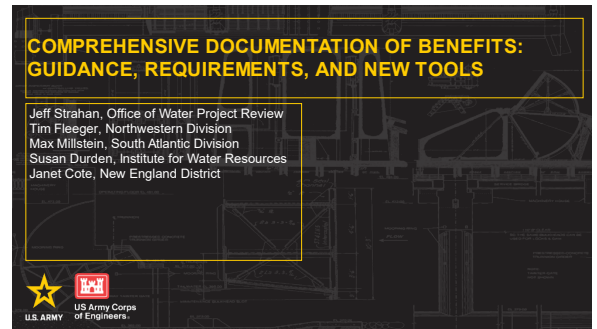


Comprehensive Documentation of Benefits: Guidance, Requirements, and New Tools  
28 September 2023  
Q&A Summary

*This webinar is part of the Planning Fundamentals Series and provided an overview of the guidance and requirements associated with the comprehensive documentation of benefits in decision documents. Presenters Jeff Strahan (Economics Team Lead, HQUSACE Office of Water Project Review); Tim Fleeger (Policy and Environmental Coordinator, Northwestern Division); Max Millstein (Senior Economist, South Atlantic Division); Susan Durden (Economist, Institute for Water Resources); and Janet Cote (Project Manager, New England District) introduced new tools to aid study teams in the selection of metrics and analysis for different Civil Works mission areas, including Comprehensive Benefit Evaluation Scoping Tool (C-BEST), IWR's suite of Quick Look Tools, and examples developed to aid study teams in displaying the performance of alternatives against a variety of fields in a "table of effects." Presenters also discussed a case study to highlight a practical application of consideration and documentation of benefits in the four P&G (Principles and Guidelines) accounts: National Economic Development, Regional Economic Development, Environmental Quality, and Other Social Effects.*



*Note: Once finalized, all tools discussed during the webinar will be made available on the Planning Community Toolbox within the [Apps, Tools, and Software collection](#). Tables of effects examples will be available on the [Report Writing and Communication collection](#).*

*This summary of the Question/Answer session of the webinar is not a transcription; questions and responses have been edited and reordered for clarity.*

### **C-BEST Tool**

The Comprehensive Benefit Evaluation Scoping Tool (C-BEST) provides a starting point for study teams considering appropriate effect categories. Example and commonly used effect categories are presented by mission area for each of the four P&G (Principles and Guidelines) accounts: National Economic Development, Regional Economic Development, Environmental Quality, and Other Social Effects. This tool does not contain an exhaustive list of all possible benefit categories. Many projects will have benefits unique to their specific circumstances, and some projects will require unique metrics and measurement methodologies. The benefit categories provided should be used as a starting point and augmented or expanded as necessary.

### **Who is primarily responsible for filling out C-BEST?**

The study team – including the non-federal partner -- should work together on filling out C-BEST, but with the lead planner and economist taking the lead for data input.

### **Should study teams use one spreadsheet/ workbook for each alternative in the C-BEST tool?**

Currently, the C-BEST tool doesn't look at results across alternatives, although users can add a separate column for each alternative plan if this is helpful. In general, the tool is intended to show what type of effect any one of the alternatives might have (i.e., what the effect of the project in general might be) within a certain category. This information can then be used to inform the formal alternatives analysis.

### **IWR “Quick Look” Tools**

IWR has developed a series of Other Social Effects “Quick Look” tools to assist study teams in orienting themselves to opportunities and potential impacts on communities within the study area.

- The Community Profile Dashboard (OSE Dashboard) provides a quick visual comparison of the demographics in nine demographic categories (for example, percentage of households without vehicles available) of selected census tracts against the county (counties) and state. This allows a literal 10-minute assessment of the likelihood that OSE will be an important element in a study.
- The Social Vulnerability Index Explorer (SOVI-X) allows analysis of alternatives and “without project” and “with project” assumptions for study area/sub-areas based on a social vulnerability index. Data is drawn directly from the census and addresses over 70 sources of vulnerability.
- The Comprehensive Benefits Tool provides planners with a way to compare plans against multiple user defined criteria in a “stripped down” version of multi-criteria decision analysis tools.

#### **Does the Quick Look Comprehensive Benefits Tool utilize the Multi-Criteria Decision Analysis (MCDA) module from the [IWR Planning Suite](#) or are these different MCDA approaches/tools?**

The Comprehensive Benefits Quick Look Tool is a stripped-down version of a MCDA. It is focused on getting a fast, simple comparison of alternative plans across multiple user-defined criteria (e.g., NED impacts, impacts to Environmental Justice communities) by evaluating measures or plans for each of the four accounts (NED, Regional Economic Development [RED], Other Social Effects [OSE], and Environmental Quality [EQ]) *early on in the planning process using existing data.*

The Quick Look Comprehensive Benefits Tool only has one criterion per account and isn't intended to replace a full MCDA. A full MCDA will have multiple criteria in each account and the MCDA module in the IWR Planning Suite is appropriate for those comparisons. *Note: The IWR Planning Suite is certified to do MCDA and can do basic weighting, among other methods.*

#### **Is there guidance regarding how study teams should determine the weights for the criteria in the Quick Look Comprehensive Benefits Tool?**

Choosing the weights for each criterion is subjective and should be done by someone familiar with the goals of the project and the concerns of the community. Additionally, the Quick Look Comprehensive Benefits tool has a worksheet to help determine weights that users may choose to use rather than assigning them.

For further information on determining weights, refer to [the existing IWR Planning Suite manuals](#) and the [previous PCoP webinar on the MDCA module within the IWR Planning Suite](#). Study teams can conduct a multi-criteria decision analysis without using a quantitative MCDA approach – weights are not necessary to make a case considering multiple criteria.

#### **Does the Quick Look Comprehensive Benefits Tool qualify as a formal MCDA procedure, which per the [pre-publication Engineer Regulation 1105-2-103](#) (Policy for Conducting Civil Works Planning Studies, formerly the Planning Guidance Notebook) requires coordination with and approval by HQUSACE in advance?**

No. The Quick Look Comprehensive Benefits Tool is for looking at “what ifs” based on one criterion, so it is not a full or formal MCDA.

**How long does it take to input alternatives into the Social Vulnerability Index-Explorer (SOVI-X)?**

It takes an average of four to eight hours to initially set up SOVI-X for a study or project. After it is set up, it takes an hour or so to input each alternative.

**Is the Quick Look OSE Dashboard data based on county census or a finer area of resolution related to the study area (which might be a subset of the county)?**

The data for the Quick Look OSE Dashboard is based on census tract data.

**How is the Quick Look OSE Dashboard different from [CEQ's Climate and Economic Justice Screening Tool](#) or [EPA's EJScreen tool](#)?**

The OSE Dashboard is an alternative for quick and easy assessments of the likely importance of OSE in an area. The Dashboard identifies an area of consideration based on census tracts. The nine factors that are addressed do not include the range of environmental factors which are address in the CEQ and EPA tools.

**General Use of Comprehensive Benefits Analysis Tools**

**Will any of the tools discussed in the presentation be certified as planning models, per [Engineer Circular 1105-2-412, Assuring Quality of Planning Models](#), because they evaluate alternatives and provide information that will be used to compare and select the tentatively selected plan?**

C-BEST is not a model; it does not conduct any evaluation or analysis that informs the planning decision. It provides a list of potential benefit categories in each of the four accounts that study teams may use to consider how to evaluate project performance against the study's problems, opportunities, objectives and constraints.

The technical portion of SOVI-X is not new. It has been available and used by USACE study teams for many years. The soon-to-be released refresh makes it a stand-alone tool utilizing current technology. As a tool, it manipulates census data and provides outputs that teams can use in their tasks; it does not do evaluation.

**Do quantitative analyses that compare the alternatives need inundation grids or boundaries?**

For a flood risk or coastal storm risk management project, study teams need to have some idea of where the impact is going to occur, whether via inundation grids, boundaries, or some other method. There is a research effort underway to quantify second and third order effects to utilities via the Engineer Research & Development Center's Research Area Review Group/R&D program; planners should look out for the results of this research to inform future work.