### **APPENDIX 7**

### VALUE MANAGEMENT

The value management methodology (also known as value analysis, value engineering, value planning, etc.) should be considered for use in the Planning and Budgeting, Acquisition, and Management-In-Use Phases of capital programming. The value methodology uses a systematic job plan to identify essential functions necessary to accomplish an activity, analyze those functions, and generate alternatives to secure them at their greatest worth on a life-cycle benefit-to-cost basis. By following the process defined in the job plan, the use of the value methodology will facilitate the selection through evaluation and analysis of the "best value" alternative for those functions. The process provides plans and actions to acquire and implement the selected alternatives. The IPT may employ the use of the value management methodology in several ways including a professional value management specialist as a member of the team, using team leaders trained in the value management methodology, or using value specialists (either agency employees or industry consultants) to perform studies.

## Planning Phase

This process has seven elements which define capital asset needs in terms of the performance and functional requirements necessary to meet an agency's strategic goals. The seven elements are:

- 1. Selection of the Function/Process to be studied.
- 2. Determination of why the function is performed. The need for the function itself may be questioned by asking: "What does it do?"
- 3. Information gathering. This is the collection and assembly of all necessary information concerning the selected study item. This provides an understanding of what is to be accomplished through the performance of the function and provides answers to the questions: "What does it cost?" and "What is the function worth?"
- 4. Development of alternatives. This is the single most important element of the process. The use of free imagination, tempered with experience, will develop the best ideas. In initial brainstorming sessions, all ideas, even the wildest, should be duly recorded and encouraged. Many times, the most progressive, breakthrough ideas, with the greatest payoff, will come from near or beyond the edge of the current function paradigms in the area being studied. This element provides answers to the question, "What are the different ways this function can be performed?"
- 5. Analysis of alternatives. The purpose of this analysis process is to eliminate those ideas that are technically or financially unfeasible in order to permit the selection of alternatives for further feasibility testing based on the resulting cost estimates. This element will answer the question, "What is the cost of the selected alternative?"
- 6. Feasibility testing and function verification. This determines that the selected alternative can perform the required function and is technically feasible. A viable alternative must provide the essential function performance and be capable of being implemented. This element answers three questions for each selected alternative: "Is the alternative feasible?"; "Does the alternative provide the essential function?" and "Does the alternative meet the definition of function worth?"
- 7. Implementation and follow-up. This is the selection of the final alternative, documentation of the decision, and preparation of the necessary implementation plans. Integrating schedules and funding requirements documents into the agency capital plan is part of this element.

### **Procurement Phase**

The agency should include the FAR Part 48, Value Engineering, requirements in its contracts and actively encourage the contractor(s) to identify potential cost savings, along with schedule and performance enhancements.

# Management-In-Use Phase

The use of statistical process control, Pareto analysis, and the value management function analysis methodology can be used to analyze performance data to determine whether the asset is meeting cost and performance goals, and can help identify if there are better ways for the asset to meet its life-cycle cost and performance goals.

The IPT may perform the value management function by including a professional value management specialist as a member of the team, using team leaders trained in the value management methodology, or using value process facilitators (either agency employees or commercial consultants) to perform the value management studies.