



1.1 Definitions

1.1.1 Federal Major Projects

A Federal Major project is defined as a project that is “a recipient of federal financial assistance with an estimated total cost of \$500 million or more.”

A project with an estimated total cost below \$500 million can also be designated by FHWA as a Federal Major project if FHWA determines the project will require a substantial portion of the transportation agency's program resources; has a high level of public or congressional interest; is unusually complex; has extraordinary implications for the national transportation system; or is likely to exceed \$500 million in total cost.”

1.1.2 High-Profile Projects

Projects that are not a Federal Major, but that Department management has decided needs additional oversight and reporting are considered High-Profile projects. State Major Highway Development program projects enumerated by the legislature’s Transportation Projects Commission may be considered a High-Profile project.

Typically, projects over \$100 million in total cost and/or that have significant public, outside agency and legislative issues and interest may also be considered a High-Profile project. Department management may choose to utilize some Federal Major management reporting and controls on High-Profile projects. Other smaller, tightly scheduled, and sensitive projects may also require additional oversight and management.

1.1.3 Conventional Projects

Projects that are not Federal Major projects or High-Profile projects are considered to be conventional projects. These projects:

- follow the WisDOT Facilities Development Process as outlined in [FDM Chapter 3](#) and project management activities per [FDM Chapter 2](#)
- do not require additional oversight and reporting
- typically fall under a Categorical Exclusion Environmental Document that defines these projects as not individually or cumulatively having a significant environmental impact as defined in [FDM Chapter 20](#)
- typically have a total cost well under \$100 million and do not have significant public, outside agency or legislative issues nor require special reporting tools

Occasionally some of these projects can have isolated situations that are unique or complex in which application of one or a few of the Federal Major or High-Profile Project tools or “Best Practices” may be appropriate to consider.

1.2 Project Documentation

Federal law establishes additional oversight and reporting requirements for Federal Major projects. Accordingly, the Department utilizes defined management tools and resources for all projects that fit the Federal Major project definition or are designated as Federal Majors by FHWA.

This section establishes the framework for appropriate Federal Major project documentation. Based on the associated project guidance matrix ([Attachment 1.1](#)), this framework reflects the best practices and lessons learned from every Federal Major project designed and built in Wisconsin. It is intended to help efficiently allocate resources, encourage continuous improvement, and to provide the tools needed to allow the Department to prepare for the next generation of Federal Major project development.

The purpose of project documentation is to provide guidance and consistency concerning roles and responsibilities and management of Federal Major projects on the Wisconsin Highway System.

The Department's goal is to strengthen the project team's ability to forecast challenges and proactively manage Federal Major projects, so that decision-makers can recognize the need for (and then act upon) meaningful and timely changes. This is accomplished using proven Federal Major project practices, processes, resources, and tools.

In addition to providing guidance for all Federal Major projects, it is intended that this documentation can be scaled appropriately to provide guidance to High-Profile and conventional projects as well.

LIST OF ATTACHMENTS

Attachment 1.1	Guidance Matrix for Project Organization, Tools, Management and Reporting
Attachment 1.2	Partnering
Attachment 1.3	Innovation
Attachment 1.4	Accountability (Matrix)
Attachment 1.5	Dispute Resolution
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FDM 3-15-5 Project Management Plans

February 15, 2023

5.1 Background

Federal law requires that a Federal Major project, shall submit a project management plan (PMP) for review. The project management plan must document the procedures and processes to provide timely information to the project - decision makers. This will facilitate effective management of project scope, costs, schedules, and quality, as well as federal requirements applicable to the project.

5.2 Initial Project Management Plan – General

WisDOT Federal Major projects are monitored from planning to operations. The project management plan helps the management team maintain focus on major project delivery according to the customers' needs, wants, and expectations. Federal Major projects must be delivered as to capture the public's trust and confidence in the state and federal transportation agencies' ability to deliver quality products effectively and efficiently.

For most projects, WisDOT is the recipient of federal financial assistance and will prepare the project management plan. A draft project management plan must be submitted to Federal Highway Administration (FHWA) for review prior to approval of the National Environmental Policy Act (NEPA) decision document. FHWA provides comments and WisDOT must submit a project management plan for approval within 90 days of the date of the signed NEPA decision document.

For the first project management plan, FHWA Major Projects Team must concur before FHWA division office approval. Then, either the Division or Headquarters Office may request FHWA Headquarters review and concurrence prior to the Division's approval of subsequent project management plan revisions. The project

management plan is a living document in which revisions are issued as the project progresses to add, modify, or delete provisions that result in effective project management. At a minimum, the project management plan should be revised and approved prior to the authorization of federal-aid funds for right-of-way (ROW) acquisition and prior to authorization of federal-aid funds for construction.

5.3 Purpose

The project management plan is the guide for implementing Federal Major projects that documents assumptions and decisions regarding communication, management processes, execution, and overall project control. The ultimate purpose of the project management plan is to clearly define the roles, responsibilities, procedures, and processes that result in the Federal Major project being managed such that it is completed:

- on-time,
- within budget,
- with the highest degree of quality,
- safely for project workers and the traveling public, and
- in a way the public trust, support, and confidence in the project are maintained.

The project management plan addresses all phases of the Federal Major project life cycle and ensures that the project is managed holistically and as a continuum, not incrementally as the project progresses. It is essential that the project management plan establish the metrics by which the success of the project is defined. It is expected that all sponsoring agencies will endorse the project management plan.

5.3.1 PMP Guidance

The PMP is a federal requirement that is developed and used by WisDOT to effectively manage the Federal Major project.

See <https://www.fhwa.dot.gov/majorprojects/pmp/guidance17.cfm> for Project Management Plan Guidance for Major Projects (including "Project Management Plan Checklist").

5.3.2 WisDOT Information

Federal Major projects are discussed in the Program Management Manual; [PMM 03-01](#) (Major Highway Development Program) and [PMM 03-30](#) (Southeast Wisconsin Freeway Federal Major Projects). (*Only WisDOT employees have access to these hyperlink).

Another source of information is FHWA's Risk Management Tool for Managing the Planning / Environmental Phases of Prospective Major Projects which provides a thorough series of questions to ask when considering what risks might be present on a project:

[Risk Management Tool for Managing the Planning / Environmental Phases of Prospective Major Projects - Issuance Major Project Guidance - Major Projects - Federal Highway Administration \(dot.gov\)](#)

FDM 3-15-10 Project Financial Plans

February 15, 2023

10.1 Background

Federal law requires an annual financial plan on Federal Major projects. The timeline for submitting the project financial plan to Federal Highway Administration (FHWA) is shown in [FDM 3-15 Attachment 13.1](#).

10.2 Process for \$100 to \$500 Million Projects

Federal law requires that recipients of federal financial assistance for projects with a total cost of between \$100 million and \$500 million in year-of-expenditure dollars, to prepare an annual financial plan. Unlike financial plans for projects costing more than \$500 million, FHWA does not formally approve the plan, but it must be available for review by the FHWA Wisconsin division office before federal funds may be authorized for construction. For determining whether the project costs exceed \$100 million, the Department will examine the estimated total cost in year of expenditure dollars from the cost and schedule risk assessment (CSRA) workshop completed prior to finalizing the NEPA document.

FHWA could identify the project as a Project of Division Interest (PoDI) if the total cost in year of expenditure dollars is less than \$500 million. If the project is identified as a PoDI, it will follow the steps identified in [FDM 19-10-3](#).

10.2.1 Initial Financial Plan

For projects in the \$100 to \$500 million range, the initial financial plan (IFP) must be finalized before requesting FHWA authorization to obligate federal funds for the first significant construction contract for the project. Therefore, the financial plan is submitted to the FHWA Wisconsin division office before the PS&E due date in the Proposal Preparation Process Schedule shown in [FDM 19-1 Attachment 1.5](#).

The total cost of the project reported in the IFP typically matches the cost of the 70th percentile level of confidence generated during the CSRA. The IFP presents costs in year of expenditure dollars.

To ensure timely completion of the initial financial plan, the following steps must be completed:

- Six months prior to the letting date for the first significant construction project, staff from the Bureau of Budget (BOB) and the Bureau of State Highway Programs (BSHP) will contact the project manager regarding the need to complete the initial financial plan.
- Staff from the project team draft the required financial plan and meet with BOB and BSHP to review the document.
- The director of the BOB and the administrator of DTIM sign the letter of certification included with the plan on behalf of the Department. BOB staff then submits the plan to the FHWA Wisconsin division office. BOB retains a signed copy of the financial plan.

10.2.2 Annual Update to the Financial Plan

To ensure timely completion of the annual update to the financial plan, the following steps should be completed:

- The required annual update is to be completed by March 31st of each year using financial information from December 31st of the prior year.
- Staff from the project team compile an updated draft of the financial plan and meet with the BOB and BSHP to review the document.
- The director of the BOB and the administrator of DTIM sign the letter of certification included with the plan on behalf of the Department. BOB staff then submits a copy of the plan to the FHWA Wisconsin division office.

10.3 Process for Projects in Excess of \$500 Million

Federal law requires FHWA to formally approve the financial plan before federal funds are authorized for construction.

For determining whether the project costs exceed \$500 million, the Department will look at the estimated total cost in year of expenditure dollars from the CSRA workshop completed prior to finalizing the NEPA document.

10.3.1 Initial Financial Plan

For projects estimated to cost more than \$500 million in year of expenditure dollars or are identified as a PoDI, the IFP must be finalized before requesting FHWA authorization to obligate federal funds for the first significant construction contract for the project. Therefore, the financial plan must be approved by FHWA no later than PS&E submittal for the first significant construction project. For additional information, refer to [FDM 19-1 Attachment 1.5](#).

To ensure timely completion of the financial plan, the following steps must be completed:

- Conduct a CSRA workshop no more than 12 months before submittal of the IFP. The total cost of the project reported in the IFP typically matches the cost of the 70th percentile level of confidence generated during the CSRA. The IFP presents costs in year of expenditure dollars.
- 12 months prior to the letting date for the first significant construction project, staff from BOB and BSHP will contact the project Manager regarding the need to complete the initial financial plan. FHWA Wisconsin division staff is also invited to participate in the development of the initial financial plan.
- BOB staff coordinates the development of the financial plan document and works with the project team to schedule a review of the plan by the Oversight committee.
- The Secretary of the Department will sign the letter of certification included with the plan on behalf of the Department. BOB staff will then submit a copy of the plan to the FHWA Wisconsin division office.

10.3.2 Annual Update to the Financial Plan

To ensure timely completion of the annual update to the financial plan, the following steps must be completed:

- A project will follow one of two update cycles. One cycle is to be completed by March 31st using financial information from December 31st of the prior year. The other cycle is to be completed by September 30th of each year using financial information from June 30th. Staff from BOB will inform the

project team which annual update cycle the project will follow.

- Staff from BOB, BSHP, and the Project team meet, as needed, during the year to review and discuss significant changes to the project cost and estimate.
- The Secretary of the Department will sign the letter of certification included with the plan update on behalf of the Department. BOB staff will then submit a copy of the plan update to the FHWA Wisconsin division office.

FDM 3-15-15 Value Engineering

May 15, 2019

15.1 Originator

The originator of this chapter is the Chief of the Design Standards and Oversight Section, Bureau of Project Development.

15.2 Introduction to Value Engineering

Value Engineering (VE) is defined by the Society of American Value Engineers¹ as “the systematic application of recognized techniques which identify the function of a product or service, establish a value for that function, and provide the necessary function at the least overall cost. In all instances, the required function should be achieved at the lowest possible life-cycle cost consistent with requirements, performance, maintainability, safety, and aesthetics.” Value can be increased by improving function or reducing costs.

Wisconsin Department of Transportation (WisDOT) recognizes the need for the prudent use of resources while delivering a quality transportation program. The goals of a VE study can include improving quality, minimizing total ownership costs, reducing construction time or cost, simplifying construction, increasing safety, enhancing operations, and meeting environmental and ecological goals. While VE is relevant to many processes and is used across many sectors, this chapter focuses on transportation projects.

States with active VE programs have realized additional benefits beyond design improvements and cost savings, such as continual improvement of standards and policies, accelerated incorporation of new materials and construction techniques, employee enthusiasm through participation in agency decisions, and increased skills obtained from team participation.

Value engineering analysis is accomplished through a workshop, during which a multidisciplinary panel of peers led by a qualified VE Team Leader reviews a project according to a prescribed job plan and recommends changes to increase value. Workshops often occur over 3 to 5 days, take place near the proposed project site, and are staffed by individuals with expertise relevant to the project but not immediately involved with the project’s design.

This procedure provides guidance on the use of VE by explaining when a study is required, various stages of a project’s life where VE may be applied, how to set up a VE study and the roles of various WisDOT staff in VE.

15.3 Policy and Application

15.3.1 Federally Required Value Engineering Studies

Pursuant to Federal Highway Administration (FHWA) requirements under MAP-21², a VE analysis shall be conducted on:

- Each project on the National Highway System (NHS) receiving Federal Aid with an estimated total cost of \$50 million or more
- Each bridge project on the NHS receiving Federal Aid with an estimated total cost of \$40 million or more
- Any other project the USDOT Secretary determines to be appropriate

A project is defined by the scope identified in the NEPA Environmental document, which includes the portion of a highway that a state or local unit of government proposes to construct, reconstruct, or improve. The total cost includes all design, right-of-way, construction, and associated costs from all project phases, as reported in the

¹ <https://www.fhwa.dot.gov/ve/>

² <https://www.fhwa.dot.gov/legsregs/directives/orders/13111a.htm>

environmental document. A project may consist of several contracts or phases over several years. A VE analysis is required on either the whole project, a segment of the project, or on an element of the project, during some phase of the Department's Facilities Development Process.

Best practice is to review and determine VE requirements with FHWA as soon as the estimated total project cost is determined. There are no provisions in MAP-21 that authorize FHWA to grant a waiver or exemption to the requirement to conduct VE analyses.

Regions are responsible for implementing the VE program and complying with its requirements. Central Office facilitates the statewide VE program and uses the results of VE studies to prepare the Department's required annual VE summary report, evaluate the VE program guidance, cost effectiveness, and recommend changes to the program as needed.

Note: Thresholds for required VE studies were changed with MAP-21. All projects authorized for Federal funding before October 1, 2012 are required to provide VE according to previous requirements:

- Each project on the Federal Aid system with an estimated total cost of \$25 Million or more, or
- Each bridge project with an estimated total cost of \$20 Million or more, and
- Any other project the Secretary determines to be appropriate.

15.3.2 Value Engineering on Projects Beyond Federal Requirement

A VE study may be beneficial to a project with an estimated total cost between \$25 million and \$50 million (authorized for Federal funding on or after October 1, 2012). In this case, contact the State VEPM to review the scope of the project to determine whether VE is likely to yield a return on its investment.

Consider a VE analysis for any project involving:

- Scopes or estimates that substantially exceed initial values, or that grow complex over a long period of time
- Complex traffic control or staging/phasing, or right-of-way or utility requirements
- Extensive or expensive environmental, geotechnical, or structural requirements
- Other multidisciplinary workshops such as road safety audits, context sensitive solution workshops, etc.
- Complex technical issues, challenging project constraints, unique requirements, or competing community and stakeholder objectives

15.3.3 Other Value Engineering Applications

VE analysis may be applied to policies, standards, procedures or specifications. VE may be performed on a Region-wide basis, along a corridor, along several projects, or on a network of roadways (major, interstate, local, etc.)

When a VE study is not required but is performed because of its potential to improve value, follow the procedures in this chapter and report the results of the study to the State VEPM.

15.4 Scheduling a Value Engineering Study

When a VE study is warranted under [FDM 3-15-15.3](#), contact the State VEPM to set up a VE study. Following are the steps for selecting a team and structuring the study.

Most VE studies are conducted by consultant firms under Master Contract. However, if a project's design contract includes VE services, follow all procedures in this chapter.

See [Attachment 15.1](#) and [Attachment 15.2](#) for a description of the roles and responsibilities of Consultant, Region, and Central Office personnel.

15.4.1 Project Identification/Selection

WisDOT personnel complete a VE Work Order Request Form and submit it to the State VEPM as soon as a VE need is identified. The State VEPM selects a VE consultant, completes the request, and submits it to the Contract Administration Section for approval, then returns the approved copy to the Project team. Each VE study is performed under one Work Order, which is executed between the VE consultant and the WisDOT Region / Project Manager. See [FDM 8-20](#) for consultant contracting procedures.

The scope of a VE study may include one project or a series of projects. Adjacent projects that share geometric elements or construction staging, or projects on a corridor, can sometimes be combined into one VE analysis. Review the proposed scope with the State VEPM and the VE Team Leader, and determine the appropriate scope of each VE study, and confirm the scope in writing with FHWA.

Apply VE as early as practical in project development. In doing so, the VE study is less likely to conflict with the project schedule, recommendations are less likely to require extensive design re-work, and the project team is more likely to be receptive to VE recommendations. However, adequate project data and preliminary design must be available for the VE team to analyze. Work with the State VEPM and FHWA VE coordinator to determine the most appropriate time to hold the VE study.

Common project development stages when VE is applied with the best results include:

- Scoping of project concepts and alternatives to be studied – this is often referred to as a “Value Planning” study
- Development and evaluation of alternatives and alignments, and their environmental impacts
- Development of preliminary roadway and bridge design, typically near 30% design

Examples of VE applications for Major Projects are discussed [Attachment 15.3](#). At a minimum, any VE analysis required per [FDM 3-15-15.3.1](#) shall be conducted prior to completing the project’s final design.

15.4.2 Team Leader Selection

For Federally-required VE studies, the VE firm selected must not be the same as the design or environmental firm selected for the project under study.

WisDOT retains several VE consultants on two-year Master Contracts for quick access to qualified VE Team Leaders and participants. The State VEPM is responsible for soliciting and maintaining the VE master contracts. The number of Master Contracts in each biennium is based on the probable amount of work anticipated. To be considered for a Master Contract, a VE firm must employ qualified Team Leaders.

To be eligible to lead a WisDOT VE study, a VE Team Leader must:

- Not be employed by the same firm as the design or environmental firm for the project under study
- Be certified by the Society of American Value Engineers as a Certified Value Specialist (CVS)
- Be fluent with the current VE Job Plan ([Attachment 15.2](#)) and FHWA VE requirements
- Demonstrate past performance leading VE studies, with references
 - Have a record of presenting practical solutions, indicated by a high number of recommendations implemented compared to the number of recommendations made.
 - Be skilled in facilitating workshops and motivating a diverse group to produce creative solutions
- Have engineering background, with experience in transportation projects
 - Be familiar with the requirements, standards, and policies of the affected regulatory and environmental agencies
- Be employed by a firm on or eligible for WisDOT’s roster of engineering consultants. See [FDM 8-5-45](#)

The State VEPM facilitates connecting VE Team Leaders with project teams based on schedule, work load, areas of expertise, and likelihood of success.

Convey relevant project information to VE Team Leader

In order to define the objectives of a VE study and select an appropriate team, the WisDOT project team must provide basic information to the VE Team Leader. To the extent practicable, provide the VE Team Leader with current design information such as plans, alternatives, estimates, and other reports. Discuss with the VE Team Leader any specific project concerns or constraints, and objectives for the VE study. At a minimum, provide the Team Leader with a project overview to help the VE team leader select an appropriate VE team.

15.4.3 Team Selection

A VE team is a multidisciplinary group of individuals, none of whom may be directly involved in the day-to-day design or management of the project being studied. The team’s expertise should include the major areas anticipated to be evaluated. Representatives from diverse disciplines other than engineering may provide greater objectivity to the study.

The VE Team Leader is responsible for selecting and managing the VE team and will recommend relevant individuals from their network of subject matter experts. Team members can also include experts from other agencies, elected officials, or interested citizens.

Each VE team should include WisDOT staff, from any region or Statewide Bureau, to contribute expertise on subject matter, State policies, and procedures. Consider inviting personnel from the Bureau of Traffic Operations and Bureau of Structures to participate in each VE study. Including WisDOT personnel on VE study teams results in more relevant, implementable VE recommendations.

The VE consultant shall obtain the approval of the region Project Manager and State VEPM on the scope of the

VE study, as well as the study team members included.

15.4.4 Study Set-up

Coordinate the VE study details with the VE Team Leader. Some of these elements influence the cost of the VE study and need to be determined prior to executing a Work Order.

- **Date and time of study:** VE studies vary in length based on project complexity, are often 3 to 5 days long and occur during one week. The VE team leader will recommend an agenda for the study. Structure the agenda to accommodate travel by VE team participants, and attendance by key WisDOT personnel.
- **Location of study:** Some studies are held in conference rooms at region offices, but are often effective when moved offsite, to a nearby conference or meeting facility of any kind. The study location must be conducive to the VE team focusing fully on the study, without distractions.
- **Site Visit:** Many VE project teams greatly benefit from a site visit. When a site visit is part of the agenda, a study location near the project site is recommended. A representative from WisDOT who is familiar with the site should act as a guide for the VE study team. Site visits are usually made in a State van (arranged by WisDOT PM) or rented van (arranged by VE Team Leader.)
- **In-brief meeting:** At the beginning of each VE study, the project/design team briefs the VE team on the project design and decisions to-date, as well as constraints and goals for the VE study. The in-brief meeting is a valuable opportunity to solicit input and participation from project stakeholders, which can include WisDOT, FHWA, local municipalities, and others. At a minimum, the Project Manager shall establish a meeting for the in-brief session, and invite the State VEPM, the project's FHWA representative, the project's Design Oversight liaison (BPD), and representatives from the Bureau of Traffic Operations and Bureau of Structures. Provide this invitation as soon as possible after the VE agenda is determined.
- **Out-brief meeting:** At the end of each VE study, the VE team presents its recommendations to WisDOT. In coordination with the VE Team Leader, the project manager shall establish a meeting time and place for the out-brief and invite interested or affected stakeholders (as described below in [FDM 3-15-15.6](#)).

15.5 Conduct a Systematic Functional Analysis VE Study

The VE study itself is administered in accordance with a standard Job Plan ([Attachment 15.1](#)), by the VE Team Leader. During the study, involvement by the WisDOT project team is usually minimal. Designate an individual on the project team as a point of contact for the VE team, to answer questions or furnish additional information requested.

15.6 Presentation of Recommendations

At the end of each VE study, the VE Team presents its recommendations to the WisDOT project team and other interested stakeholders. It is imperative that project personnel, region managers, and other interested decision-makers attend the out-brief meeting and ask any questions directly of the VE team.

At a minimum, the Project Manager in coordination with the VE Team Leader shall establish a meeting for the out-brief session, and invite the State VEPM, FHWA, Bureau of Project Development, Bureau of Traffic Operations, and Bureau of Structures (if the project includes any structures), and region managers.

After the VE study is completed, the VE consultant shall prepare and deliver to WisDOT a complete draft report of the VE study. It is recommended that the draft report be furnished to WisDOT in electronic (PDF) format. The report must be completed in a timely manner (as specified in the Work Order), and give a complete, clear, and thorough account of the VE study considerations and recommendations.

15.7 Implement Approved Recommendations

The WisDOT project team is responsible for implementing accepted VE recommendations.

After the completion of the VE study and receipt of the draft VE report, the Project team, in consultation with region management, must determine which VE recommendations to implement. It is desirable for the project team convene an additional meeting to review the VE recommendations. Give serious consideration to all VE recommendations, even those that represent significant changes to the project design. Revise the estimated savings, if necessary, and note any conflicts with project parameters. Contact the VE Team Leader, if necessary, for corrections to the draft report or for additional clarifications.

Likewise, understand that the VE team works with limited information; do not accept VE recommendations that violate previous commitments or other project objectives or parameters not adequately considered by the VE team.

Ultimately, determine which recommendations to accept or reject, and document rationale for each decision alongside each recommendation on the VE summary worksheet ([Attachment 15.4](#)). Provide a list of these decisions to the VE Team Leader for inclusion in the final VE report and to the VEPM for statewide reporting.

Approved VE recommendations shall be implemented through revision of the project design documents. Changes made as a result of the VE study should be noted in design documentation, including the DSR.

15.8 Reporting Requirements

For each VE study, the VE Consultant shall provide the Department a complete final report of the VE study. The report must thoroughly document each phase of the VE study, along with summary information.

Provide a full electronic (PDF) copy and one full paper copy to the State VEPM, to be retained in Central Files. Additional copies should be distributed at the Project Manager's discretion.

For each VE study, all VE alternatives shall be summarized on [Attachment 15.4](#). This worksheet consists of a summary description and details of each VE alternative considered, their acceptance status, and final VE estimated cost avoidance. A draft of form [DT1342](#) (Value Engineering Summary) shall be included with each VE final report, which the Project team will update with implementation data.

The State VEPM retains records of all VE studies completed and compiles the required annual report to FHWA. This report helps keep stakeholders aware of VE accomplishments and results and serves to promote VE as a team effort of the entire department.

LIST OF ATTACHMENTS

Attachment 15.1	Value Engineering Job Plan
Attachment 15.2	Roles and Responsibilities
Attachment 15.3	Value Engineering Studies on Major Projects
Attachment 15.4	VE Recommendations Summary Worksheet