

## Department of the Interior Departmental Manual

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**Series:** Management Systems and Procedures

**Part 369:** Value Analysis

**Chapter 1:** General Criteria and Policy

**Originating Office:** Office of Acquisition and Property Management

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### 369 DM 1

1.1 **Purpose.** For the purposes of this Departmental policy value engineering, value planning, value management, and value control all use the value process/methodology and are considered synonymous with value analysis. This policy implements the Value Engineering provisions of Public Law 104-106 and Office of Management and Budget (OMB) Circular No. A-131, Value Engineering. It establishes policy, assigns responsibilities, and defines objectives, goals, and requirements to establish and maintain a value analysis (VA) program. This policy promotes sound value-based decision-making throughout Department of the Interior (DOI) bureaus and offices. Its ultimate goal is the acquisition of the most functionally effective assets, products, and programs at initial and life-cycle costs that provide best value to the government.

#### 1.2 **Scope.**

A. The VA program is a mandatory program that applies to all DOI bureaus and offices. All DOI bureaus/offices shall use VA methodology and analysis techniques as a management instrument in performing or contracting for the planning, design, construction, repair, and rehabilitation/renovation of facilities, and in administrative and management programs to improve operations, identify and remove nonessential capital and operating costs, and improve and maintain optimum quality of program and acquisition functions. Bureaus/offices which administer Federal grant programs involving planning, design, construction, repair, and rehabilitation/renovation of facilities shall encourage grantees to implement VA wherever possible.

B. All bureaus/offices having contractual authority for procurement and/or construction will implement Value Engineering Change Proposal (VECP) programs with contractors in accordance with paragraphs 1.3C, 1.3D, 1.3E, and 1.3F.

#### 1.3 **Authorities.**

A. Public Law 104-106, Defense Authorization Act, Section 4306 - Value Engineering for Federal Agencies, February 10, 1996.

B. OMB Circular A-131, Value Engineering.

- C. Federal Acquisition Regulation (FAR), Title 48, Part 48 (Value Engineering) and value engineering clauses in Part 52.
- D. FAR, Title 48, Part 31, Contract Cost Principles and Procedures.
- E. Title 43, (Public Lands: Interior), Part 12, Subpart C, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- F. Department of the Interior Acquisition Regulation (DIAR), Part 48, Value Engineering.
- G. ASTM Standard E 1699 – 00 “Standard Practice for Performing Value Analysis of Buildings and Building Systems” and ASTM Standard E 2013 – 06 “Standard Practice for Constructing FAST Diagrams and Performing Function Analysis During Value Analysis Study”.
- H. Value Standard and Body of Knowledge established by SAVE, International.

#### 1.4 **Definitions.**

- A. Administration and Management Programs - Includes all activities, organizations and personnel that manage and perform tasks to meet the missions of the various bureaus/offices within DOI. Program activities include administration, supervision, labor, procurement, operations and maintenance, information technology, and similar activities needed to produce the products and services required by customers.
- B. Certified Value Specialist (CVS) - A designation obtained by practitioners who have fulfilled the certification requirements as established by SAVE, International.
- C. Conceptual Stage Value Analysis (CSVA) - Value analysis that occurs at the conceptual/schematic stage of project development and considers project scope, need, alternatives, and cost. All the various solutions or alternatives available to meet the identified need are considered and a preferred alternative is selected. Recommendations provided by the analysis to develop the selected alternative have a high probability of being included in subsequent stages of project development. At the conclusion of the analysis, project scope is well defined and major activities required for further project development have been identified.
- D. Construction Program - Comprises planning, design, construction, maintenance, alteration, or repair of buildings, structures, or other real property, and includes all preparatory conceptual design activities. Structures include, but are not limited to, pavement, bridges, dams, irrigation systems, water supply and sewer systems, power generation and transmission systems, hatcheries, recreation facilities, and installed fixed equipment.
- E. Cost Avoidance - An action that is taken in the immediate time frame that will decrease costs in the future. For example, an engineering improvement that increases the mean time between failures and thereby decreases operation and maintenance costs is a cost avoidance action. Another example would be performing value analysis during the planning/schematic

stages of a construction project. If a value analysis study reveals a different alternative that is of lower cost and is consistent with project required performance, reliability, quality, and safety, then the change in estimated project cost constitutes cost avoidance. Cost avoidance is the cost differential between the proposed project configuration developed by the planning/formulation effort and the actual project configuration that is employed for development of project design and contract documents after value analysis has been performed.

F. Cost Savings - A reduction in actual expenditures below the projected level of costs required to achieve a specific objective. Examples of cost savings are revisions to the design and/or schedule of a funded project such that actual expenditure for the project is less than the amount that was planned to be expended, or a measurable reduction in personnel or administrative requirements needed to conduct a specific activity or project function. A funded project is a project that has been appropriated funds by Congress or that is supported by other funds, such as recreation fee dollars, and those funds have been allocated to the project.

G. Design Stage Value Analysis (DSVA) - Value analysis that occurs at the design stage when the design process and documentation is approximately 30% - 50% complete (design and contract documents are in draft form). A thorough review of existing design documents and plans identifies major asset components/systems and proposes changes for reasons of performance, reliability, quality, and value. The VA provides recommendations to modify the design based upon value analysis principles.

H. Life Cycle Cost (LCC) - The total cost of a system, facility, or other product, computed over its useful life. It includes all relevant costs involved in acquiring, owning, operating, maintaining, and disposing of the system or product over its useful life or other specified period of time. Economic analysis is used in determining LCC.

I. Planning Value Analysis (PVA) - Value analysis that occurs during planning (general management plans, feasibility studies, business plan development concept plans, etc.) for a defined geographic area or a specific program. VA is used to evaluate planning options and to select a preferred planning option. General guidelines and principles for future development are identified and selected.

J. Program/Project/Activity (PPA) - Any item specifically identified in tables or written material set forth in the Interior and Related Agencies Appropriations Act and the Energy and Water Development Appropriations Act, and/or supporting budget documents prepared by the Department.

K. Return on Investment (ROI) - The ratio of the dollars saved through implementation of VA proposals versus the cost of performing the VA study or program (normally expressed as: ROI= \$10:\$1).

L. Value Management (VM) - The application of analysis techniques, such as functional analysis, cost evaluation, life-cycle costing, and creative "brainstorming" in an organized effort focused on adding value to non-construction processes, procedures, and systems at reduced cost and/or resources while maintaining or improving services or products. The term

value management is often used when conducting a value analysis study of administrative procedures, organizational structures, or management systems.

M. Value-Based Decision-Making - The use of value analysis techniques at key decision points throughout the life cycle of an asset.

N. Value Analysis (VA) - An organized team effort directed at analyzing the functions of processes, systems, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, and safety. These organized efforts can be performed by in-house agency personnel and/or by contractor personnel.

O. Value Analysis Study Cost - Include the cost of performing the VA analysis, administrative costs of implementing VA proposals such as redesign, additional field and laboratory investigations, additional reviews, and other costs associated with implementing VA recommendations.

P. Value Engineering Change Proposal (VECP) - A proposal submitted by a contractor under the VE provisions of the Federal Acquisition Regulation (FAR) Part 48 that, through a change in a project's plans, designs, or specifications as defined in the contract, would lower the project's cost to the Government. VE contract clauses are listed in FAR Part 52.

Q. Value Analysis Proposal (VAP) - A recommendation resulting from using VA methodology to study an item. It is developed by Government employees and/or Government and non-Government contract personnel in the performance of a VA study.

R. Value Analysis Program Coordinator (VAPC) - Manages the VA program at the bureau/office level.

S. Value Analysis Program Manager (VAPM) - Manages and oversees the DOI VA program in the Office of the Secretary.

T. Value Analysis Review Board (VARB) - A board that is responsible for implementing VA recommendations. A VARB must consist of personnel having decision-making authority that allows immediate action to be taken on each VA proposal/recommendation presented before it.

## 1.5 Policy.

A. All DOI bureaus/offices, in accordance with P.L. 104-106 and this policy, shall:

(1) Establish VA programs to identify and remove nonessential capital and operating costs, improve and maintain optimum quality of program and acquisition functions, and ensure best value for the government in acquisition activities;

(2) Utilize VA as an analytical technique in developing PPAs and implementing improvements to them;

(3) Support the VA program with the necessary funding and trained staff; and,

(4) Maintain management support for the VA program.

B. VA is applicable to any or all phases of a PPA. Review of VA proposals and recommendations should be prompt and objective with the intent to implement them to the maximum extent possible. Results shall be documented by the bureau/office VAPC and reported annually to the Department's designated VAPM through bureau/office directors.

C. Responsibility and authority for the VA program is assigned to each of the DOI Assistant Secretaries. Goals, responsibility, and authority will be sub-allocated to bureau/office directors and the VAPCs. Meeting VA requirements shall be a performance measure of bureau/office directors and appropriate managers responsible for the mandatory VA program.

#### 1.6 Objectives.

A. General VA program objectives are to:

(1) Increase productivity, innovation, communication, use of value-based decision-making, and the use of interdisciplinary project teams through the application of VA principles, methodology, and management;

(2) Employ VA to reduce costs to bureaus/offices while maintaining quality in mission attainment;

(3) Encourage the application of VA to Federal grants, loans, and cooperative agreements to provide additional program benefits; and

(4) Establish and maintain VA procedures and processes to provide for the systematic development and maintenance of the most effective, efficient, and economical arrangements for conducting the work of bureaus and offices.

B. Construction PPA objectives.

(1) All bureaus/offices with VA program responsibility shall set an annual fiscal year goal for the sum of cost avoidance and cost savings that is, at a minimum, four percent of the aggregate value of all construction, repair, rehabilitation, and renovation projects with estimated cost greater than \$1,000,000. Bureaus/offices will use value analysis studies and contractor generated VECs to meet the goal.

(2) Each bureau/office shall encourage contractor participation in the VEC program.

C. Non-construction PPA objectives. Bureaus/offices shall utilize VA methodology and analysis techniques to improve operations and reduce cost.

### 1.7 Responsibilities.

A. The Director, Office of Acquisition and Property Management (PAM), is responsible for:

(1) Overseeing the DOI VA program; formulating, establishing and maintaining policy on VA; establishing goals and requirements; measuring progress against the goals; evaluating program effectiveness; and establishing report formats and schedules;

(2) Reviewing VA action plans, staffing, and funding to assure VA programs are being fully supported and utilized. Advising Assistant Secretaries and heads of bureaus/offices of deficiencies and recommending corrective actions;

(3) Designating a VA Program Manager to serve as the Departmental point of contact on VA; and

(4) Reporting to OMB as required by OMB Circular No. A-131.

B. Assistant Secretaries are responsible for VA program implementation in bureaus/offices under their jurisdiction. The Assistant Secretaries will demonstrate support for the VA program to ensure top management commitment for the program.

C. Heads of bureaus/offices are responsible for:

(1) Assigning necessary resources and staffing to establish and maintain a VA program that fully complies with the requirements of this policy and designate a VAPC;

(2) Ensuring a VA organizational and management structure that supports a permanent program;

(3) Budgeting sufficient funds to pay for VA activities, including: VA staff; VA studies conducted by Government personnel and/or A-E firms under contract; VA related technical assistance; review of VA proposals; redesign to incorporate accepted recommendations; VA related training; and incidental costs such as testing, travel and professional activities related to VA;

(4) Directing that a VA action plan and annual report is prepared and submitted to the Department each year; and

(5) Establishing a VARB(s), as appropriate, within bureaus/offices with mandatory VA program responsibility to advise the VAPC, making recommendations on VA study proposals, and providing management assistance in implementing proposals and recommendations.

(6) Providing training in VA techniques to bureau/office staff responsible for coordinating and monitoring VA efforts and for staff responsible for conducting VA studies and developing, reviewing, analyzing, and carrying out VA proposals, change proposals, and evaluations.

(7) Developing internal criteria and guidelines necessary to ensure accomplishment of VA requirements contained in this policy.

D. Bureau/office VAPCs are responsible for:

(1) Maintaining and monitoring a VA program that meets the requirements of P.L. 104-106, this policy, the FAR, and DIAR;

(2) Developing and submitting an annual action plan and annual report;

(3) Coordinating and maintaining a VA training program;

(4) Evaluating VA program effectiveness and recommending remedial or improvement actions to the bureau/office head; and

(5) Striving to attain Certified Value Specialist status as established by SAVE, International.

### 1.8 Standards, Requirements, and Procedures.

A. VA application thresholds for construction, repair, rehabilitation, and renovation projects.

(1) All construction, repair, rehabilitation, and renovation projects with estimated cost greater than \$1,000,000 shall be subject to VA study.

(2) All construction, repair, rehabilitation, and renovation projects with estimated costs between \$1 million and \$10 million shall be subject to a design stage value analysis. Bureaus are required to identify projects in this cost range that will realize significant benefit from a conceptual stage value analysis and implement that analysis when appropriate.

(3) All construction, repair, rehabilitation, and renovation projects with estimated costs greater than \$10 million shall be subject to both conceptual stage value analysis and design stage value analysis, at a minimum, as defined by this policy.

(4) Identify and perform VA on any construction, repair, rehabilitation, and renovation project with estimated costs less than \$1 million when:

(a) A project has unique or complex issues that can benefit from VA study;

(b) ROI analysis indicates potential savings at a ratio of \$5:\$1 over study and redesign costs; and

(c) Criteria stipulated by an individual bureau require the application of VA.

B. Design contracts with A-E firms for construction, repair, rehabilitation, and renovation projects. A-E design contracts that meet the above VA application thresholds shall:

(1) Stipulate that a VA study can be performed by either Government personnel and/or a contracted entity that is independent of the A-E firm performing the design; and

(2) Stipulate whether a conceptual stage VA and/or a design stage VA shall be performed per the thresholds specified by this policy.

C. Disposition of VA Savings. Subject to the appropriation law governing PPA funding, funds saved through VA studies may remain with the bureau/office to be used within discretionary authority which may include:

(1) Fund authorized but underfunded or unfunded elements of the PPA that realized the VA savings;

(2) Fund additional VA reviews for the PPA that realized the savings;

(3) Fund authorized but underfunded or unfunded elements of another PPA through a reprogramming action;

(4) Fund other VA program activities of another authorized PPA through a reprogramming action if necessary; or,

(5) Return VA savings to the United States Treasury.

D. Preparation of an annual VA action plan. An annual VA action plan shall be submitted by each bureau/office that lists and prioritizes specific construction, repair, rehabilitation, and renovation projects for VA study. Federal grant programs that issue individual grants exceeding \$1,000,000 in Federal funds are encouraged to prepare and implement a VA action plan for promoting and encouraging VA and identify specific grant projects which will employ VA techniques.

## 1.9 Reports and Forms.

A. Recognition and reporting of VA savings. Savings identified by VA studies shall be recognized and included in the annual report to the Director, PAM. All VA cost avoidance, cost savings, and cost savings shared with contractors identified through VA studies up to the time of construction contract award shall be recognized and reported in the fiscal year the construction contract is awarded.



B. Annual reporting requirements.

(1) Each bureau/office shall submit a VA action plan by October 1 of each fiscal year in the format specified by the Director, PAM. Bureaus/offices will use the President's budget that was submitted to Congress the previous February and knowledge of projects in the conceptual and/or planning stages that will require VA in the upcoming fiscal year to formulate the VA action plan.

(2) Each bureau/office shall submit an annual report on its VA program activities to the Director, PAM, by December 15 of each year. The format of the report shall be specified by the Department.