

value analysis in action



MINISTRY OF TRANSPORTATION



Introduction to Value Analysis

- Facilitated and creative process
- Generates alternative solutions
- Involves people from a variety of backgrounds
- Six phases or steps



The Value Analysis Workshop

Phase 1: Information Phase

Phase 2: Function Analysis Phase

Phase 3: Creative Phase

Phase 4: Evaluation Phase

Phase 5: Development Phase

Phase 6: Presentation Phase



Information Phase

- Review project information
- Discuss the project
- Ask questions
- Clearly define project objectives
- Establish key constraints



Cost Models

- Developed prior to the workshop
- Improve understanding
- Organize cost information

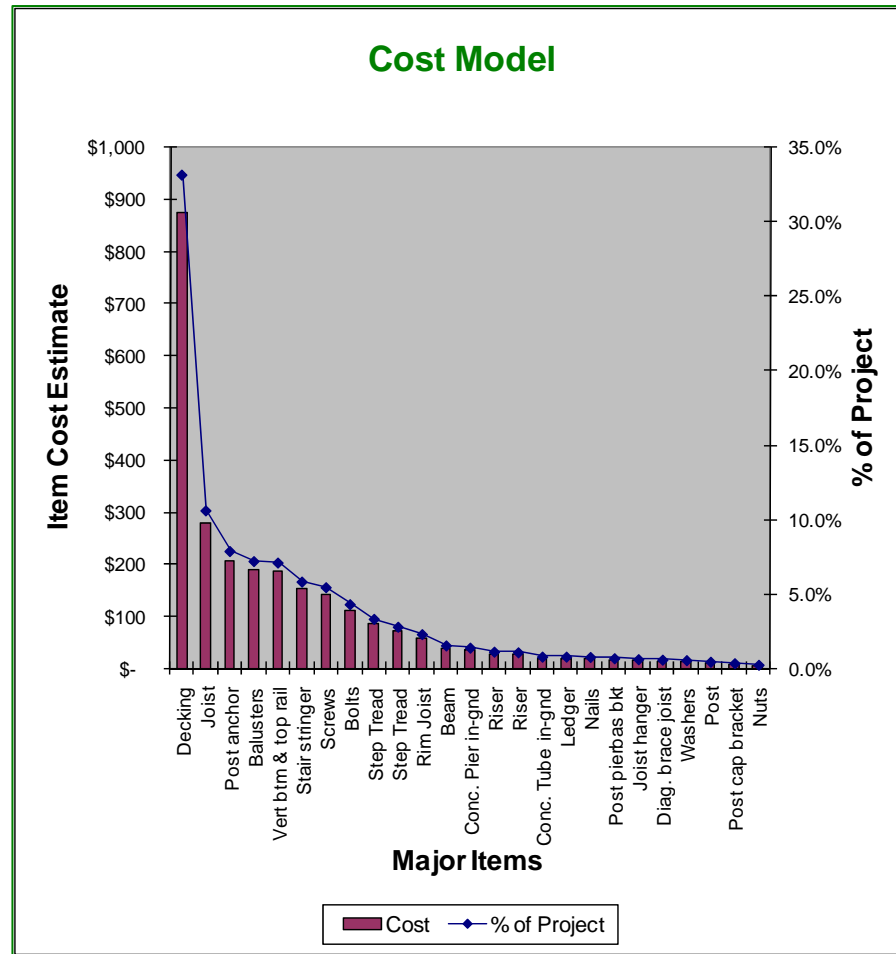


Types of Cost Models

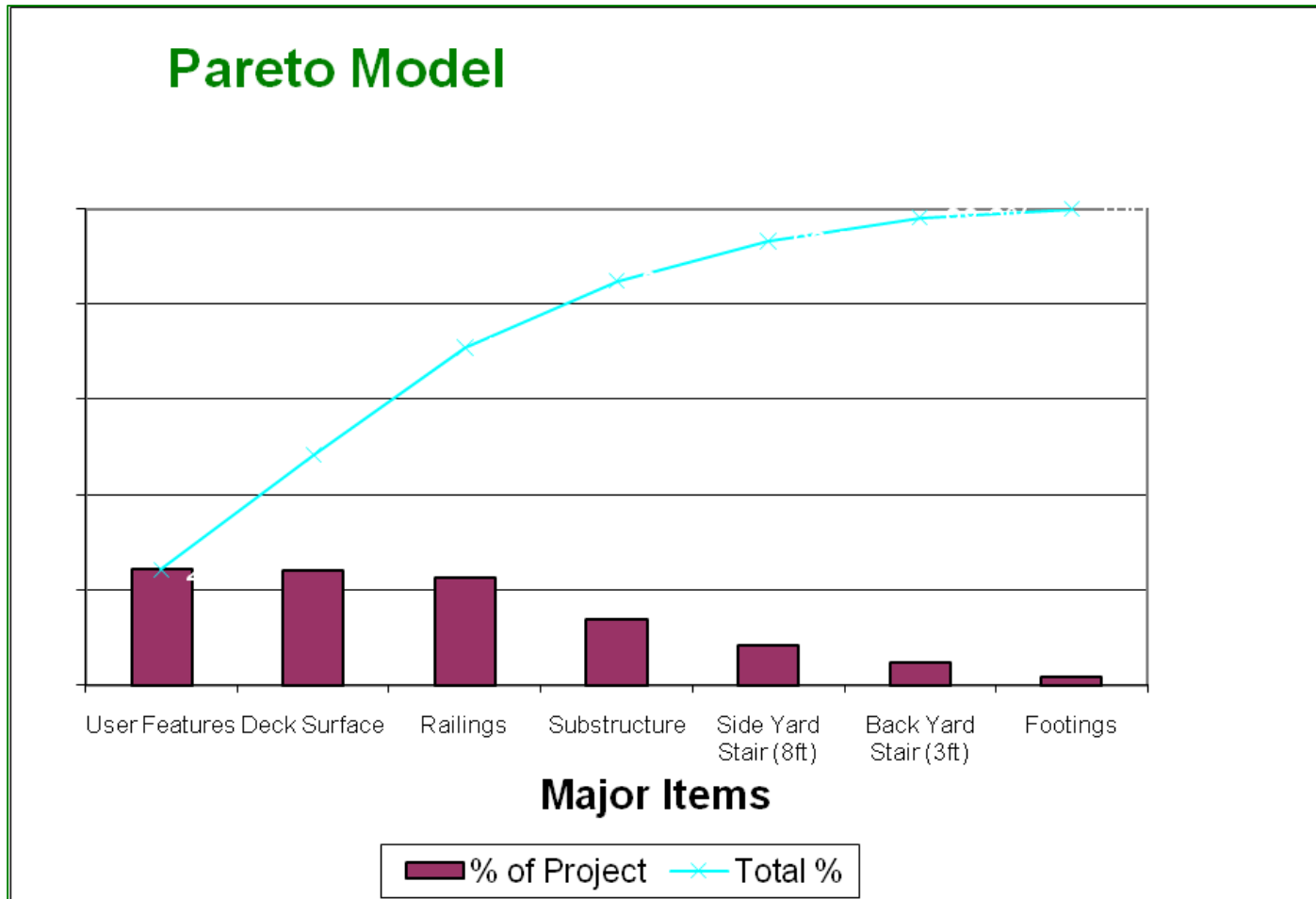
- Graphical model
- Pareto's model
- Hierarchical model



Graphical Model by Component



Pareto Model by Item



Function Analysis Phase

- Key aspect of Value Analysis
- Answers the question “What must it do?”
- Functions are examined for their inter-relatedness
- Allows a better exploration of alternatives



Function Analysis Activities

- Verb Noun Definitions
- FAST diagrams
- Cost/Function analysis

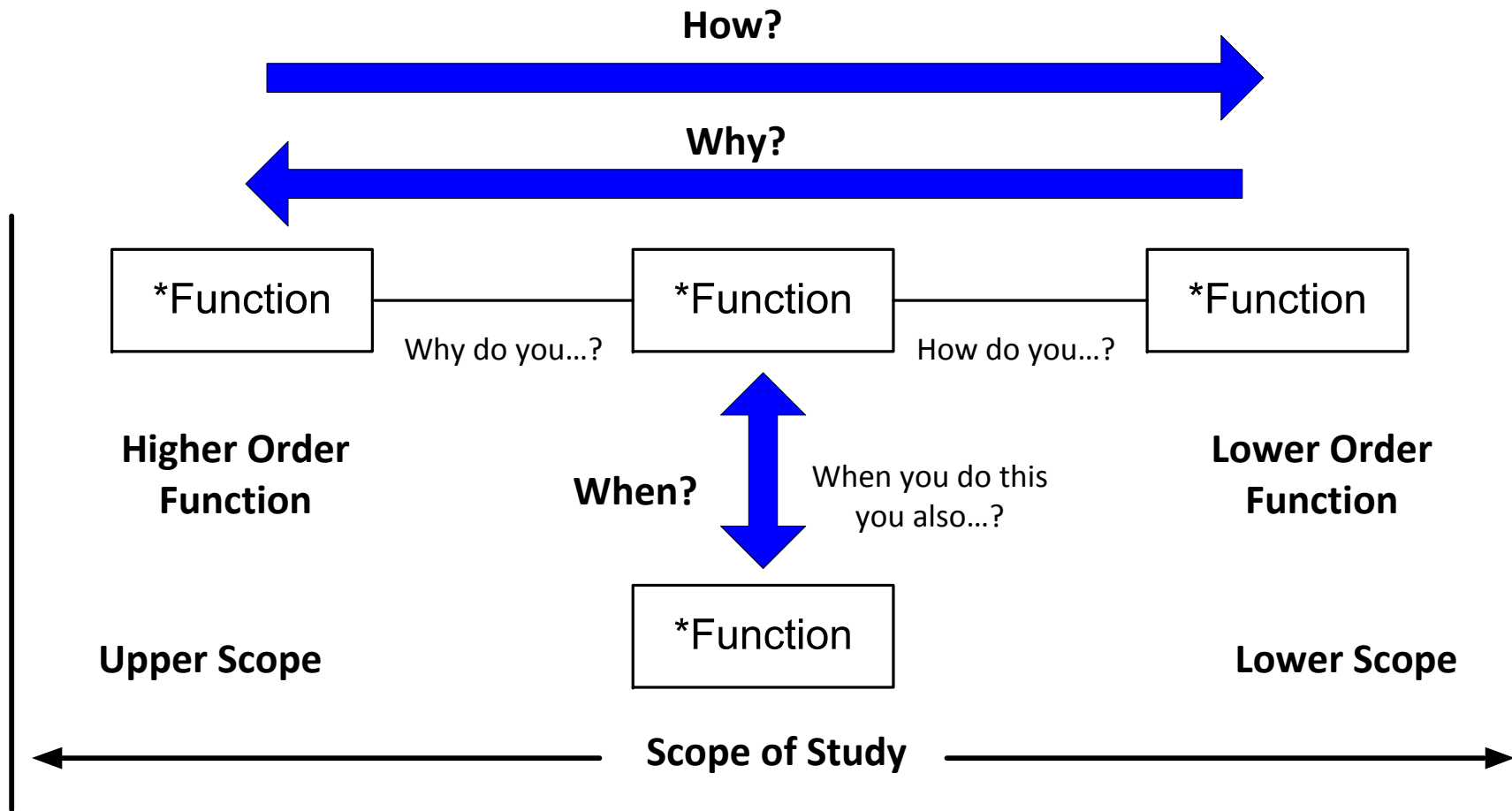


FAST Diagram

- Method of organizing relationships between functions
- Asks 'how' and 'why' questions about the functions
- Debate fosters understanding and creativity

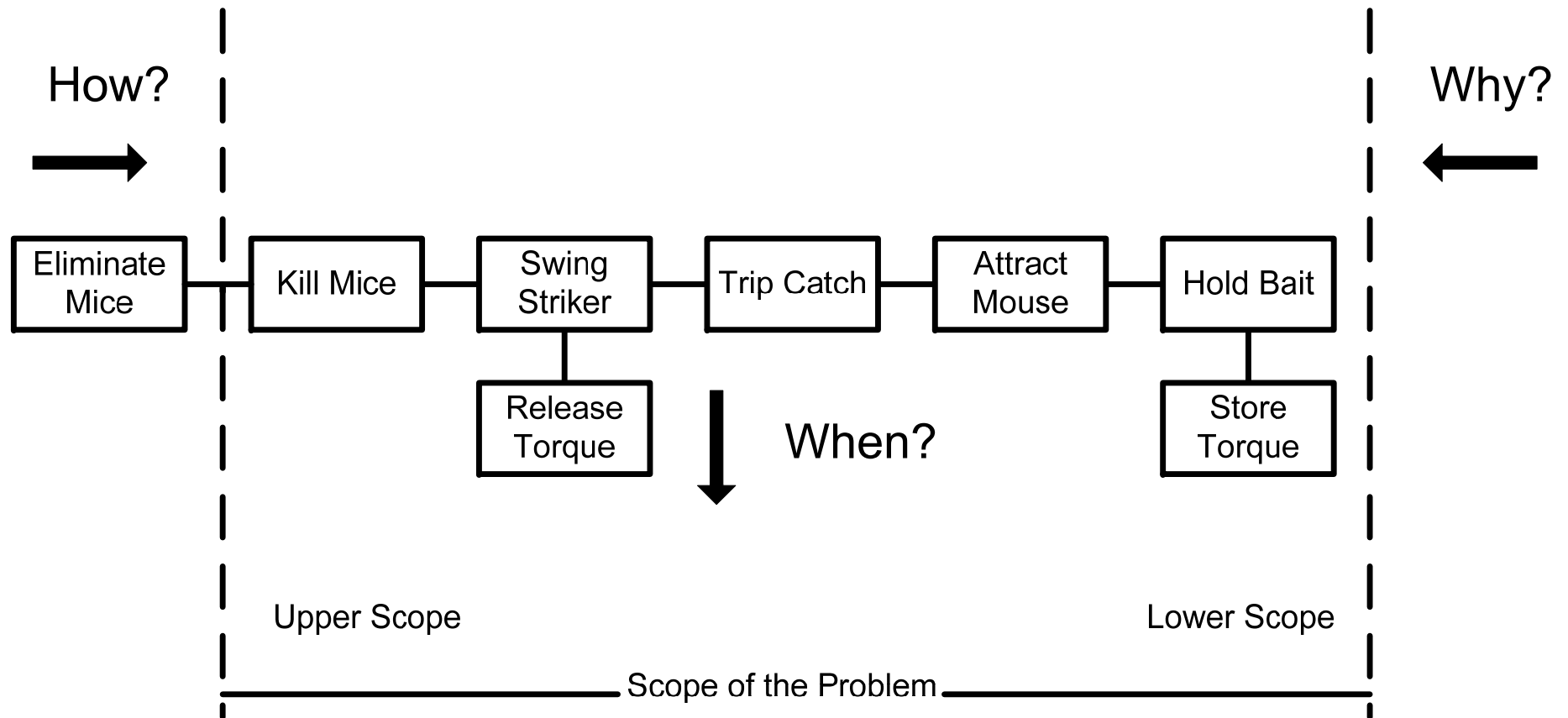


How to Read a FAST Diagram



*...where Function = Active Verb + Measurable Noun

Sample FAST Diagram



Creative Phase

- Generates alternate ideas for performing functions
- Function-based brainstorming as one way to generate ideas
- Goal is to create as many ideas as possible



Evaluation Phase

- Ideas from the creative phase are evaluated and prioritized for their potential to:
 - Save cost
 - Add value



Development Phase

- Explore ideas selected in Evaluation phase
- Obtain data to compare idea to original solution
- Sub-teams explore different alternatives
- Develop ideas into written recommendations



Presentation Phase

- Present workshop team recommendations
- Demonstrate depth, knowledge and thoroughness
- Inspire confidence in the recommendations



Implementation of Ideas

- Value Analysis report with recommendations is circulated
- Recommendations are discussed and steps are taken to reject, accept or further study recommendations



Benefits of Value Analysis

- What's in it for the organization to use Value Analysis?
- What's in it for you if you participate in, or promote, Value Analysis?



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