

Department of General Services
Division of Engineering & Buildings

The Capital Outlay Process in Virginia



January 24, 2008

Commonwealth of Virginia's agencies and institutions design and construct facilities which are:

- **LARGE**
- **COMPLEX**
- **EXPENSIVE**

Examples:

- **Laboratories**
- **Hospitals**
- **Prisons**
- **Technology-intensive classrooms**
- **Stadiums and arenas**



- These projects are constructed under the “capital outlay process”
- On major projects, this process can span over several years

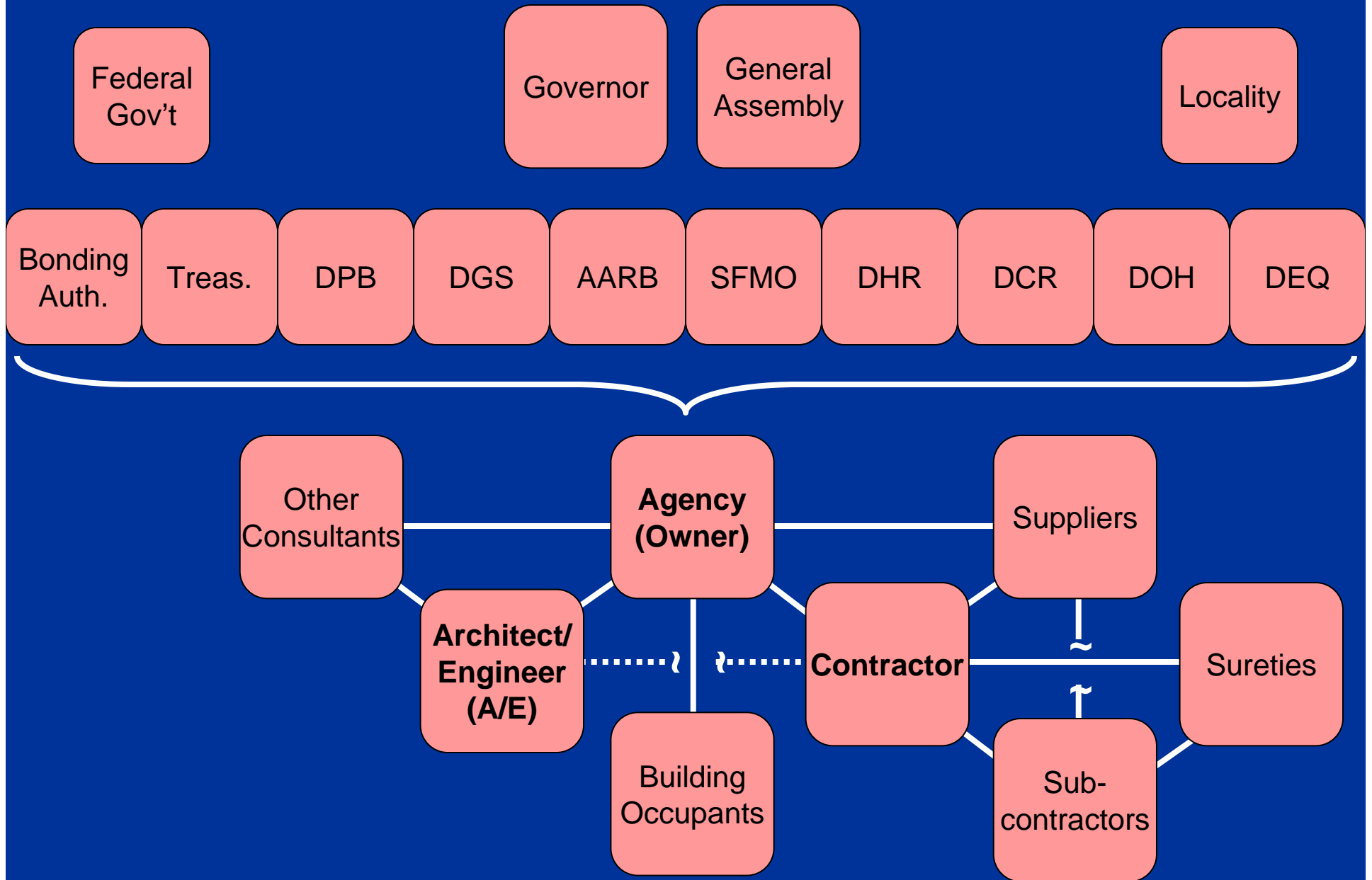
The image displays five identical, small-scale budget spreadsheets for the year 2006, arranged horizontally. Each spreadsheet is a grid with multiple columns and rows, containing numerical data and text labels, typical of a financial budget document. The year '2006' is printed at the top of each grid.

- The process begins when an agency submits a Capital Budget Request to DPB and ends when the building is occupied for its intended use

The Process Begins

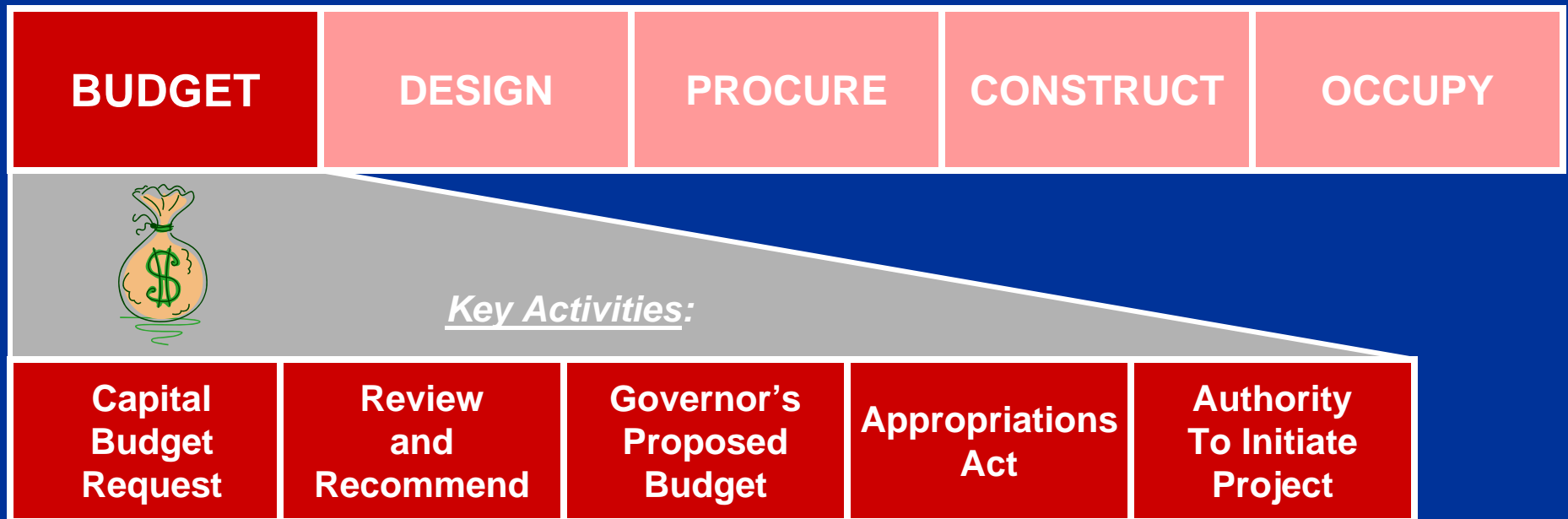
- Agencies submit their Six Year Plan to the Department of Planning and Budget (Dept of Planning and Budget is the Agency who is primarily responsible for the overall planning and programming for the Capital Outlay Process).

Many different participants are engaged in the process:

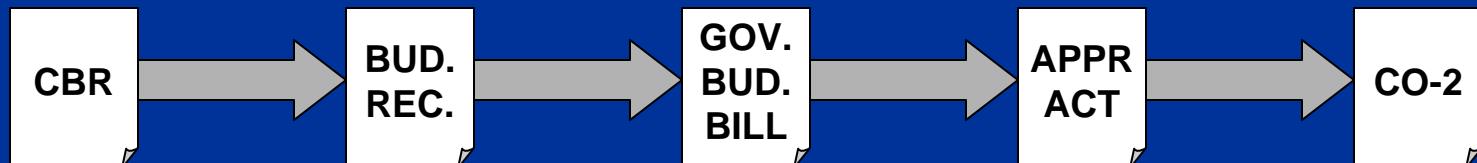


The Capital Outlay Process

The Budget Development Phase



Key Documents:



The Capital Outlay Process

Five Major Phases

BUDGET

DESIGN

PROCURE

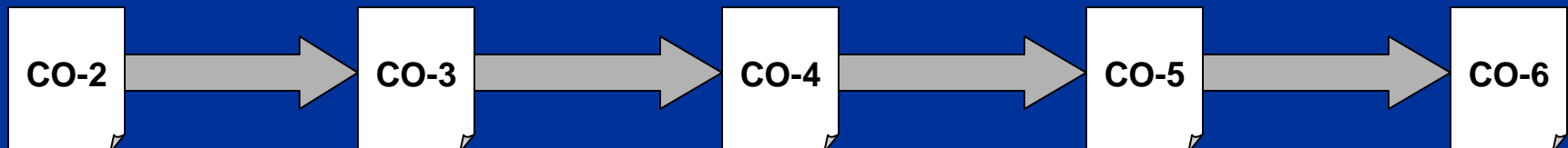
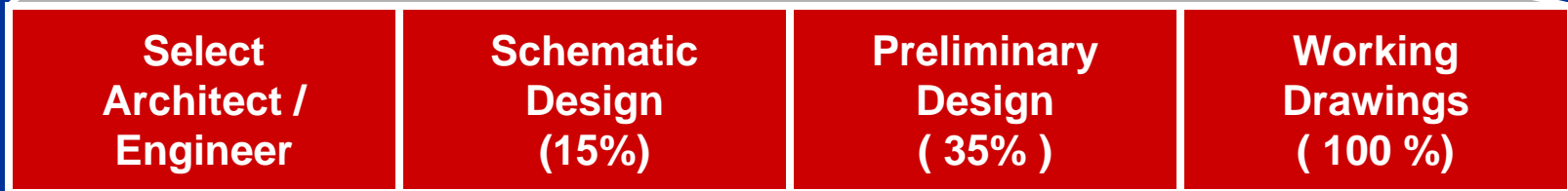
CONSTRUCT

OCCUPY



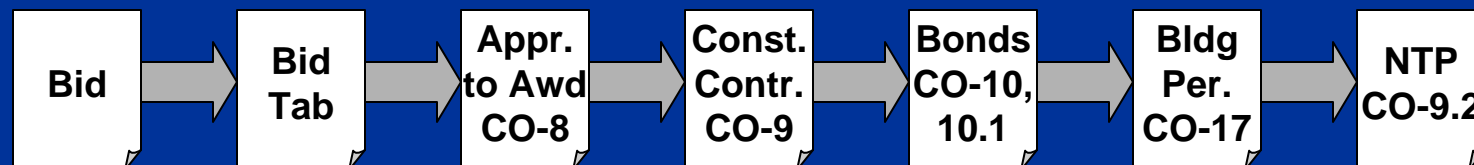
The Capital Outlay Process

The Design Phase



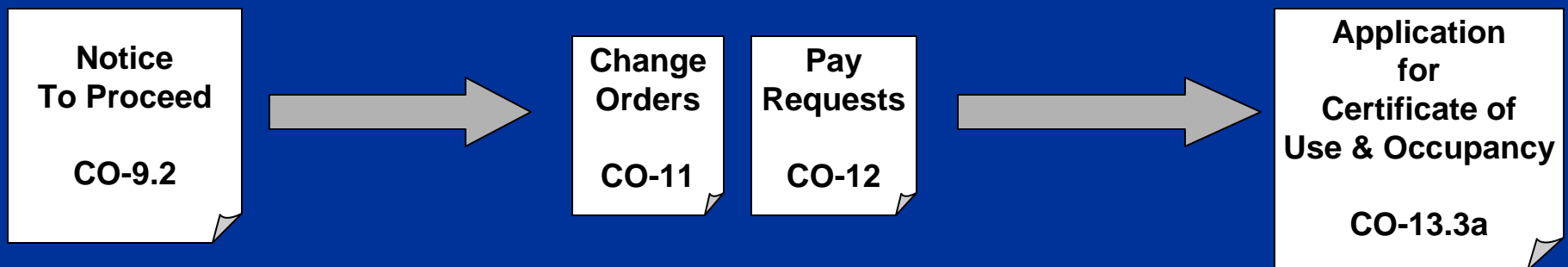
The Capital Outlay Process

The Procurement Phase



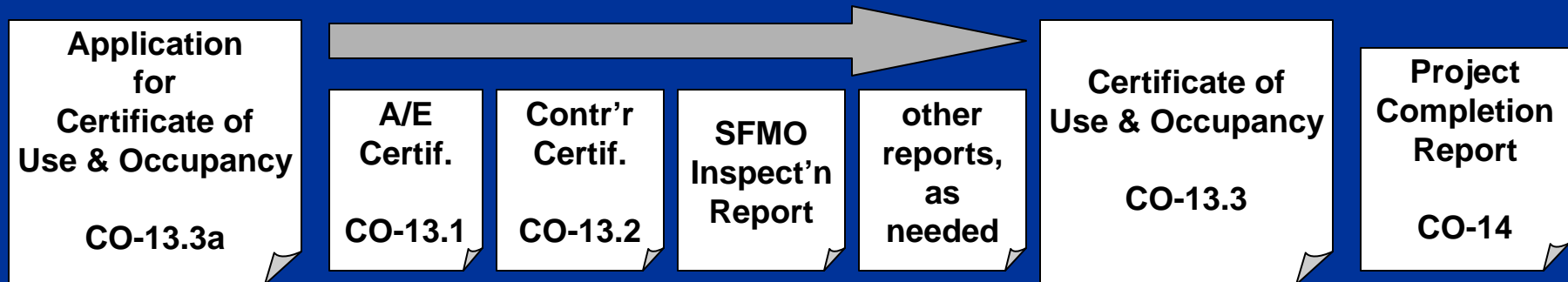
The Capital Outlay Process

The Construction Phase



The Capital Outlay Process

Occupancy



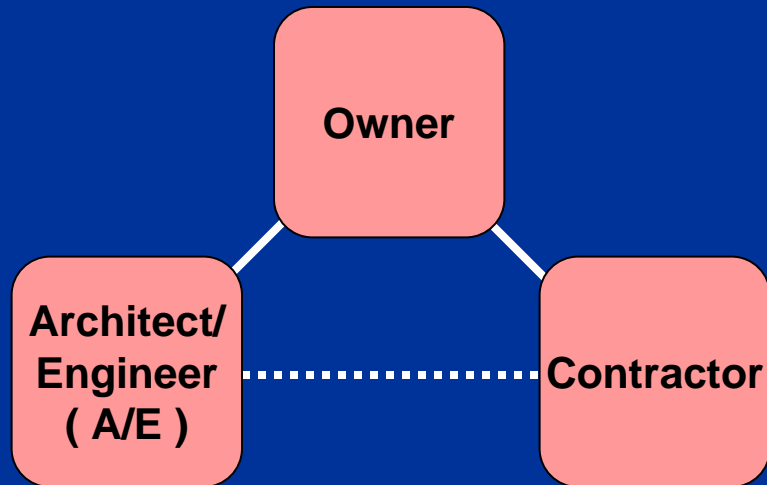
- Capital projects are complex, both from the technical & administrative perspectives
- Without experienced personnel, adequate systems, and sufficient oversight, projects can be delayed, and poorly managed, — **all of which result in increased costs to the Commonwealth**
- **Many small agencies do not have the expertise on staff to manage projects**

Methods of Procurement

- Agencies and their Project Management professionals must understand, select, and manage the most appropriate methods of procurement for their projects
- Methods include:
 - Traditional (Design–Bid–Build)
 - Design–Build
 - Construction Management (CM @ Risk)
 - Construction Management Agency

Methods of Procurement

Traditional (Design-Bid-Build)



PROS

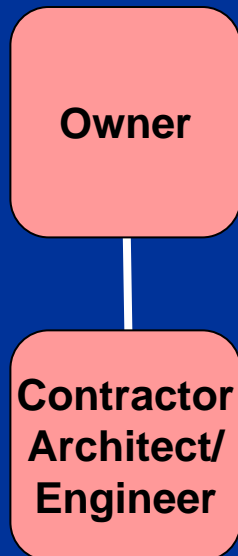
- Well-defined scope puts all bidders on an even playing field
- Owner has full control over quality of systems
- Single set of plans and specifications expedites Building Official review process
- Potential lowest cost

CONS

- Delays start of construction until all design is complete
- Award based on low price, although "pre-qualification" option can help assure suitable pool of bidders
- Contractor has no input into design of systems
- Multiple points of project liability
- SWAM participation suffers

Methods of Procurement

Design-Build



PROS

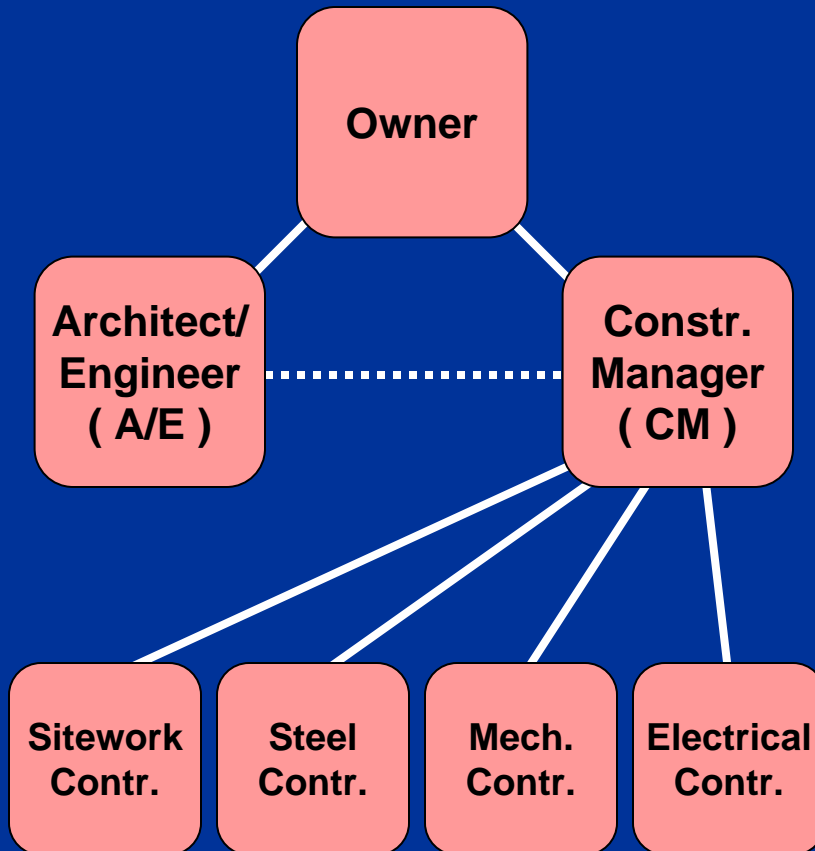
- May allow earlier award of construction contract
- A single source of project responsibility/liability
- RFP process allows consideration of factors other than price
- Allows Contractor to use "initiative" in selecting systems
- Has been used successfully for prototypical or simple bldgs
- Total project time decreases

CONS

- Owner loses control over quality of systems & details of construction
- Change Orders can negate cost or schedule savings
- Incorrectly defined scope & criteria can result in higher costs
- Initial cost to contractors high
- Partial/uncoordinated submittals to the Bldg Official can extend time to review & issue a permit

Methods of Procurement

Construction Management (CM @ Risk)



PROS

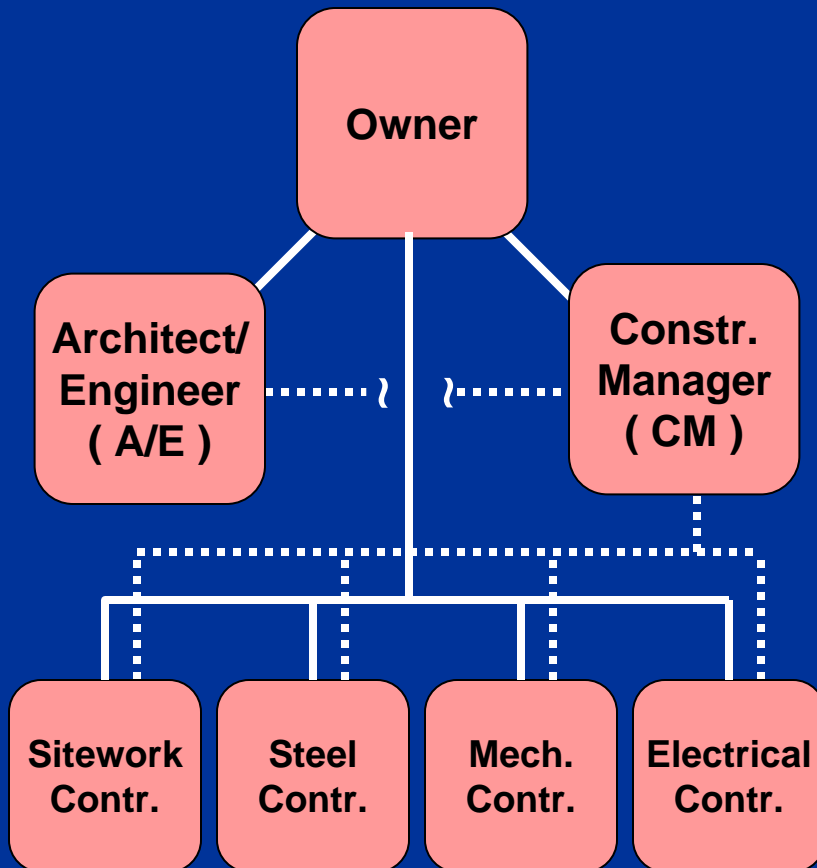
- May allow earlier award of construction contract
- RFP process allows consideration of factors other than price
- Contractor has input into design of systems
- Contractor has input to control costs
- Better opportunities for SWAM subcontractors

CONS

- The RFP process can make for an uneven playing field between proposers
- Partial/uncoordinated submittals to the Bldg Official can extend review time
- A/E's fee for services will be higher
- Requires more Owner time for project management and oversight

Methods of Procurement

Construction Management (Agency CM)



PROS

- May allow earlier award of construction contract
- RFP process allows consideration of factors other than price
- Contractor has input into design of systems
- Contractor has input to control costs
- SWAM business opportunities

CONS

- No risk for CM
- Owner must administer multiple contracts
- The RFP process and sketchy or ill-defined scope & criteria can make for an uneven playing field between proposers
- Partial/uncoordinated submittals to the Bldg Official can extend review time
- A/E's fee for services will be higher
- Requires more Owner time for project management and oversight

Cost Containment

- Owners, including Commonwealth of Virginia agencies have seen inflation impact projects budgets
- Recent historical and forecast construction cost inflation rates as reported by industry sources who perform work in both public and private projects:

• 2003	2 – 3%		3 – 5%
• 2004	12 – 15%	10 – 15%	12 – 15%
• 2005	10 – 13%	8 – 10%	10 – 14%
• 2006	8 – 10%	10%	8 – 9%
• 2007	7 – 9%	5%	5 – 6%
• 2008	6 – 8%	3 – 4%	
• 2009		3 – 4%	

Cost Containment

- Nongovernmental Building Costs:

- Office Buildings \$165 - \$195/sf
- Higher Ed Teaching Wet Labs \$335 - \$400/sf
- Health Care, Hospitals \$285 - \$345/sf
- Parking Garages \$13,500 - \$17,000/space

- Local Federal Courthouse Costs:

(representative of high quality government buildings)

- Newport News \$402.50/sf
- Richmond \$432.50/sf

The Bureau of Capital Outlay Management (BCOM) currently provides the following key services:

- Building Code and ADA compliance reviews
- Other project review services (e.g., adherence to procurement policies, ADA compliance, etc.)
- Project inspections
- Issuance of Building Permits & Certificates of Occupancy
- Development and maintenance of the Commonwealth's Construction and Professional Services Manual (CPSM)
- CPSM training
- Virginia Construction Contracting Officer (VCCO) training, testing, and certification
- Technical assistance to agencies
- Coordination of capital outlay forms, the Semi-Annual Progress Report, and Annual Value Engineering (VE) Report
- Assistance to DPB and Legislature's money committees

Functions no longer performed by BCOM

Due to budget cuts, the following functions are no longer a function of BCOM:

- The Asbestos Section was disbanded

- The Maintenance Section was disbanded

- The Energy Section was disbanded.

- The Central Boiler Plant expertise was lost due to attrition.

Functions that BCOM lost support to enforce:

- Space Utilization in design.

- Facilities that exceed state guidelines and buildings efficiency criteria are now recommendations and not actively enforced.

- State owned building "Best Practices" in chapter 9 of the CPSM are typically identified for agency resolution but are not enforced nor do they hold up project approval.

Decentralization:

- Has led to multiple manuals for design guidelines.

- May fracture consistency within State procurement practices.

Internal Service Fund:

- Requiring Agencies to pay for services causes BCOM to not be as involved providing answers to technical questions or for interim inspections.