

Maximizing Value for Your Project Construction Budget

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Success is often measured by the Owner's
realization of Project Value.



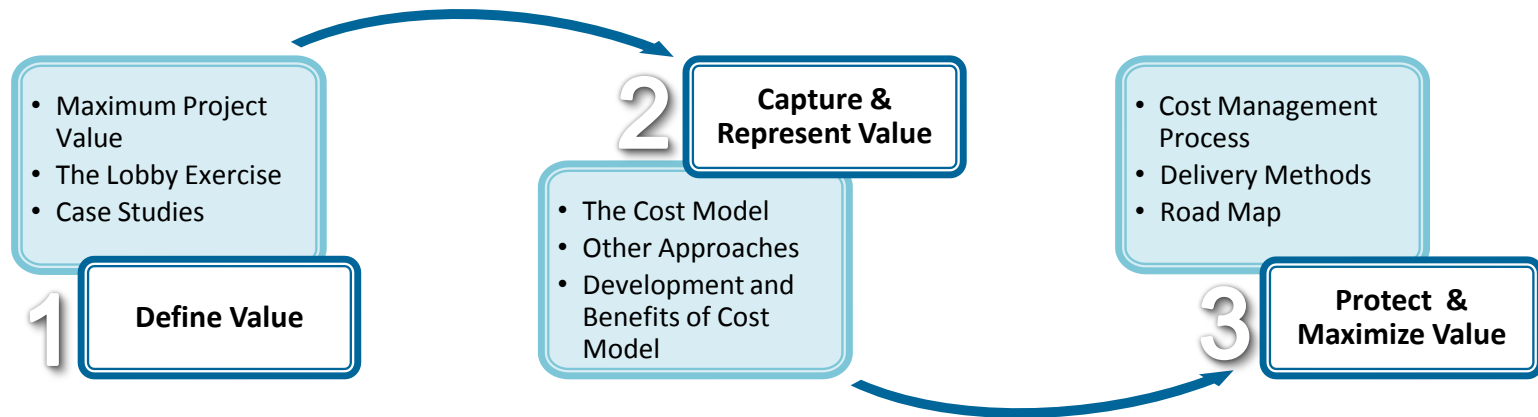
ROADMAP TO PROJECT SUCCESS

- Clear and Consistent Vision
 - Understand the core, the root of the Project
 - Design is an extremely collaborative effort
 - “Mission Statement”
- Reconciled Budget and Scope
 - Small margin of error
 - Its lack is often the basis of unsuccessful projects
 - “Business Plan”
- Leadership
 - You are responsible for your project
 - Leadership is top-down

Think of every project as a business venture.

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INTRODUCTION



Project Highlight

Georgia Institute of Technology G. Wayne Clough Undergraduate Learning Commons, Atlanta, GA



Architect: Bohlin Cywinski Jackson

Cost: \$63,350,000

Size: 218,500 SF

Maximizing Value for Your Project Construction Budget

DEFINE VALUE Maximum Project Value

- Maximum Project Value
- The Lobby Exercise
- Case Studies

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Define Value

MAXIMUM PROJECT VALUE

Striking the Owner's perfect balance
among scope, quality, and schedule.

Project Highlight

Southeastern Technical College Automotive Technology School and Career Center, Vidalia, GA



Architect: McLees, Boggs, Selby

Praxis3

Cost: \$5,000,000

Size: 36,176 SF

MAXIMUM PROJECT VALUE

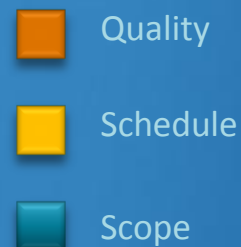
Owner and Design Team must understand the appropriate relationship among three parameters:

- Quality
- Scope
- Schedule

Since state work is rarely time/income driven, the overall balance is typically between scope (building area/program space) and quality (aesthetics/finish materials) .



Equal Balance of Parameters



MAXIMUM PROJECT VALUE

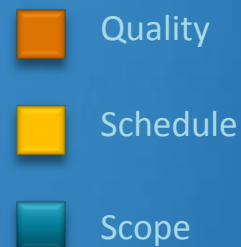
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Maximum Quality Yields Optimal Value

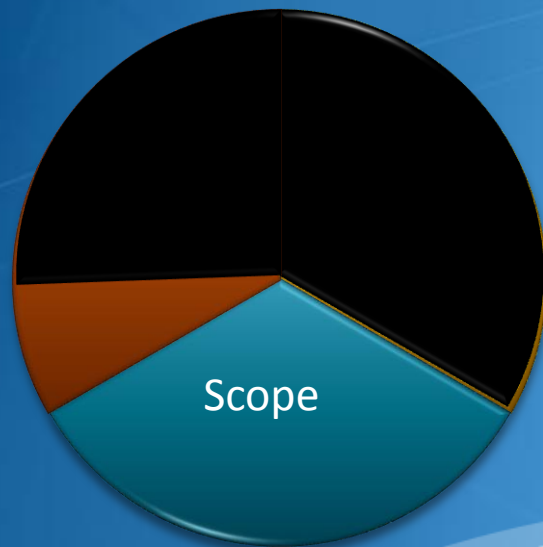


MAXIMUM PROJECT VALUE

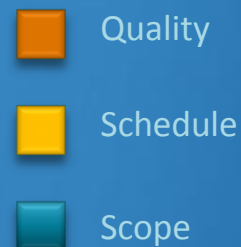
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Maximum Scope Yields Optimal Value



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DEFINE VALUE The “Lobby Exercise”



Owner determines that Maximum Scope yields optimal Project Value.

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DEFINE VALUE The “Lobby Exercise”



Owner determines that a balance between Scope and Quality yields optimal
Project Value.

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DEFINE VALUE The “Lobby Exercise”



Owner determines that Maximum Quality yields optimal Project Value.

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DEFINE VALUE Case Studies

It is critical that the Owner and Design Team understand the hierarchal relationship among scope, quality and schedule in order to have a smooth design process.

CASE STUDY

- University of West Georgia Bookstore
Carrollton, GA
- Kennesaw State University Laboratory Addition
Kennesaw, GA

University of West Georgia Bookstore

Carrollton, GA

Architect: LP3



- Though a retail space, building quality and aesthetics took priority over square footage area
- Prominent and highly visible site on campus
- Building is visible from all four sides
- Campus wanted an iconic building for this high traffic area

Kennesaw State University Laboratory Addition Kennesaw, GA

Architect: Perkins + Will



- Set behind an existing building with limited visibility
- It was made clear to the Architect that maximizing the program laboratory space (scope) was critical
- Design Team and Owner worked together to limit the architectural detailing and shift those funds to introduce a shelled 5th floor

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CAPTURE & REPRESENT VALUE The Cost Model

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Capture &
Represent Value

- The Cost Model
- Other Approaches
- Development and Benefits of Cost Model

THE COST MODEL

The Cost Model is a conceptual, pre-design estimate that either establishes the budget or reconciles the project scope to a proposed budget. *A critical first step on the road to project success.*

Project Highlight

College of Coastal Georgia Health Sciences Building, Brunswick, GA



Architect: Perkins + Will

Cost: \$11,825,000

Size: 49,000 SF

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CAPTURE & REPRESENT VALUE Other Approaches

Other Approaches

- Construction cost publications
- Historical data
- Cost/SF by space type

Disadvantages

- Offer wide range of costs for any particular building type
- Do not take into consideration particular market conditions
- Do not account for special design or systems considerations
- Do not recognize that every project is unique

Result: Often create dangerously inaccurate budgets

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CAPTURE & REPRESENT VALUE Cost Model Development

Development of the Cost Model

- Typically provided with only a program
- Apply years of Cost Management experience
- Information from Architect/Owner
- Understanding the Campus
- Use historical data as a reference only
- Careful review by Owner and Design Team

Result: Highly accurate Cost Model that sets parameters and captures the design intent



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CAPTURE & REPRESENT VALUE Cost Model Benefits

Benefits of the Cost Model

- Highly accurate Construction Budget
- Helps develop other project budgets (contingency factors, A/V, FF& E, and others)
- Establishes precisely what is included in the Construction Budget
- Used to track future design phases
- Owner & Design Team are all looking in the same directions

| PROJECT NAME | COST MODEL | DESIGN DEVELOPMENT ESTIMATE | FINAL CONSTRUCTION COST | PERFORMANCE DATA |
|---|--------------|-----------------------------|---|---|
| <p>GEORGIA GWINNETT COLLEGE LIBRARY Lawrenceville, GA Leo A Daly Architects Size: 90,000 sf</p>  | \$20,297,900 | \$20,204,499 (-0.5%) | \$19,990,699 (-1.5%) | Added 5% Value or \$1,000,000 to the project |
| <p>EMORY FRESHMAN HALL 4 DORM ITORY Atlanta, GA Ayers Saint Gross Size: 114,000 sf</p>  | \$31,034,879 | \$31,333,917 (1%) | \$31,262,484 (0.7%) | Project was completed successfully within the construction budget |
| <p>SOUTHERN POLYTECHNIC STATE UNIV ENGINEERING TECHNOLOGY CENTER Marietta, GA Cooper Carry Architects Size: 122,000 sf</p>  | \$27,970,000 | \$27,913,000 (-0.2%) | \$26,000,000 (Post Successful V/E) | At Design Development, budget was reduced by \$2 Million. Palacio Collaborative led the value engineering effort resulting in no loss of building area, scope or quality. |
| <p>GAINESVILLE STATE UNIVERSITY ACADEMIC BUILDING, Oakwood, GA Lyman Davidson Dooley, Inc. Size: 134,000 sf</p>  | \$28,314,200 | \$27,963,147 (-1.2%) | \$28,400,000 (Owner's Stipulated Project Budget) | Project scope and design quality level remained consistent from Cost Model to Construction Documents phase. |

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PROTECT & MAXIMIZE VALUE Cost Management & Delivery Methods

THE COST MANAGEMENT PROCESS

- Design Phase Estimating
- Alternates Pricing
- Understanding LEED Cost Implications
- Contractor Estimate Review/Reconciliation
- Market Surveys
- Value Engineering

- Cost Management Process
- Delivery Methods
- Road Map

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**Protect &
Maximize Value**

Maximizing Value for Your Project Construction Budget

PROTECT & MAXIMIZE VALUE
Cost Management & Delivery Methods

COST MANAGEMENT AND DELIVERY METHODS

- Design – Bid – Build
Work for the Owner or Architect
Cost Model, Design Phase Estimating
- Design – Build
Work for the Owner
Cost Model, Design Phase Estimating, Contractor Estimate Review
and Reconciliation

General Note: It's always best to have two opinions of cost for a project.

Maximizing Value for Your Project Construction Budget

PROTECT & MAXIMIZE VALUE
Cost Management & Delivery Methods

COST MANAGEMENT AND DELIVERY METHODS

- Integrated Project Delivery

Work for the Owner or Architect

Cost Model, Design Phase Estimating, Contractor Estimate Review and Reconciliation

- CM-at-Risk

Work for the Owner or Architect

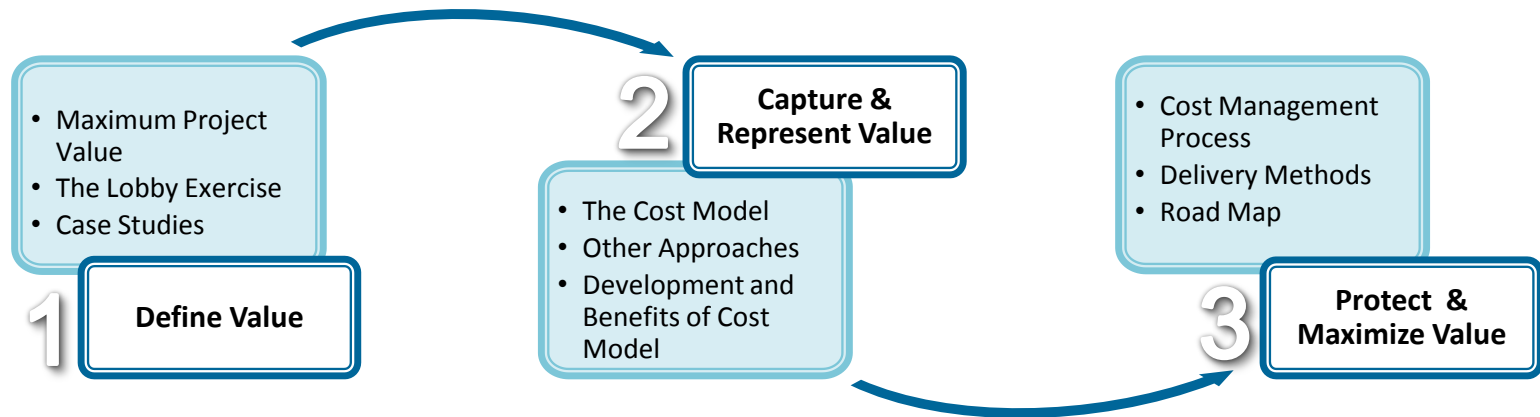
Cost Model, Design Phase Estimating, Contractor Estimate Review and Reconciliation.

*The Construction Manager fits the Guaranteed Maximum Price (GMP) into the scope
– We do not fit the scope into the GMP.*

General Note: It's always best to have two opinions of cost for a project.

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Roadmap to Maximized Value



MAXIMIZED VALUE = OPTIMAL PROJECT SUCCESS!