# Considerations for an Agency's Value Engineering (VE) Program

- Why Have a VE Program?
- What Should a VE Program Accomplish?



- When Should VE be Applied?
- Where Should the VE Program be Managed in the Agency?
- **How** Should VE Studies be Executed?

# Considerations for an Agency's Value Engineering (VE) Program

- Some Specifics
- Common Issues
- Your Input
- Summary



### Why Have a VE Program?

- Federal agencies - VE is required by OMB Circular a-131; basic requirements are:

- . Establishing a VE program
- . Designating a VE official
- . Developing criteria and guidelines
- . Assigning internal responsibility
- . Providing VE training
- . Ensuring adequate program funding
- . Maintaining records
- . Adhering to FAR VE requirements (Contractor VECPs)
- . Developing annual VE plans
- . Annual reporting to OMB

### Why Have a VE Program?

- State and local govt. agencies
  - . VE is may be required by state or city law or policy (or not); need to perform on shrinking funds



(Cal Trans, Several DOTs, New York City)

- Private industry
  - . Competition and profit motive dictates VE and/or similar programs

(Pratt and Whitney and many, many others)

# What Should a VE Program Accomplish?

- Satisfy customers
  - . Owners
  - . End users
  - . Partners and/or sponsors
  - . The taxpayer or stockholder
- Improve product performance and cost-effectiveness
- Improve internal process efficiency
- Broaden agency knowledge and communication



### When Should VE be Applied?

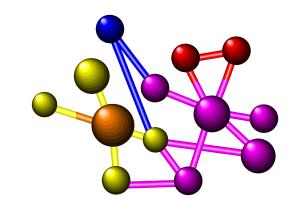
 VE is best applied as a product development tool vs project review



- VE studies should be performed early in planning (no later than defining final alternatives)
- ... and early in the design (no later than 35% completion)
- Cal Trans data on VE in planning phase and design phase

# Where Should the VE Program be Managed in the Agency?

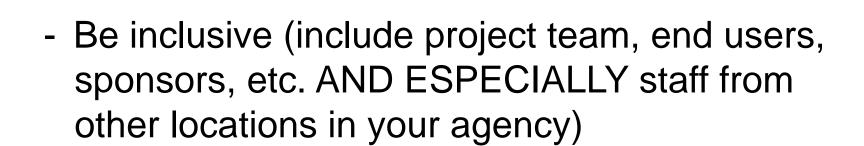
Should be located anywhere it will be supported



- Best <u>not</u> in Engineering Dept. but closer to agency funding management (PM, etc.)
  - . NYC VE located in their OMB...... VERY effective!
- Often included in QA/QC especially in private industry

#### **How Should VE Studies be Executed?**

- Be early
- Be big

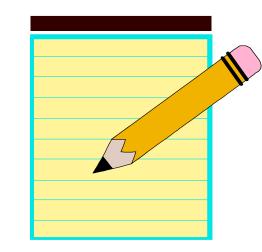


- Be expensive (high quality)
- Be planned well in advance



### **Some VE Specifics**

- Establishment in product delivery process
- Can cover multiple of common type of projects/ procurements/processes ('programmatic' studies)



- Integration in QA/QC
- Inclusion in internal process improvement
- Performing quality VE studies
- How do you measure VE program effectiveness?

#### **Common Issues**

- Inertia resistance to starting a program
- Funding and scheduling
- Perception of VE as just cost cutting



- QA/QC of VE studies
- Over detailed performance reporting



# Your Input?



### **Summary**

- For federal agencies VE is required by OMB Circular a-131; others have programs for its benefits



- VE should satisfy customers via improving product performance and cost-effectiveness, internal process efficiency and broadening agency knowledge and communication
- VE is best applied as a product development tool vs project review and should be performed early in planning and design

### **Summary (cont.)**

- VE should be located where it is supported in the agency but probably best in project funding management.



- VE studies best when done early, big in scope, inclusive, expensive and planned well in advance
- VE should be integrated in product delivery, quality and process improvement

### **Summary (cont.)**

- Program issues including, but not limited to, inertia, funding and scheduling, perception and individual obstinance are to be expected and must be addressed

