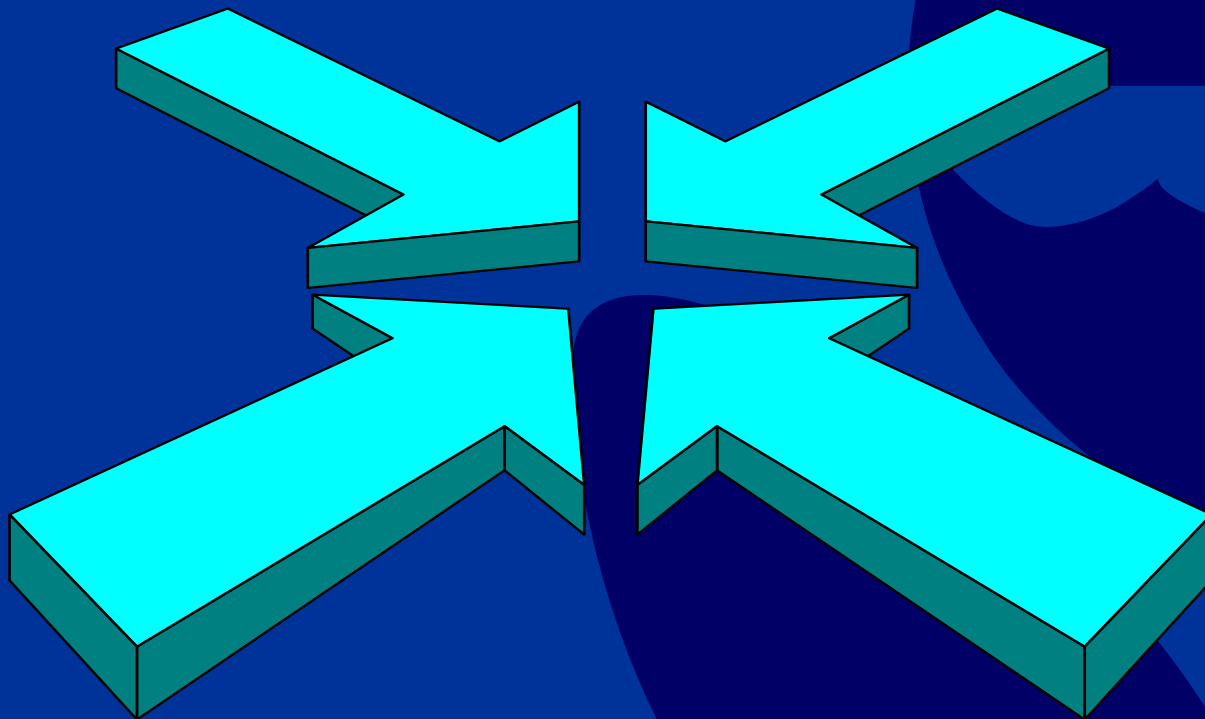


Considerations for RA Contracting



Overview of Contracting Module

- ◆ This module addresses:
 - » Understanding how the degree of certainty of site characterization and site complexity relate to the contracting strategy
 - » Understanding how financial risk, management effort, and cost control relate to the contracting strategy
- ◆ This module provides:
 - » List of references
 - » List of contacts

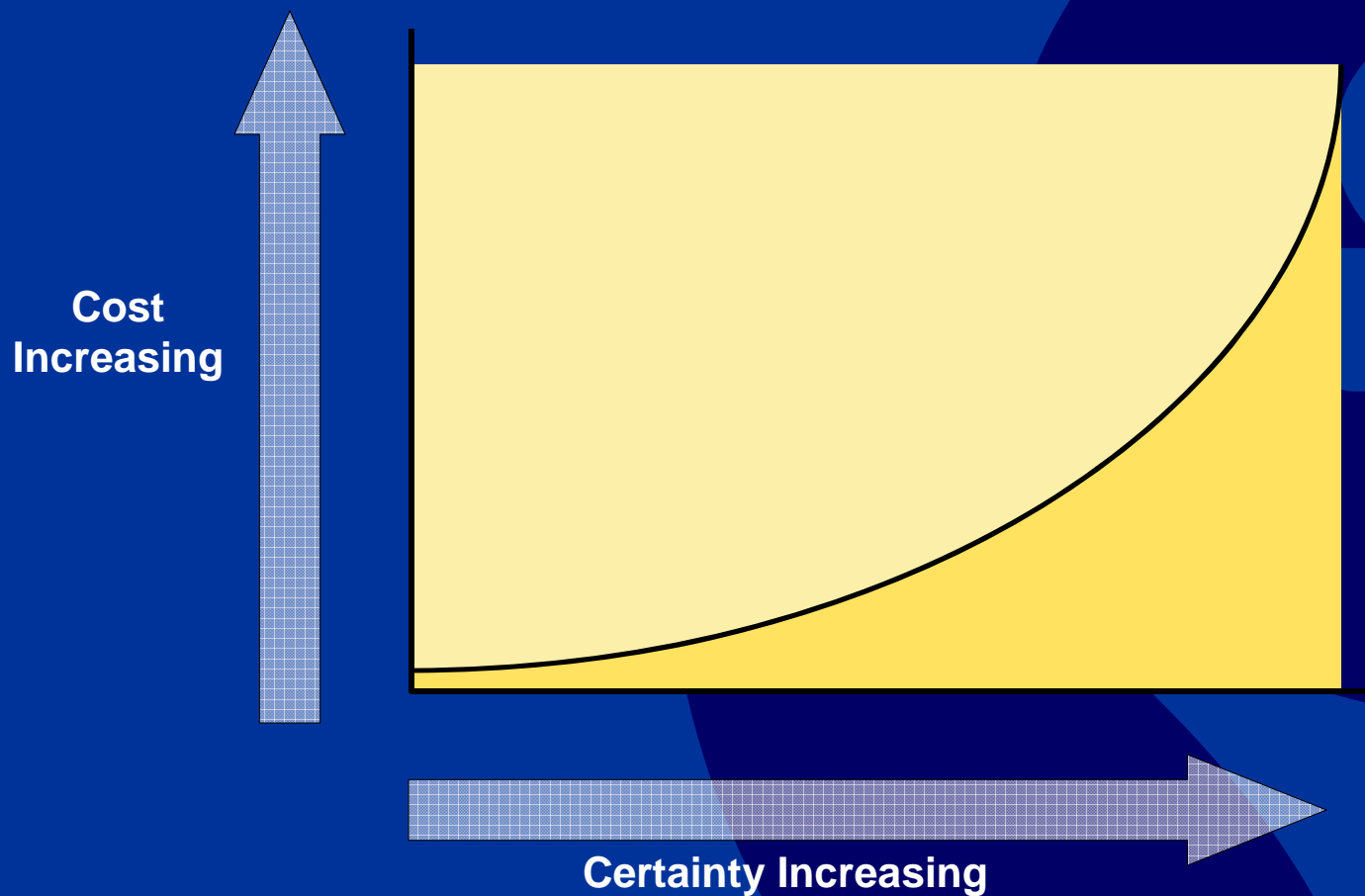
Developing the Contracting Strategy

- ◆ RPM can influence the design approach, contract type, or procurement strategy the construction manager is to use for the RA.
- ◆ RPM can create a statement of work that will lead the contractor to the type of contracting strategy best suited for the site.
- ◆ Fund-lead RAs are conducted under one of four contracting arrangements with the following entities holding the contract with the constructor:
 - » RAC
 - » USACE
 - » EPA
 - » State

Factors Affecting the Contracting Strategy

- ◆ Certainty of the site characterization
 - » The higher the level of certainty, the less flexibility required in the contracting strategy
- ◆ Site complexity
 - » The more complex the site, the greater flexibility required in the contracting strategy

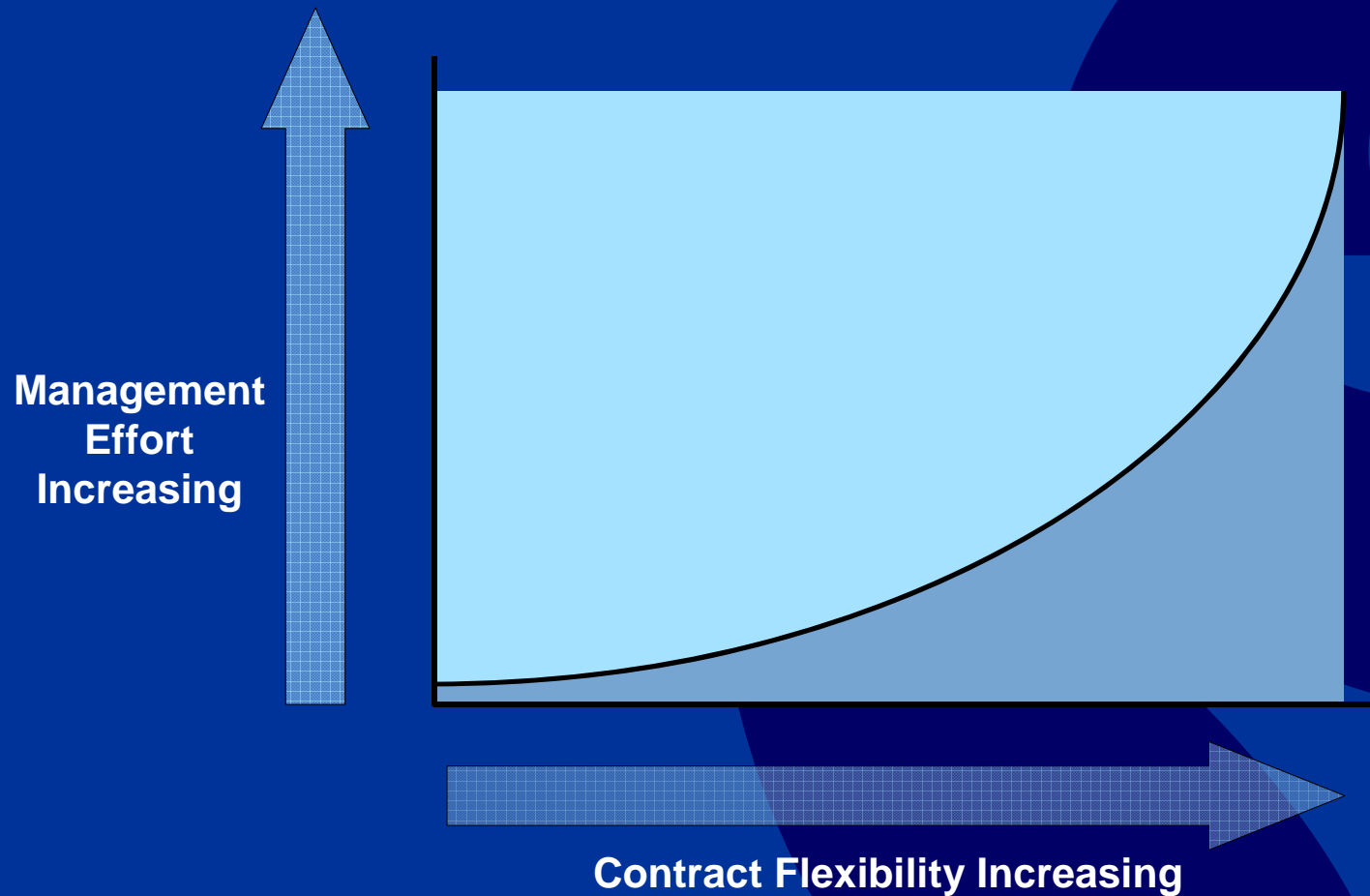
Relationship Between Site Characterization Certainty and Cost



Components of Contracting Strategies

- ◆ A contracting strategy is comprised of the design specification, procurement method, and contract type
- ◆ Specification types - detailed design and performance
- ◆ Procurement methods - sealed bid, two-step sealed bid, and negotiated procurement
- ◆ Contract types - fixed price, time and materials, cost reimbursement

Relationship Between Contract Structure and Management Effort




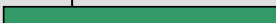


Contracting Strategy for Detailed Design Specifications

- ◆ Best suited for well-defined or simple projects where there is a high level of certainty regarding site characterization
- ◆ Used with sealed bid or two-step sealed bid procurement
- ◆ Contract type used is fixed price
- ◆ Risk for RA born primarily by contractor
- ◆ Best cost control, least management effort, least flexible to changes during RA

Contracting Strategy for Performance Specifications

- ◆ Best suited for projects that are not well defined or are complex and where there is a lower level of certainty with regard to site characterization
- ◆ Can be used with sealed bid when performance criteria are well-defined or negotiated procurement
- ◆ Contract type can be fixed price, cost reimbursement, or time and materials
- ◆ Risk for RA shared by government and contractor
- ◆ Provide flexibility for change; cost control more difficult
- ◆ High level of management effort required if cost reimbursement or time and materials contracts used

Contract Selection Matrix

Form of Contract	Certainty of Site Definition		
	Low	Medium	High
Fixed Price: Firm-Fixed-Price Unit Price			 
Cost-Reimbursement: Cost-Plus-Fee Time-and-Materials			
<p>The most appropriate form of contract for an RA depends upon the degree of certainty in defining the site.</p>			

Considering Financial Risk

- ◆ Financial risk can be born primarily by the contractor
 - » fixed price contracts
- ◆ Financial risk can be shared by contractor and government
 - » indefinite quantity contracts
 - » time and material contracts
- ◆ Financial risk can be born primarily by the government
 - » cost reimbursement contracts
- ◆ Less certain site characterization and increased site complexity require government to share financial risk

Considering Management Effort and Cost Control

- ◆ Government management effort associated with different contracting strategies
 - » less flexible strategy = less management effort
 - » more flexible strategy = more management effort
- ◆ Degree of cost control associated with different contracting strategies
 - » less flexible strategy = more cost control
 - » more flexible strategy = less cost control

Matching Site Type to Appropriate Contracting Strategy

- ◆ Determine level of certainty associated with site characterization
 - » high certainty = less flexible strategy
 - » low certainty = more flexible strategy
- ◆ Determine the complexity of the site and the remedial action
 - » simple = less flexible strategy
 - » complex = more flexible strategy

Using a Combination of Strategies for Large Sites with Multiple, Discrete Activities

- ◆ Identify remedial components that are predictable, routine, or well-defined
 - » Consider use of less flexible contracting strategies for these components
- ◆ Identify remedial components that are less well-defined or more complex
 - » Consider use of more flexible contracting strategies for these components

Examples of Simple Civil Engineering Projects

- ◆ Limited demolition
- ◆ Minor earthwork
- ◆ Routine groundwater monitoring

Contracting Strategy for Simple Civil Engineering Projects

- ◆ Detail design specification
- ◆ Sealed bid procurement method
- ◆ Fixed price contract type

Examples of Complex Civil Engineering Projects

- ◆ RCRA cap
- ◆ Extensive demolition or excavation
- ◆ Engineered structures such as a building to house groundwater treatment components
- ◆ Decontamination of buildings
- ◆ Slurry wall construction

Contracting Strategies for Complex Civil Engineering

◆ Option 1

- » Detailed design specification
- » Two-step sealed bid procurement
- » Fixed price contract type

◆ Option 2

- » Performance specification
- » Negotiated procurement
- » Indefinite quantity or time and materials contract types

List of References and Contacts for RA Contracting

- ◆ Appendix A provides a list of references
 - » Helpful technical, policy, and guidance material available on the web
- ◆ Appendix B provides a list of contacts
 - » EPA and USACE contacts for RA contracting

Conclusions

- ◆ Certainty of site characterization and complexity of the site affects the contracting strategy
 - » high certainty/less complexity = less flexible strategy
 - » lower certainty/greater complexity = more flexible strategy
- ◆ There is a relationship between the type of contracting strategy used and
 - » how financial risk is shared
 - » the level of management effort required
 - » the degree of cost control achieved
- ◆ RPMs should be engaged in the process and influence the selection of the contracting strategy