Value Engineering Screening/ Strategy Selection & VMP Process

http://www.usace.army.mil/ValueEngineering.aspx

Comply with Laws/Policies → **VEO Addresses Workload** ← **Ensure a Viable VE Program**

Screen (Sort Project List Based on VE Threshold)

Categorize

< $2M → **Default to "Not Required"** (Can be overridden by VEO, if potential identified when bundled/ grouping of like projects)

Screen for VE Opportunity (Refer to Screening Tool)

Recommend Appropriate Strategy (Refer to Screening and Strategy Selection Tool, recommend to PDT @ ASM)

LEGEND
- Value Activity
- Value Workshop

Programmatic Value Activity

Individual Value Activity

| Programmatic (Level 5) | Bridge | Scan | Value Planning (Level 1) | Abbreviated Study (Level 2) | Standard Study (Level 3) | Problem Resolution (Level 4) | Functional Review (Level 6) | Low Opportunity |

Programmatic (Level 5)
Appropriate for:
- Programmatic and Strategic studies
- Key Examples: Standard Design, Design Standards, ANSF, Dredging, Roofing, CoS, etc…

Constraints:
- Can be independent or blended

Effort:
- Typical duration 5-14 days

When
- Anytime

Create VMP (Document Strategy)

MSC Doesn't Agree / MSC Agrees

Choose Alternate Level of Effort

VMP Approved (Documenting Strategy)

Bridge
Appropriate for:
- Bridging Programmatic Efforts
- Could Satisfy VE for applicable task

Constraints:
- Limited to confirmation of previous VE efforts

Effort:
- Conducted by VEO, typical 1.5 – 2 days

When
- Allowed before 35% design

Has an **APPLICABLE** Programmatic VE been previously performed within the last 5 years?

No/ Yes

No → Choose Alternate Strategy

Yes → **Create VMP** (Using Screening Tool)

<$10M / ≥$10M

MSC Doesn't Agree / MSC Agrees / MSC Agrees / MSC Doesn't Agree

HQUSACE Chief OVE Agrees / HQUSACE Chief OVE Doesn't Agree

VMP Approved (Documenting Strategy)

Scan
Appropriate for:
- Apply efforts from previous studies
- Could satisfy VE for applicable task

Constraints:
- Primarily for small projects ($2-$10M)
- Requires MSC approval
- Over $10M requires HQ OVE approval

Effort:
- Conducted by VEO, typical 1.5 – 2 days

When
- Allowed before 35% design

Has at least five VE workshops been previously performed within the last 5 years within the same region?

Yes/ No

Yes / No → Choose Alternate Level of Effort

Value Planning (Level 1)
Appropriate for:
- Phase 1 VE for all projects
- Can be integrated with other process
- Satisfies VE for low dollar & complexity
- Key examples: SRM, CoS projects, fuels projects, levee repairs

Constraints:
- Tasks with greater value and complexity require additional VE
- Typically integrated

Effort:
- 1.5 – 5 days typical

When
- 15% design or sooner

Abbreviated Study (Level 2)
Appropriate for:
- Repetitive type tasks that are low in complexity.

Constraints:
- Limited to low complexity or as second effort.
- Key Examples: Reserve Center, Hangars, small flood protection and, small navigation projects, etc…

Effort:
- 3 days typical

When
- Allowed 35% design or sooner

Create VMP (Using Screening Tool)

Scoping/ Pre VE Activity

Execute VE Activity

Standard Study (Level 3)
Appropriate for:
- All tasks, especially those w/high value & complexity

Constraints:
- Must be independent or blended
- Key Examples: Hospitals, Schools, Labs, Dams, Levees, etc...

Effort:
- 5+ days typical

When
- Allowed 60% design or sooner

Problem Resolution (Level 4)
Appropriate for:
- Projects with scope or schedule challenges

Constraints:
- Not allowed as initial strategy
- Must be independent or blended
- Only for exceptional circumstances
- Example: Projects that have budget or scope issues

Effort:
- 5+ days typical

When
- ONLY allowed 60% design or later

Functional Review (Level 6)
Appropriate for:
- A follow-on value activity for large scale complex projects.
- Supplements an abbreviated or standard study

Constraints:
- Can't be a standalone effort
- Requires independent team members

Effort:
- Typically at least 1 day or more

When
- Towards the end of delivery process

Is this part (second effort) of an abbreviated or standard study?

Yes/ No

Yes / No → Choose Alternate Level of Effort

Low Opportunity
Appropriate for:
- Low complexity and low dollars
- Routine projects
- Highly constrained
- Low opportunity for beneficial change

Constraints:
- Over $10M requires MSC & HQ OVE approval

Effort:
- Creation of the VMP

When
- At the very beginning, not later than 35%

Create VMP (Using Screening Tool)

<$10M / ≥$10M → Choose Alternate Level of Effort

MSC Agrees / MSC Doesn't Agree

HQUSACE Chief OVE Agrees / HQUSACE Chief OVE Doesn't Agree

Finalize VMP (Documenting Strategy) / **VMP Approved** (Documenting Strategy)

Bridge: VEO & PDT Review Programmatic VE Report

Scan: VEO Pulls Similar VE Reports & PDT Reviews

Reports

Generate PROGRAMMATIC VE Report
- VE Report #
- Study Cost
- Function Analysis
- Consensus Results

Generate BRIDGE VE Report
- VE Report #
- Ref Program Study
- Consensus Results
- Implementation
- Study Cost

Generate SCAN VE Report
- VE Report #
- Ref VE Studies Used
- Consensus Results
- Implementation
- Study Cost

Generate Project VE Report
- VE Report #
- Function Analysis
- Consensus Results
- Study Cost

District Quality Control Review
- Confirm Report Finished
- Review Function Analysis
- Confirm Appropriate Team Members
- Confirm Appropriate Level of Effort
- Confirm Qualified Team Leader
- Confirm Valid Alternatives

VE Project Close Out
- VERS
- VE Team Evaluation
- SharePoint
- Closeout Checklist
- BCOES VE Certification
- ACASS

MSC Quality Assurance Review
- Confirm Completed Closeout Checklist
- Review Function Analysis
- Confirm Appropriate Level of Effort
- Confirm Valid Alternatives

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