FEMA

Job Aid

PUBLIC ASSISTANCE: REASONABLE COST EVALUATION

The Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program provides supplemental assistance to States, Territories, Tribes, and local governmental entities, as well as certain private nonprofit (PNP) organizations (hereinafter referred to as Applicants). FEMA's *Public Assistance Program and Policy Guide* (http://www.fema.gov/public-assistance-policy-and-guidance) provides comprehensive information regarding assistance that FEMA can provide and the requirements that Applicants must follow in order to receive the assistance. This Job Aid supersedes FEMA's *Public Assistance Alternative Procedures Pilot Program Validation of Subgrantee-Provided Cost Estimates Job Aid*, dated May 20, 2013. It provides uniform guidance to FEMA personnel on evaluating cost reasonableness for Federal funds expended by non-Federal entities, also referred to as Applicants in this guidance, under the PA Program in accordance with Title 2 Code of Federal Regulations (CFR) § 200.404, and for disasters declared prior to December 26, 2014, in accordance with 44 CFR part 13 and the Office of Management and Budget (OMB) Circular A-87. This Job Aid includes a checklist in Appendix A: *Validation of Applicant-Provided Cost Estimates*, which FEMA staff must use to review and validate cost estimates submitted to FEMA for Permanent Work.

Applicability

This guidance applies to any assessment of cost reasonableness undertaken by FEMA for relevant work completed under a PA grant award or subaward. It provides general information to guide FEMA personnel in evaluating whether costs are reasonable including when necessary as the result of a financial review such as closeout or administrative appeals, Department of Homeland Security Office of the Inspector General (DHS OIG) audits, single audits under 2 CFR part 200, and Improper Payments Elimination and Recovery Act audits.

Cost eligibility is a basic component of PA Program eligibility, and in order for a cost to be considered allowable, it must be necessary and reasonable to accomplish the work properly and efficiently.[1] FEMA evaluates cost reasonableness for all projects. In addition, the determination of cost reasonableness is also instructive with regard to grant non-compliance enforcement remedies. Generally, FEMA considers an Applicant's force account labor, equipment, and materials costs as reasonable provided the costs are consistent with the entity's policies including, but not limited to, pay rates, labor policies, and cost schedules utilized during its normal operations. Contract costs are generally considered reasonable when the Applicant adheres to full and open competition under applicable Federal procurement under grant requirements, and the scope of services or work in the contract and level of effort is consistent with respect to the eligible scope of work. For these situations, FEMA staff are not required to perform a detailed cost reasonableness analysis.

[1] 2 CFR § 200.403

Reasonable Costs – General Information

Definition[2]

A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost.

Factors to Consider in Determining Reasonable Costs[3]

FEMA considers many factors in evaluating whether costs are reasonable, including:

Factor	Example
Whether the cost is of a type generally recognized as ordinary and necessary for the operation of the Applicant or the proper and efficient performance of the Federal award	The appropriate skill level and/or level of effort to complete the required activity
The restraints or requirements imposed by such factors as: sound business practices; arm's length bargaining; Federal, Tribal, State, local, and other laws and regulations; and terms and conditions of the Federal award	Whether the Applicant participated in ethical business practices, ensuring parties to a transaction are independent of each other, without familiar ties or shared interests and on equal footing without one party having control of the other
Market prices for comparable goods or services for the geographic area, particularly in the context of post-disaster conditions, which may cause shortages of skilled labor, building materials, and energy sources	When escalated costs are due to shortages, FEMA considers whether the Applicant's work continued beyond the period of shortages and whether there was an opportunity for the Recipient/Subrecipient to obtain more reasonable pricing
Whether the individuals concerned acted with prudence in the circumstances considering their responsibilities to the Applicant, its employees, its students or membership, the public at large, and the Federal Government	Were there emergency or exigent circumstances?
Whether the Applicant significantly deviates from its established practices and policies regarding the incurrence of costs, which may unjustifiably increase the Federal award's cost	Did the Applicant comply with procurement requirements?

FEMA also considers project-specific complexities that may affect costs, such as: environmental or historic issues; remote access or location; provision of a unique service with few providers; and elements requiring an extraordinary level of effort.

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[2] 2 CFR § 200.404; OMB Circular A-87

[3] Id.

Process to Determine Reasonable Costs

In conducting a reasonable cost analysis, FEMA will perform a preliminary review of the documentation to assess the complexity of the project and expertise required to complete the analysis. If specialized expertise is required, FEMA will utilize a subject matter expert with the appropriate specialized skills, knowledge, experience, or capability in the appropriate field such as engineering, architecture, or cost estimating.

FEMA, in consultation with the subject matter experts as necessary, will then determine the appropriate methodology or methodologies to assess reasonable costs. This assessment will be based on several factors, such as the circumstances surrounding the event, availability of materials, project type, complexity, sole sourcing, best construction practices, codes and standards, and other relevant information available at the time of evaluation. This may require requesting additional information from the Applicant. If the Applicant does not provide supporting documentation, FEMA will inform the Applicant of the determination to deobligate funding or to deny obligation of funding, as applicable, and the Applicant may appeal the determination and provide necessary information at that time.

If the costs determined reasonable are lower than actual costs for the subaward, FEMA's Office of Chief Counsel (OCC) may also review the findings, where warranted. An example of where engagement with OCC may be necessary is determining if an Applicant's contract evaluation (resulting in award to higher bidder) was performed correctly. While PA costing specialists have the qualifications to determine reasonable costs, OCC has contracting and procurement qualifications and PA should engage OCC in such an evaluation whenever uncertain contract award selection questions arise.

FEMA will record the results of the reasonable cost analysis in the appropriate award file or Grants Management System.

Methodology to Determine Reasonable Costs

The method(s) used to evaluate costs will depend on the type of project and the resources and information available. The first step in any evaluation of reasonable costs is to verify that all items of work included in the cost are eligible. If an item is not eligible based on the approved scope of work, FEMA will remove the associated cost from the estimate. FEMA will then notify the Recipient and Subrecipient accordingly if ineligible items have been removed. FEMA then evaluates whether costs for the approved scope of work are comparable to relevant current market prices for similar goods or services using the best information available for the project, which may include any of the following resources.

1. Validation of Recipient or Subrecipient's Cost or Price Analysis

Per 2 CFR § 200.323(a), non-State Applicants must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold, including contract modifications. The method and degree of analysis depends on the facts surrounding the particular procurement situation, but as a starting point, the non-State Applicant must make independent estimates before receiving bids or proposals. While State entities are not required by 2 CFR § 200.323(a) to conduct a cost or price analysis, it is advisable that they do so in completing their procurements.

When an Applicant provides a cost or price analysis, FEMA will review the analysis as part of its evaluation of reasonable costs. For example, this may be useful in evaluating reasonableness when price competition is lacking or when the selection was non-compliant with the applicable procurement under grant requirements even though there may have been price competition.

If the Applicant does not submit a cost or price analysis (because not required to do one in the case of State entities, or because it did not do one as required in the case of non-State entities) and price competition was lacking or its selection was non-compliant with the applicable procurement under grant requirements, then FEMA should identify the elements that would otherwise have been a part of a cost or price analysis (for more information, see the detailed resources available from FEMA's Procurement Disaster Assistance Team here: https://www.fema.gov/procurement-disaster-assistance-team). FEMA may request that the Applicant provide this information in order to evaluate reasonable costs.

The cost or price analysis is one component of documentation that an Applicant may use to support that its costs are reasonable. FEMA may use the methodologies described below to evaluate costs both in conjunction with, and in the absence of, this information, as appropriate.

2. Historical Costs and Average Weighted Unit Prices

FEMA may compare the Applicant's costs to the Applicant's historical costs for a similar scope of work or items. Where an Applicant procures the same or similar supplies or services over a period of time, an Applicant may be able to provide documentation of historical costs to demonstrate comparable costs, adjusted for inflation or other factors as necessary. Other factors may include, but are not limited to, changes in codes and standards, availability of in-kind construction material, quantity, delivery schedules, and the economy. This may not be a flat inflation rate, because some types of work may have a different inflation rate than others. There are tools available to account for differences in inflation rates. FEMA's Cost Estimating Format (CEF) employs a nationally recognized economic inflation factor. An Applicant may provide previous contracts, invoices, or other documentation to demonstrate that its current costs are comparable to historical costs for similar supplies or services.

FEMA may also use weighted average unit pricing and related specifications from the Applicant or the Applicant's respective State or regional agency, such as the Department of Transportation. Average weighted unit prices are comprised of historical bid tabulation average costs and related specifications from competitive bid pricing solicitations respective to the area. These prices are generally inclusive of all factors required to bid public works projects, such as performance bonds, bid bonds, overhead and profit, and general conditions.

3. Published Unit Costs: Industry Standard Information Resources

There are many circumstances where it is appropriate and necessary to use published unit costs to evaluate the reasonableness of a project's costs. For example, where appropriate local data cannot be developed or obtained, industry standard construction cost estimating resources are the recommended sources of information for preparing an estimate against which to evaluate an Applicant's actual costs. This is due to their wide acceptance in the industry and the availability of data for nationwide use. Examples of such sources are RSMeans, BNi Costbooks, Marshall and Swift, and Sweet's Unit Cost Guide. Depending on the complexity of the project, FEMA will utilize an experienced cost estimator or other subject matter expert with appropriate technical experience and validate costs using RSMeans (or other cost estimating resources as appropriate) and FEMA's CEF.

A reviewer using this method must ensure that the current cost data publications for the project at issue are used, and if necessary, confirm that the appropriate locality adjustment factor from the cost estimating publication is used.

While industry standard construction cost estimating resources are recommended for use, these publications may not always provide work items that are appropriate or applicable to the construction activities required to complete the project. When industry standard cost data is not appropriate, other sources should be considered, such as local cost data from Other Federal Agencies or other State agencies responsible for construction of similar facilities in or near the locality.

4. Comparable Costs of Other Applicants

FEMA may also compare the Applicant's costs with a different Applicant with a properly procured contract for a project with a similar scope of work in the same geographic area under similar circumstances. Factors to consider here are: events and a scope of work of comparable magnitude; contracts of a similar nature; and any applicable market factors and/or any other unique circumstances that may impact either of the costs respectively.

5. FEMA Cost Codes

FEMA maintains a national unit price listing called cost codes and periodically adjusts this listing to conform with geographical and disaster-specific needs. FEMA cost codes may be used when a cost is not found in other published unit costs or if the cost codes are otherwise more applicable than other published costs. FEMA cost codes may be useful for determining reasonableness of force account costs. If using this methodology, a reviewer must check the date of the cost codes to ensure they are applicable to the project at issue. This needs to be considered for both regional and national cost codes, as appropriate.

6. Use of Least-Cost Alternative, or Low Bid

There may be situations where use of the least-cost alternative, or the low bid, is the appropriate remedy when establishing a reasonable cost for procurements that do not comply with federal grant requirements. However, this determination requires an analysis to understand the context surrounding the project and if there are any extenuating circumstances or mitigating factors demonstrating why the least cost alternative may not be appropriate.

For example, when it is necessary to conduct a reasonable cost analysis for Applicant A's debris removal operation, and Applicant B located in the same or nearby geographic area has a properly procured contract for a similar scope of work, FEMA may compare the projects and associated costs. Applicant B has lower costs for a similar scope of work. Using the least cost alternative option in this situation would be to determine that Applicant B's lower costs are the only reasonable costs and to apply those to Applicant A's project. While this may ultimately be the correct remedy, this determination is premature without evaluating whether Applicant A is able to justify its higher costs. For example, Applicant A may be able to demonstrate mitigating factors affecting costs such as the economy of scale of the project (i.e., Applicant B's project was similar but larger and therefore costs were negotiated at a lower rate), or longer haul routes in Applicant A's geographic area due to different damage impacts or landfill locations.

When a necessary reasonable cost analysis has been conducted and costs appear high for a project, there are several possible scenarios to determine reasonableness. For example, if an Applicant is able to provide a justification for the increased costs, FEMA employs experts and/or seeks out expert assistance from professionals familiar with evaluating applicable factors to determine whether the higher costs are reasonable based on the Applicant's justification.

Another example is when an Applicant cannot substantiate why a higher bidder was selected based on its selection criteria set forth in its Request for Proposal. In this circumstance if an Applicant's lowest responsible bidder has an appropriate scope of work, the low bid will establish the reasonable costs. However, the determination to use the low bid should be based on an Applicant's ability to demonstrate the reasonableness of its costs based on the circumstances.

References

FEMA has developed comprehensive instructional aids and guidance in this area. See the following resources for additional information about reasonable costs.

- CEF for Large Projects Instructional Guide V2.1 (September 2009)
- Pricing Guide for Recipients and Subrecipients Under the Uniform Rules (2 CFR Pt. 200), dated May 1, 2016

Appendix A

Validation of Applicant-Provided Cost Estimates

This Appendix provides a checklist that FEMA staff must use to review and validate cost estimates submitted to FEMA for Permanent Work. FEMA staff may also use relevant portions of this checklist for Emergency Work, if necessary. FEMA will include this checklist in the associated subaward file in Grants Manager and EMMIE.

The steps for validating Applicant-provided cost estimates are as follows:

1. **Verify that the estimate:**
   - ☐ Is prepared by a licensed Professional Engineer or other estimating professional, such as a licensed architect or certified professional cost estimator[4] who certifies that the estimate was prepared in accordance with industry standards.
   - ☐ Includes certification that the estimated cost directly corresponds to the repair of the agreed upon damage.
   - ☐ Is based on unit costs for each component of the SOW and not a lump sum amount.
   - ☐ Contains a level of detail sufficient for FEMA to validate that all components correspond with the agreed-upon SOW.
2. **Review the scope of work and cost estimate to verify that only eligible items are included.**
   - ☐ The scope of work items in the cost estimate are required based on the agreed-upon damage description and dimensions.
   - ☐ The scope of work included ineligible items, and FEMA has removed the ineligible components from the estimate (documentation detailing the components removed and reason for removal is attached).
   - ☐ The scope of work included ineligible items, and FEMA is returning the estimate to the Applicant to revise.
3. **Determine whether unit costs are from an approved source of industry standard information and whether current cost data publications were used.**

   There are numerous sources that may be used in the preparation of cost estimates.
   - ☐ The Applicant used the following appropriate cost estimating resource(s):
     - ☐ Industry standard construction cost estimating resource
       - ☐ RSMeans
       - ☐ XActimate
       - ☐ BNi Costbooks

[4] In lieu of a license or certification, an individual with professional experience and proficiency in the field of cost estimating may prepare and sign the cost estimate.

- ☐ Marshall & Swift
- ☐ Sweet's Unit Cost Guide
- ☐ Other____

- ☐ Local cost data from____
- ☐ Contract unit costs from recently completed projects
- ☐ Other:____

- ☐ FEMA returned the estimate to the Applicant to revise as the Applicant did not use an appropriate cost estimate resource.

4. Determine the components of unit costs.

Ensure that the components that make up the unit costs are fully understood. The purpose of this review is to ensure that components of the unit costs are not duplicated elsewhere in the cost estimate.

- ☐ The estimate contained sufficient information related to the components of the unit costs:
  - ☐ Each unit cost represented a complete and in-place cost that included all labor, equipment, materials, small tools, incidentals, and hauling costs necessary to complete that element of work.
  - ☐ Unit costs were analyzed to determine if general contractor overhead and profit were included in the unit costs:
    - ☐ Both general contractor and subcontractor overhead and profit are included in the unit costs and these costs are not duplicated elsewhere in the estimate or in the CEF.
    - ☐ Overhead and profit are not included in the unit costs.
    - ☐ Overhead and profit are duplicated in the estimate.
    - ☐ Costs for surveying, construction inspection, and permit compliance fees are not duplicated (i.e., not included within a unit cost and separately in the estimate).
- ☐ The estimate did not contain sufficient information related to the components of the unit costs. FEMA requested additional information from the Applicant.

5. Validate the cost estimate for completeness and reasonableness.

- ☐ The cost of work items are reasonable based on a representative sample.
- ☐ FEMA has determined costs for items of work in the estimate to be unreasonable (see attached). Therefore, the estimate was returned to Applicant to revise.
- ☐ All items of work included in the cost estimate are eligible.
- ☐ FEMA has removed ineligible items of work from the cost estimate (see attached).
- ☐ All work activities required to complete the work are quantified with unit costs.
- ☐ The cost estimate included lump sum amounts for work activities that need to be adjusted to unit prices. FEMA has returned the estimate to the Applicant for revision.
- ☐ The appropriate locality adjustment factor from the cost estimating publication is used for each

line item, as applicable. Where historical costs were used, a locality adjustment was not applied, but cost escalation factors were added.

- ☐ The appropriate locality adjustment factor from the cost estimating publication was not used (see attached) or, as historical costs were used, a locality adjustment was inappropriately applied.
- ☐ Cost items checked are within 10 percent of the local average weighted unit prices or industry standard construction cost data (based on a review of at least six of the ten largest cost items against local average weighted unit prices or industry standard construction cost data (or there were less than ten cost items and all were reviewed) and based on reviewing at least 25 percent of the remaining cost items against local average weighted unit prices or industry standard construction cost data.
- ☐ Cost items checked are not within 10 percent of the local average weighted unit prices or industry standard construction cost data; therefore, the estimate was returned to Applicant to revise.

Date Review Completed______________________

Date of Information Requests to Applicant_________________________

Name of Reviewer__________________________

Reviewer Signature________________________________