydraulics
* HMGP- Hazard Mitigation Grant Program
* LOF- Loss of function
* PA- FEMA Public Assistance
* PDM-Pre-Disaster Mitigation
* PVC- Present Value Coefficient
* RI-Recurrence Intervals
* SFHA-Special Flood Hazard Area

**Resource Links:**

**BCA Reference Guide -** <https://www.fema.gov/media-library/assets/documents/18870>

This is a resource that provides more in-depth information on putting together a complete BCA. It includes appendices that explain what is expected of various BCA inputs and where some standard values used in the FEMA BCA Tool come from (note that the standard value of certain items have changed since publication).

**Supplement to BCA Reference Guide** - <https://www.fema.gov/media-library-data/1396549910018-c9a089b8a8dfdcf760edcea2ff55ca56/bca_guide_supplement__508_final.pdf>

This is a supplement to the BCA Reference Guide and includes very in-depth information on where to get information for flood and wind retrofit projects. This also includes some examples of using the FEMA BCA Tool in calculating loss of function of critical facilities such as police stations, fire stations, and hospitals.

**HMA Guidance** - <https://www.fema.gov/media-library-data/1424983165449-38f5dfc69c0bd4ea8a161e8bb7b79553/HMA_Guidance_022715_508.pdf>

This document explains FEMA’s HMA grant programs. It contains information on eligible (and ineligible) activities, plan requirements, requirements for showing cost-effectiveness (and BCA), and additional program guidance.

**HMA Guidance Addendum** - <https://www.fema.gov/media-library-data/1424983165449-38f5dfc69c0bd4ea8a161e8bb7b79553/HMA_Addendum_022715_508.pdf>

This document contains additional hazard-specific information on acquisition, wildfire, safe room, mitigation reconstruction, and elevation projects. This includes a list of eligible (and ineligible) wildfire mitigation activities.

**HMA Job Aids -** <https://www.fema.gov/media-library/assets/documents/102051>

This includes resources for specific types of projects that includes information on eligibility and the types of information required for certain project types.

**FEMA Building Science Publications** - <https://www.fema.gov/building-science-publications>

This includes hazard-specific resources aimed at providing information to choosing and implementing successful hazard mitigation projects, including seismic, flood, and wildfire projects.