Generally Accepted Value for Money Analysis Principles & Standards

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BACKGROUND AND CONTEXT

Most agencies would agree that conducting a robust comparison of project delivery models, often referred to as a Value for Money (VfM) analysis, to inform the selection of the best option is good practice. Moreover, Sections 11508 and 70701 of the Infrastructure Investment and Jobs Act (IIJA), signed into law on November 15, 2021, require VfM analysis for specific categories of projects that are carried out using Federal financial assistance.

In 2023, the Build America Center (BAC) introduced the **Generally Accepted Value for Money Analysis Principles** (hereafter VfM Analysis Principles), which compile a set of commonly recognized principles to enhance clarity and consistency in communication about VfM analysis across the U.S. infrastructure sector.

Building on this foundation, in 2025, the BAC developed the **VfM Analysis Standards**, which operationalize the VfM Analysis Principles. The standards serve as a comprehensive checklist to promote consistency in VfM analyses and ensure alignment with the IIJA's requirements.

The development of both the VfM Analysis Principles and the VfM Analysis Standards has been an industry-driven effort, incorporating extensive stakeholder engagement. To ensure the VfM Analysis Principles reflected widely accepted best practices, the BAC conducted a survey to solicit input from practitioners, agencies, and other stakeholders involved in conducting or reviewing VfM analyses. The insights gathered informed the identification and selection of key principles. Based on this initial feedback, the BAC developed a first draft of the VfM Analysis Principles, which was then circulated for industry review. The comments received were incorporated into a revised version, which was subsequently shared with relevant stakeholders for further input. To provide stakeholders with the opportunity to discuss specific topics regarding each of the principles in greater detail, the BAC hosted a series of roundtables. The final draft of the VfM Analysis Principles was developed based on these discussions. A similar approach was followed for the development of the VfM Analysis Standards, ensuring they reflect industry consensus and provide a structured framework for consistent and rigorous VfM analysis.

DEFINITION OF VFM ANALYSIS

Value for Money can be defined as the optimal combination of cost, quality, risk allocation, and performance that best meets the public sector's objectives over the project lifecycle. A VfM analysis is a tool used to compare different delivery methods, including public-private partnerships (P3s), for the same capital investment project. Through this comparison, a VfM analysis enables decision-makers to understand the trade-offs between delivery models.

A VfM analysis is different from other assessments carried out during the preparation stages of a project, such as a benefit-cost analysis (BCA) and a financial feasibility assessment. More specifically, a BCA aims to assess whether the project is attractive from the perspective of society and a financial feasibility assessment evaluates whether the project is financially feasible. In

contrast, a VfM analysis assumes that, at this stage in the process, the decision to proceed with the project has already been made. Therefore, the VfM analysis does not provide an answer to the question of whether the project is a good use of societal resources, nor does it determine whether the project is affordable. In this context, VfM analysis answers the question: which delivery method provides the 'best deal' over the life of a project from the perspective of the government? The differences between the analyses are summarized in *Table 1* below.

Table 1. Financial and Economic Analyses

Analysis	Tool	Technical Description	Key question to be answered
Economic Feasibility	Benefit Cost Analysis	Analysis of all economic (including social and environmental) costs and benefits of the project (compared to the situation without the project)	Is the project attractive from the perspective of society?
Financial Feasibility	Financial Viability Assessment	Analysis of all financial cash flows of the project, and comparison of cash flows to available budget	Is the project financially feasible? Can we afford the project?
Value for Money	VfM Analysis	Comparison of the expected pros and cons of P3 delivery compared to conventional delivery	What is the optimal project delivery method?

PURPOSES OF A VfM ANALYSIS

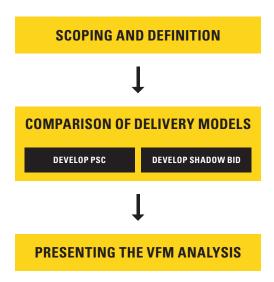
A VfM analysis, as per the law, aims to provide a structured approach for a government to assess whether or not it can expect value for money from the alternative delivery option. At its core, the VfM analysis is an analysis of the pros and cons of one or more alternative delivery options for a specific project when compared against the default "conventional" delivery option (referred to as the Public Sector Comparator).

STEPS IN A VFM ANALYSIS

This document aims to provide high-level principles and accompanying standards governing VfM analysis but does not prescribe a single approach to conducting a VfM analysis, as the process varies depending on agency preferences, data availability, and other factors. Because every VfM analysis is unique—shaped by the specific characteristics of the project at hand—these principles and standards are not intended to impose a standardized format or rigid template. Rather, their purpose is to promote consistency and support robust VfM analysis.

To effectively apply these principles and standards, it is important to recognize that all VfM analyses generally follow three key steps:

- The first step is scoping and definition, which involves defining the geographical, functional, and temporal scope of the project and identifying and evaluating all practical conventional and alternative delivery options.
- The second step is the comparison of delivery models, which identifies and evaluates the expected differences between all practical conventional and alternative delivery models. The comparison may be more qualitative or more quantitative, depending upon data availability and the stage of the project.
- 3. The third step is **presenting the results of the VfM** analysis, which supports informed decision-making on the optimal delivery option.



The principles and standards are not intended to be followed sequentially or applied in a specific order. Instead, they collectively address the entire VfM analysis process, encompassing all three steps.

Additionally, it is important to note that a VfM analysis is not a one-time exercise but rather a dynamic process conducted at key decision points throughout project development. This iterative approach ensures that the analysis remains relevant as new information emerges, allowing decision-makers to refine their assessments and make well-informed decisions.

VfM ANALYSIS PRINCIPLES

The BAC introduced the following five VfM Analysis Principles:

Principle of Objectivity	Use unbiased, fact-based, best available information, and consider all realistic delivery models.
Principle of Comprehensiveness	Consider benefits, costs, and risks throughout the project life cycle.
Principle of Consistency	Clearly define and apply the same project scope, standards, procedures, and assumptions throughout the entire analysis.
Principle of Robustness	Use realistic assumptions and account for uncertainties in the analysis and sensitivities of variables.
Principle of Transparency	Clearly disclose the analysis methods, assumptions, and sources.

RATIONALE

The underlying objective of a VfM analysis is to inform decision-making by providing a **fair**, **current**, **unbiased**, **and fact-based comparison** of all practical conventional and alternative delivery options. VfM analysis must not be used to justify decisions that have already been made.

Standard 1.1: A VfM analysis must consider all practical conventional and alternative delivery options for the procuring agency. If certain options are not considered practical, the rationale for why they are not practical must be documented.

SCOPE & APPLICABILITY

► For practical reasons, the public agency selects one conventional delivery model that is deemed the most logical contracting option ("Public Sector Comparator" or PSC). The PSC will serve as the public benchmark to be compared with all practical alternative delivery models, whether they are short-term or long-term arrangements.

Standard 1.2: A VfM analysis must remain unbiased by **considering multiple perspectives** throughout its development.

SCOPE & APPLICABILITY

A VfM analysis must involve stakeholders and experts representing all relevant disciplines (e.g., contracting, procurement, financial, economic, geo-technical, design), ensuring their perspectives are considered in order to enhance objectivity and minimize bias.

Standard 1.3: A VfM analysis must use **data that is up-to-date, statistically relevant** (to the extent available), **and grounded in experience**, with all sources thoroughly documented. It must **acknowledge when the information used is incomplete or uncertain** (as applicable).

SCOPE & APPLICABILITY

- ► This standard particularly applies to the quantification of differences between delivery models. To the extent possible, considerations relating to differences between delivery models in capital expenditures, operations and management costs, schedule, and quality must be grounded in evidence and analysis of past performance.
- ▶ Past performance assessments can be based on the procuring agency's own experience or insights from peer organizations. Sharing experiences with different delivery models among peers is often crucial for achieving an objective, fact-based comparison.
- ► The assessment must be based on objective, publicly available, and verifiable sources, using statistically significant data, where possible. When data is unavailable, the VfM analysis may rely on case study evidence.
- Any uncertainties or incomplete information must be explicitly acknowledged and documented within the VfM analysis.

Standard 1.4: To the extent realistic and feasible, an **independent analysis of past performance** under all practical delivery models must be conducted to generate a database of reliable information.

- An "independent analysis" refers to an objective review conducted by a third party or an entity without a vested interest in the outcome.
- To the extent possible, the analysis of past performance should be used to assess construction-related risks (e.g., cost overruns, schedule delays) and lifecycle-related risks (e.g., deferred maintenance).

Standard 1.5: A VfM analysis must describe how overhead costs and retained risks are considered under all practical conventional and alternative delivery options.

SCOPE & APPLICABILITY

- VfM analysis must correct for artificial advantages that would otherwise result in "hidden" costs or risks that remain unaccounted for. A common example of "hidden" costs or risks are overhead costs and retained risks.
- Overhead costs include employee benefits, equipment, facilities, workforce displacement, training, hiring project management staff, among others.

Standard 1.6: A VfM analysis must clearly describe the key assumptions with regard to any Federal grants or loans received or expected under all practical conventional and alternative delivery options.

SCOPE & APPLICABILITY

- ▶ Direct or indirect subsidies can cause differences in costs (or revenues) between conventional and alternative delivery options. A quantitative VfM analysis must include a description—and, to the extent feasible, quantification—of these differences.
- Examples of indirect subsidies include TIFIA financing and taxation. Therefore, a VfM analysis must include the differences in TIFIA financing and taxation.

Standard 1.7: A VfM analysis must **specify the perspective from which it is conducted** (e.g., agency, state, or federal government). When federal funding or financing is used, the federal government's perspective must be applied along with the procuring agency's perspective.

SCOPE & APPLICABILITY

▶ Depending on the perspective of the VfM analysis, certain cash flows need to be included or excluded. For instance, the consideration of Federal tax revenues and subsidies may vary by perspective. When federal money is used, a VfM analysis from the Federal government perspective must be applied along with the procuring agency's perspective. The analysis must clearly explain, in plain language, how the federal and procuring agency perspectives differ and the rationale behind any cost adjustments made based on the perspective applied.

RATIONALE

As alternative procurement is a long-term arrangement and the differences between conventional and alternative delivery can occur throughout the entire lifecycle, it is important to consider all potential (material) differences between delivery models concerning costs, benefits / revenues, and risks in order to make an apples-to-apples comparison.

Standard 2.1: A VfM analysis must **specify all project delivery goals** and **consider all relevant differences** between all practical conventional and alternative delivery options, as they relate to those goals.

SCOPE & APPLICABILITY

- A VfM analysis can be more qualitative or more quantitative, depending upon the data availability and the stage of the project.
- ▶ A VfM analysis must specify the goals defined by the public sponsor in relation to the delivery method. While a qualitative VfM analysis does not have to analyze all costs, benefits (economic), revenues (financial), risks, and uncertainties, it must consider all relevant differences between all practical conventional and alternative delivery models.
- A VfM analysis should focus only on relevant differences between all practical delivery models. However, in a financial analysis, it is important to consider all costs and risks—not just "material differences"—to avoid confusion regarding affordability when analyzing cash flows. This consideration is less relevant for an analysis of socio-economic differences.

Standard 2.2: A VfM analysis must **adopt a life-cycle approach when estimating the costs** of all practical conventional and alternative delivery models. This **estimation process must be data-driven**, **evidence-based**, **and verifiable** by a third party.

SCOPE & APPLICABILITY

► The VfM analysis must include all cost categories, including (but not limited to) preparation and procurement costs, design and engineering costs, construction costs, environmental / community impacts, contract management and oversight costs, and contingencies.

SCOPE & APPLICABILITY (CONT.)

► The VfM analysis must also include all O&M cost categories, including (but not limited to) monitoring and oversight, routine maintenance costs, and major maintenance costs.

Standard 2.3: A VfM analysis must consider both direct and indirect costs.

SCOPE & APPLICABILITY

- ▶ Indirect costs refer to costs that are not directly associated with the design, construction, and maintenance works, such as overhead costs. In an apples-to-apples comparison, all costs, including indirect costs, will need to be considered.
- Indirect costs can, depending on the perspective, include both indirect environmental and socioeconomic costs, such as costs borne by labor, and indirect financial costs.
- Many people automatically think about the costs of the activities that are transferred to the private party. However, delivery models can also differ in the costs of the responsibilities that are being retained by the contracting authority under alternative delivery, which is why those will need to be considered as well.

Standard 2.4: A VfM analysis must consider the **costs of public financing or private financing for the project**, taking into account the value of risks transferred to the private investors and financiers under alternative delivery.

- ▶ When the Federal perspective is applied, the cost of public financing must consider any Federal loans that will be made available to the project.
- ► The cost of private financing must consider the expected market-based cost of debt and equity rate of return.
- ► To allow for an apples-to-apples comparison, the value of risks transferred to the private investors and financiers under alternative delivery need to be taken into account as well, either quantitatively or qualitatively (See Standard 2.6).

Standard 2.5: A VfM analysis must consider differences in the benefits (economic) and/or revenues (financials) generated by the project under each delivery model.

SCOPE & APPLICABILITY

- A holistic VfM analysis must consider all benefits and disbenefits, which, at a minimum, means identifying them and qualitatively describing expected differences between delivery models and, to the extent reasonably feasible, monetizing them.
- A VfM analysis that focuses on financial impacts must include a forecast of user fees and other revenues expected to be generated by the project, including any funding from the Federal government (grants / (loan) subsidies). The assessment must also describe all assumptions about use and demand that went into the revenue forecast. If the revenue forecasts vary across delivery models, the rationale for these differences must be clearly explained.
- A VfM analysis that considers socio-economic impacts must include the expected differences in benefits and disbenefits between delivery models, including environmental and societal impacts (including workforce impacts such as worker displacement, and labor wages and benefits) and other externality impacts for the public.

Standard 2.6: A VfM analysis must **consider all major risks** throughout the project lifecycle.

- ► A VfM analysis considers the (life cycle) risk profile of a project, provides a structured assessment and discussion of the differences in the management of the main project risks under all practical conventional and alternative delivery options.
- ▶ If quantification and monetization of risks is difficult, a qualitative description of risks and their implications must be provided along with the quantitative VfM analysis.

Standard 2.7: A VfM analysis must include **consideration of risks transferred** to the private entity as well as **risks retained** by the public agency.

SCOPE & APPLICABILITY

- ▶ The public agency transfers many risks under alternative delivery. However, the public agency retains some risks as well, for example, all risks associated with (major) compensation events. The VfM analysis must incorporate the terms and conditions of the proposed alternative delivery agreement when they are available.
- An alternative delivery model may generate new risks that do not occur under conventional delivery, such as flexibility for the public agency to make changes over the project lifecycle. These new risks must be discussed in the VfM analysis. The expected costs and risks under alternative delivery are also referred to as the 'shadow bid'.

Standard 2.8: A VfM analysis must **consider differences between project delivery schedules** in all practical conventional and alternative delivery options.

SCOPE & APPLICABILITY

► There are likely to be differences in project delivery schedules between all practical conventional and alternative delivery models, and these differences will likely impact benefits to users. If these differences are material, they must be documented.

STANDARDS FOR THE PRINCIPLE OF CONSISTENCY

RATIONALE

A structured and apples-to-apples comparison of a project's cash flows under several delivery models requires a **consistent approach to scope**, **standards**, **procedures**, **and assumptions**.

Standard 3.1: VfM analysis must **define the project scope and consistently apply it** across all delivery models.

SCOPE & APPLICABILITY

- ► The project scope must be defined from a geographic, spatial, functional, and temporal standpoint, including the definition of the project's goals and objectives.
- ► To the extent practically feasible, the project scope must be applied across all practical delivery models in a consistent manner with a clear definition of the output specifications, key performance indicators, and quality of service.

Standard 3.2: VfM analysis must clearly describe and consistently apply standards, procedures, and assumptions. Any changes or updates to these standards, procedures, or assumptions must be disclosed and clearly documented.

SCOPE & APPLICABILITY

➤ Since project costs and revenues will depend – potentially substantially – on the standards, procedures, and assumptions used, it is important to explicitly describe them and apply them consistently across all delivery models.

STANDARDS FOR THE PRINCIPLE OF CONSISTENCY

Standard 3.3: VfM analysis must be **conducted** (i) **early in project development** before starting the procurement process, (ii) **before signing a pre-development agreement** (for a progressive P3), and (iii) **before signing a concession agreement** with a private entity.

SCOPE & APPLICABILITY

- ► An assessment of the appropriateness of delivery models must inform the decision regarding which delivery model will be used to develop the project. Therefore, a VfM analysis must be developed before the project development phase.
- ▶ With better and more information available later in the project life cycle, and as the commercial and financial terms or assumptions change, the public agency must update that assessment by conducting another VfM analysis to ensure that the selected delivery model is still appropriate and in the public interest. Therefore, a VfM analysis must be developed after the procurement and before signing a pre-development agreement (for a progressive P3) and before signing a concession agreement with a private entity.

Standard 3.4: The scope of the PSC in a VfM analysis developed after procurement and before signing a concession agreement at commercial close must **reflect any and all relevant changes in the alternative delivery scope** (excluding innovations proposed by the winning bidder) and **risk allocation**, and **revisions of the technical standards** needed to allow for any Alternative Technical Concepts (ATCs).

- ► The exact scope of a project, as well as the standards, procedures, and assumptions, are likely to change over the course of the project development and procurement phases. In order to do an apples-to-apples comparison, the Public Sector Comparator, which was potentially developed earlier in the process, will have to be updated to reflect those changes.
- ► Technical standards may have been revised to accommodate private sector innovations. The PSC must reflect the most likely conventional technical solution that meets those revised technical standards rather than the private sector innovations that were the product of the alternative delivery process.

STANDARDS FOR THE PRINCIPLE OF CONSISTENCY

Standard 3.5: A VfM analysis that is developed after the procurement and before signing a concession agreement at commercial close must reflect changes in the alternative delivery scope and risk allocation.

SCOPE & APPLICABILITY

► The scope of a project and the risk allocation in the Project Agreement are likely to change over the course of the project development and procurement phases. In order to do an apples-to-apples comparison, not only the bidder's financial proposal will have to reflect those changes, but also the costs and risks retained by the public agency under alternative delivery.

Standard 3.6: A VfM analysis that is developed after the procurement and before signing a concession agreement at commercial close must **specify how it treats "sunk costs."**

SCOPE & APPLICABILITY

While, in theory, a VfM analysis that is being used for decision-making before commercial close does not need to take into account "sunk costs" of alternative delivery (i.e., project preparation and procurement costs made up to that point) because these are not relevant to the decision on whether or not to continue the procurement using alternative delivery, in practice, it is often beneficial to present a comprehensive analysis that includes sunk costs. Doing so helps to avoid the perception of an unfair comparison (i.e., apples-to-oranges).

STANDARDS FOR THE PRINCIPLE OF ROBUSTNESS

RATIONALE

The quality of a VfM analysis is dependent on the quality of the inputs. Unfortunately, in particular for the quantitative VfM analysis, the lack of reliable data can be a challenge, which typically makes it impossible to reach a high level of precision. This is true not only for the financial benefits and costs of alternative delivery (prior to receipt of alternative delivery bids) but also for long-term cost estimates and valuation of risks under conventional project delivery.

Standard 4.1: A VfM analysis must **only be quantitative when reliable data is available.** When it is not available, a VfM analysis must **rely more heavily on a qualitative analysis**.

SCOPE & APPLICABILITY

- A very detailed and quantitative VfM analysis can provide false precision when there is not a lot of quantitative data available. In order to avoid false precision, VfM analyses must only include a quantitative analysis to the extent reliable data is available.
- ▶ If data is available but deemed unreliable, the VfM analysis must include a clear explanation of the rationale behind that determination. This includes identifying the limitations of the data and explaining why it was excluded from the analysis.

Standard 4.2: A quantitative VfM analysis must assess uncertainty using appropriate methods (e.g., sensitivity analysis) and present results in ranges.

SCOPE & APPLICABILITY

▶ Due to uncertainty, the quantitative VfM analysis must present any results in ranges rather than as exact outcomes.

STANDARDS FOR THE PRINCIPLE OF ROBUSTNESS

Standard 4.3: A VfM analysis must clearly explain the concepts of discount rates and financing costs, justify any assumptions, and show the sensitivity of the outcomes to these variables.

SCOPE & APPLICABILITY

▶ The assumptions around discount rates, risk valuation, and financing costs have a significant impact on the outcomes of a VfM analysis. Therefore, the VfM analysis must clearly explain these concepts, justify any assumptions and methods (including assumptions and methods to determine the expected private cost of capital and risks premiums assigned to various project delivery scenarios), and also show the sensitivity of the outcomes to these variables in order to inform decision-makers well.

Standard 4.4: When there are **material differences in the socio-economic benefits** accruing from the delivery models, a VfM analysis must, to the extent practicable, apply well-established benefit-cost analysis procedures.

SCOPE & APPLICABILITY

▶ Well-established benefit-cost analysis procedures include, for example, those published by the US Department of Transportation for applicants to discretionary grant programs.

STANDARDS FOR THE PRINCIPLE OF TRANSPARENCY

RATIONALE

As a tool to inform decision-making, VfM analysis must be **easily understood by elected officials and peer industry experts**. This will also enable VfM analysis to, in some form, be useful in informing the general public. This is only possible if the analysis is **transparent and well-documented**. Any **financial model used in the analysis must also be transparent, easy to follow, well documented, and structured** (i.e., not a black box). Additionally, the findings of the VfM analysis should be presented clearly, focusing on the differences between delivery models.

Standard 5.1: The presentation of the VfM analysis results should clearly highlight the key differences between delivery models.

SCOPE & APPLICABILITY

- ► The presentation of the key findings from the VfM analysis should focus on the expected differences between all practical conventional and alternative delivery models.
- ► The findings should be structured in a way that enables decision-makers and relevant stakeholders to easily interpret trade-offs and make informed choices based on transparent, well-documented analysis.

Standard 5.2: A VfM analysis must **document all relevant details about how the analysis was conducted**, its **limitations**, and its **results** in order to be verifiable.

SCOPE & APPLICABILITY

▶ Details on how the analysis was conducted include (but are not limited to) methods, assumptions, and sources. This includes clearly describing the status and level of certainty of assumptions and explicitly reporting any changes at different stages of the VfM analysis.

STANDARDS FOR THE PRINCIPLE OF TRANSPARENCY

Standard 5.3: A quantitative VfM analysis must **present each component distinctly and independently**, with particular emphasis on lifecycle costs, financing costs, and risk valuation with transparent use of escalation and discount rates to calculate present values.

SCOPE & APPLICABILITY

▶ Decision makers and other stakeholders should be able to fully understand the VfM analysis. Therefore, all material components of the analysis must be described independently—that is, each component (e.g., lifecycle costs, financing costs, and risk valuation) must be presented as a separate line of analysis, with its own assumptions, data sources, and calculation methods clearly documented.

Standard 5.4: A VfM analysis financial model must be transparent, easy to follow, well-documented, and structured.

SCOPE & APPLICABILITY

- A financial model can easily become a "black box," which may cause confusion and distrust rather than instill confidence about the VfM analysis. In order to avoid this and truly inform the decision-making on the preferred delivery model, the financial model must be transparent, easy to follow, well-documented, and structured.
- All data sources, formulas, and underlying assumptions in the financial model must be clearly disclosed and accessible, allowing for independent verification and scrutiny. The financial model must avoid reliance on proprietary information, methodologies, or assumptions that cannot be readily reviewed, validated, or understood by stakeholders.

Standard 5.5: The VfM analysis and all associated documentation must be accessible and available.

SCOPE & APPLICABILITY

Whereas the results of the VfM analysis will be presented to decision-makers and the general public in a concise and understandable way, the VfM analysis and all associated documentation must be accessible and available to peer industry experts and—depending on the information disclosure requirements set forth by State transparency and accountability laws and policies the general public.





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