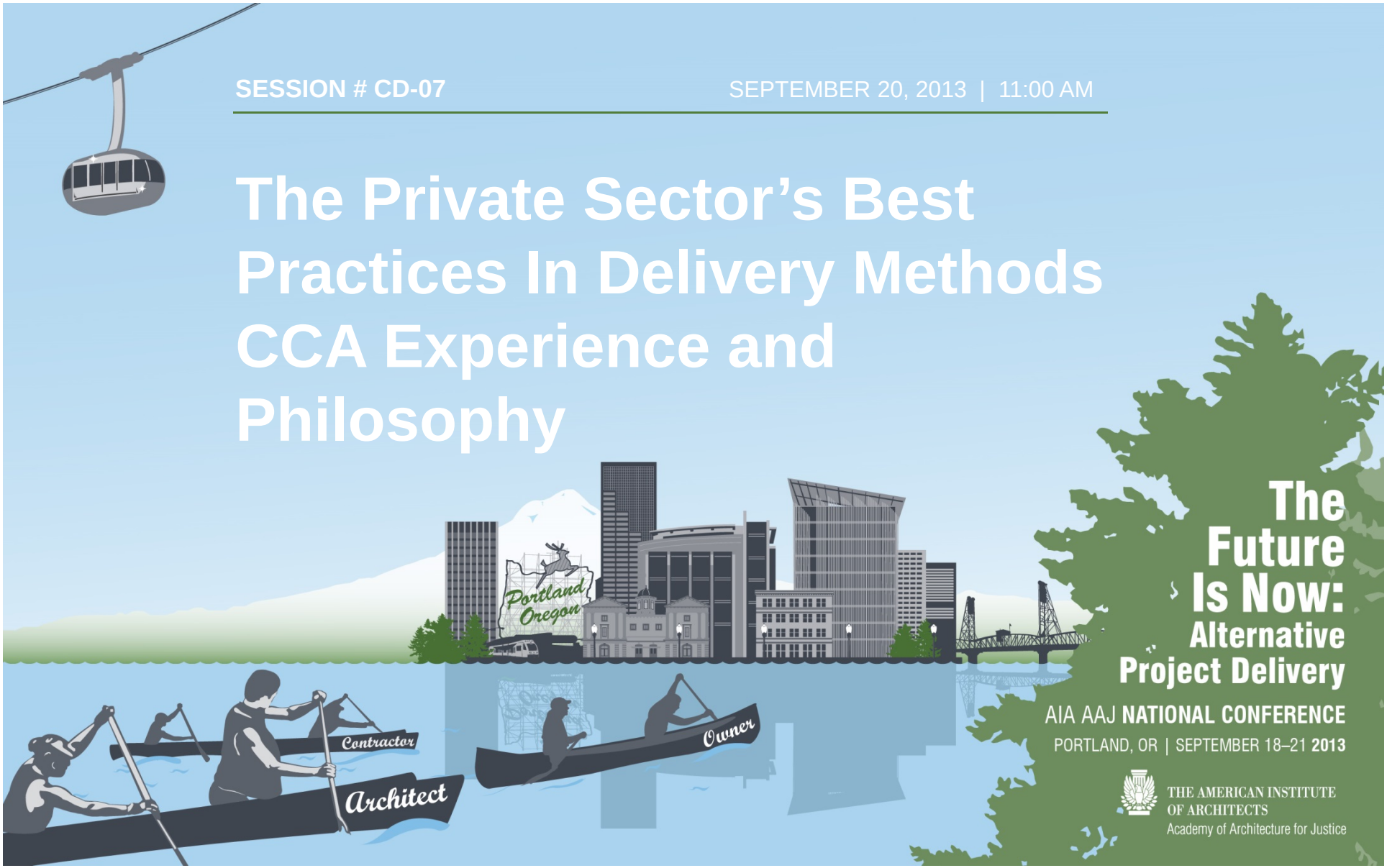
SESSION # CD-07

SEPTEMBER 20, 2013 | 11:00 AM

The Private Sector's Best Practices In Delivery Methods CCA Experience and Philosophy



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Course Description

Corrections Corporation of America (CCA) is the nation's largest owner of partnership correction and detention facilities and one of the largest prison operators in the United States. CCA currently operates 67 facilities with a design capacity of approximately 97,000 beds in 21 states and the District of Columbia.

Over the course of time, CCA has experienced all types of project delivery formats, including the traditional Design-Bid-Build, Construction Manager (CM) @ Risk, Construction Manager/General Contractor Guaranteed Maximum Price (CM/GC GMP) and Design-Build. They continue to improve on what has been done in the past, with the goal of being responsive to both the client's needs and shareholder expectations.

This course will give the participants an overview of the private corrections history in project delivery methods and outlook to the future for new projects.

Learning Objectives

1. Participants will learn from the owner's perspective what is important regarding the expectation of the designer and contractor to achieve their desired results.
2. Explain the benefits of accelerated project delivery methods that benefit the owner's schedule and the need to respond to client requirements for private corrections operations.
3. Explain key success factors related to the owner, designer, and builder that are necessary to achieve successful alternative project delivery methods.
4. Using a case history example from a recent private corrections project, describe the challenges the team members encounter and overcame, while working in a cooperative relationship.

Timothy S. Aebie, AIA, NCARB, DBIA, LEED Green Associate
Senior Director, Project Development – Real Estate Development
Corrections Corporation of America

Joseph F. Haines, AIA, DBIA, CSI
Senior Principal
DLR Group
Architects - Engineers

Wayne Einbinder, PE, LEED AP, DBIA
Vice President
Sundt Construction

Who are WE…..? CCA

- ***Largest Private Prison Provider in the US***
- ***Based in Nashville, TN – Established in 1983***
- ***Own and operate 69 Facilities in 21 States***
- ***97,000 Bed Capacity***
- ***$2.6 Billion in Real Estate Assets***
- ***Approx. 17,000 employees***

Large and Complex

Total Facility Square Feet: +18,000,000

Total Acreage: + 17,000

Facility Metrics

- **Water Consumption per year: $21M**
  - **Fresh Water Gallons per day: 8.6 M**
  - **Waste Water Gallons per year: 3.1B**
- **Electrical Expenditure per year: $29M**
  - **Kwh per year: 330,328,408**
  - **Heating BTU's per year: 113,633,561,707**
- **Average total utility costs per year $63M**

CCA - Past

- **We were a bully owner.**
- **Maintained a short view into the future.**
- **During 1997 to 2002 Avg. yearly Capex of $300M.**
- **Low trust / slow adopter.**
- **Low bid mentality.**
- **Very steep hierarchy.**
- **Silo' d conversations.**
- **Comfortable spending contingency.**
- **First Cost Buyer.**

CCA - Current

Given:

- **Competition getting smarter … market is getting tighter … margins are pressed.**
- **Buildings becoming increasingly complex.**
- **Building codes and regulations are more stringent, demanding higher standards, enhanced quality and performance.**
- **Customers want more involvement in the process.**
- **New materials, equipment, and systems are continuously entering the market.**

Condition:

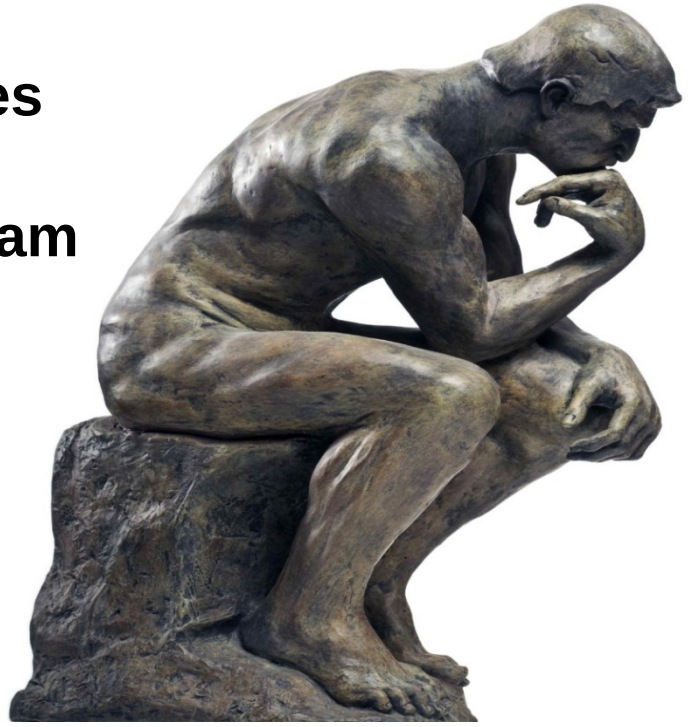
- **It takes a very large team comprised of designers, project managers, specialty consultants, contractors, subcontractors, & suppliers, not to mention owners and regulators to produce a project, that is constantly changing.**
- **We can't afford to stagger the involvement of the resources performing the physical work.**

Proof:

- **That the very OWNER'S who are so focused on exacting change on others, are woefully reluctant to embrace change in their own practices.**

Self-examination

- **Audit the Current Process**
- **What's our Common Understanding**
- **Benchmark the failures and successes**
- **Challenge the status quo**
- **Understand the Upstream / Downstream value chain (internal & external)**
- **No longer be a spectator – get into the game!**
- **Map out your desired state**
- **Find the balance in workloads**
- **Empower your people**



"I've learned that to ignore the facts—does not change the facts."

Change Management

- **Measure the Resistance**
- **Benchmark competitors**
- **Embrace a sense of urgency and crisis**
- **Identify good / bad behavior in your vendors**
- **Find owner’s within your organization to implement the steps towards the desired state**
- **Create a culture of continual learning**
- **Reward failure**
- **Empower and Trust your people**

Project Delivery Progression

Past

- **Design-Bid-Build - Traditional**
- **Construction Management at Risk – Early engagement of contractor with design team**

Present

- **Design-Build – One contract for designer and contractor**

Future

- **Integrated Project Delivery (IDP) – Contract requires collaboration among primary parties**

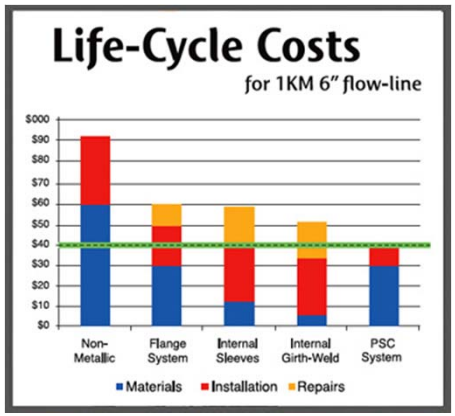
Distinguish Cost vs. Value

"The only truly sustainable competitive advantage in the future may be the ability to learn faster than your competition."

– Ari de Geus

Predictability of price

- Final Costs are truly important, saving dollars after our award and NTP is nice, however the timing of these savings are counterintuitive, in that it may have cost our firm from winning the competition. In other words we didn't have a fully informed budget.
- Accurate pricing is an absolute necessity and reliable accurate budgeting is essential to our success.
- Fully informed decisions need to be a derivative of an optimized budget.
  - Overall life cycle cost
  - Sustainability
  - Energy efficient
  - Operations
  - O & M



Align the *BIG 3*

Change the Design Process

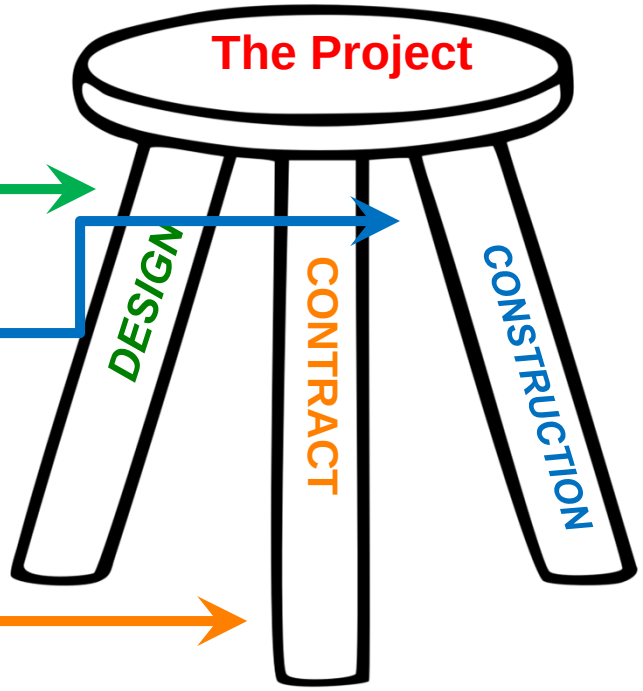
Set Based Design not Point Based.
Involve entire production process.
Insist on documents geared towards production.

Change the Construction Process

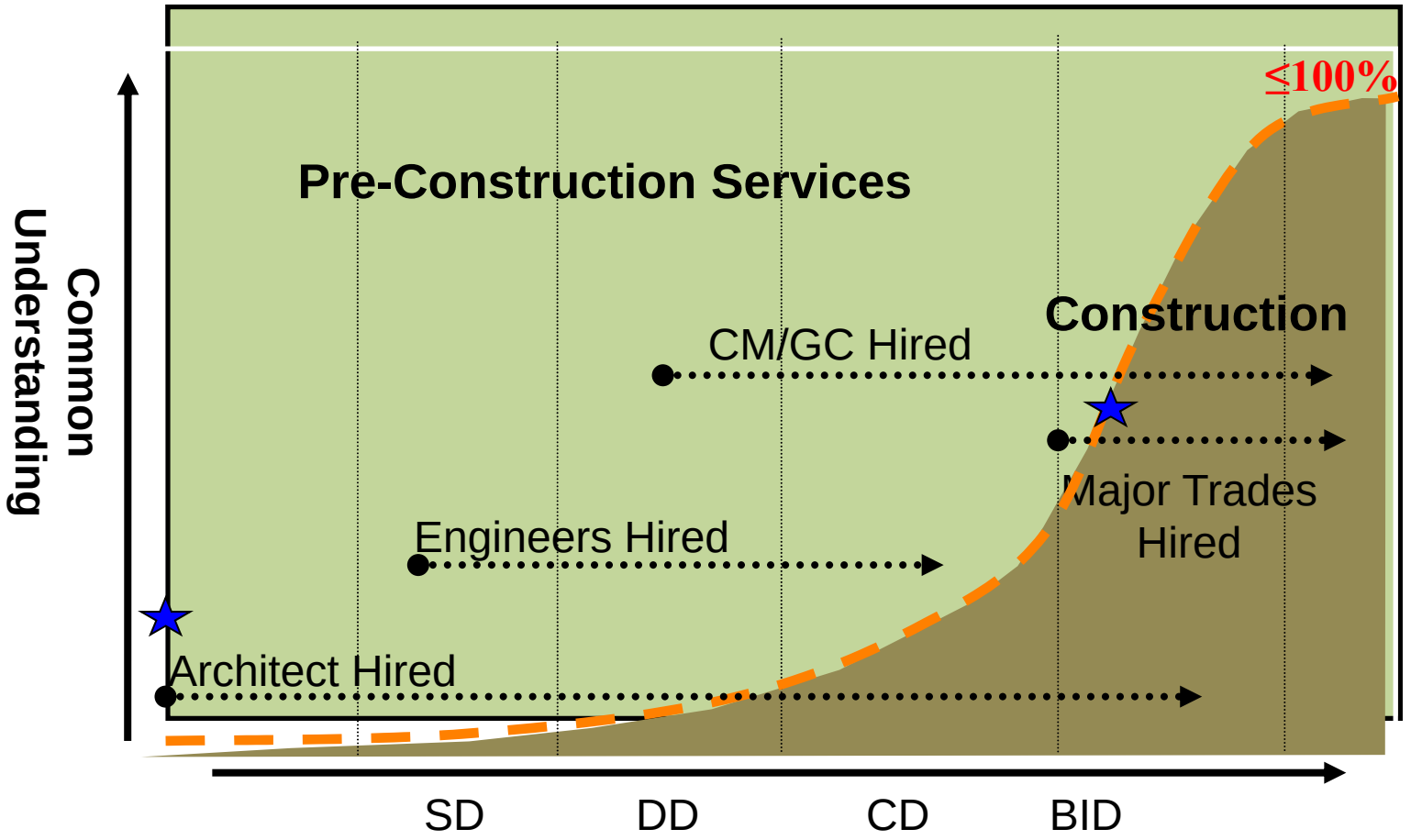
Increase the relatedness between stakeholders.
Optimize don't Maximize.
Promote the whole project, communicate to all stakeholders.

Change the Commercial Terms

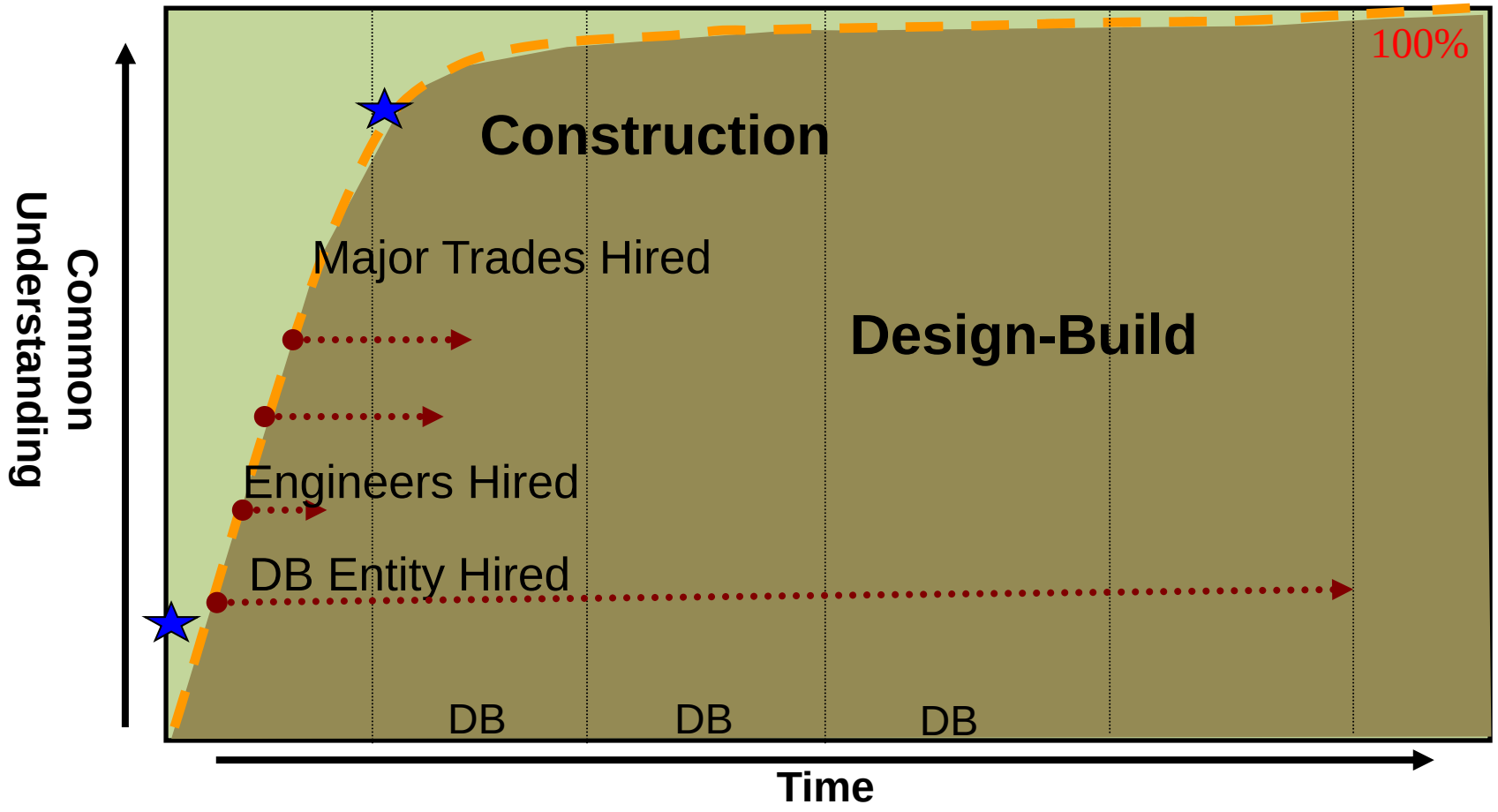
Align the commercial terms.
Establish an acceptable risk model.
Contracts should encourage and reward behavior not necessarily the results.



Traditional Delivery
Lowest Level of Common Understanding



Design-Build Integrated Delivery
Highest Level of Common Understanding



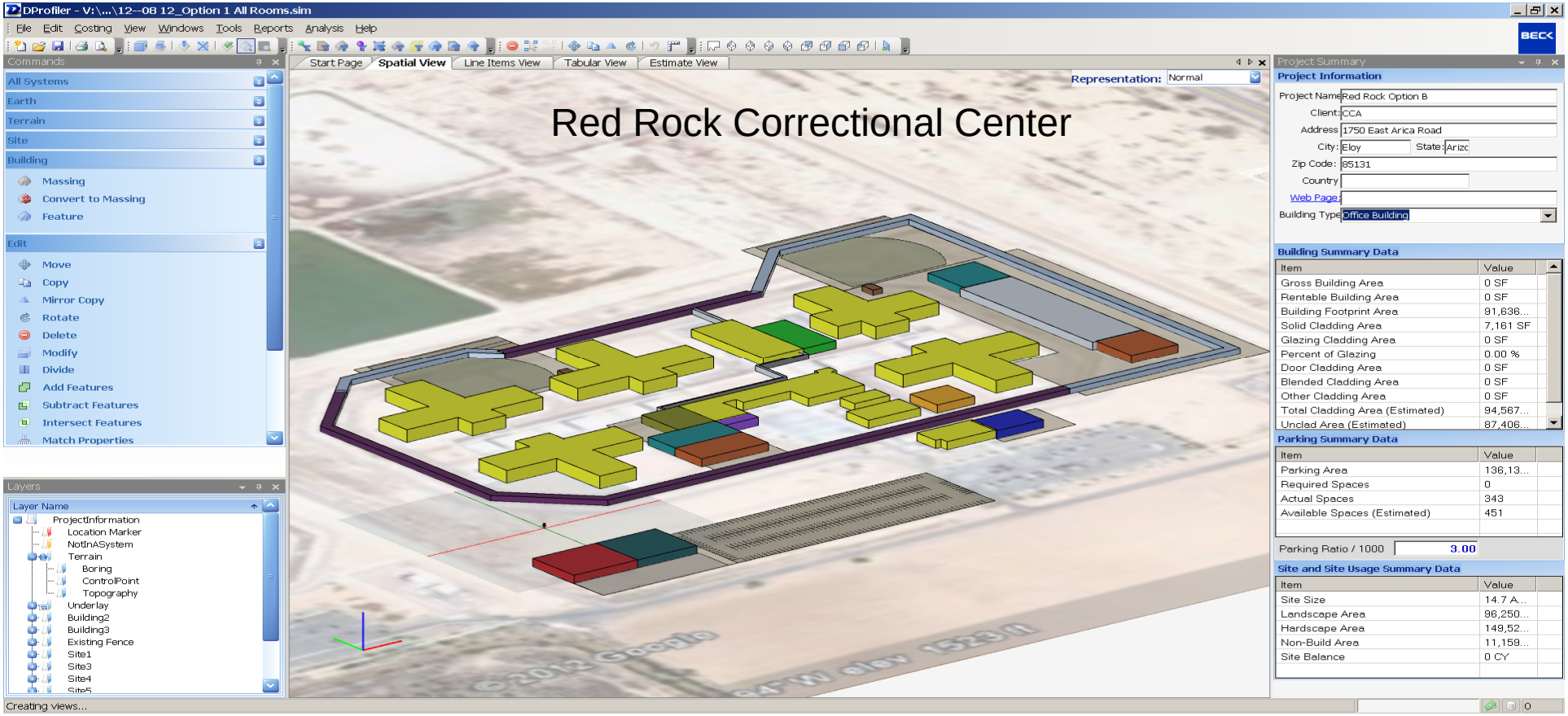
7 Key Success Factors

- Understand the owners profile
- Define the facility business goals
- Select the project delivery system
- Select the procurement method
- Select the project team
- Contract with the team
- Develop/ confirm the program

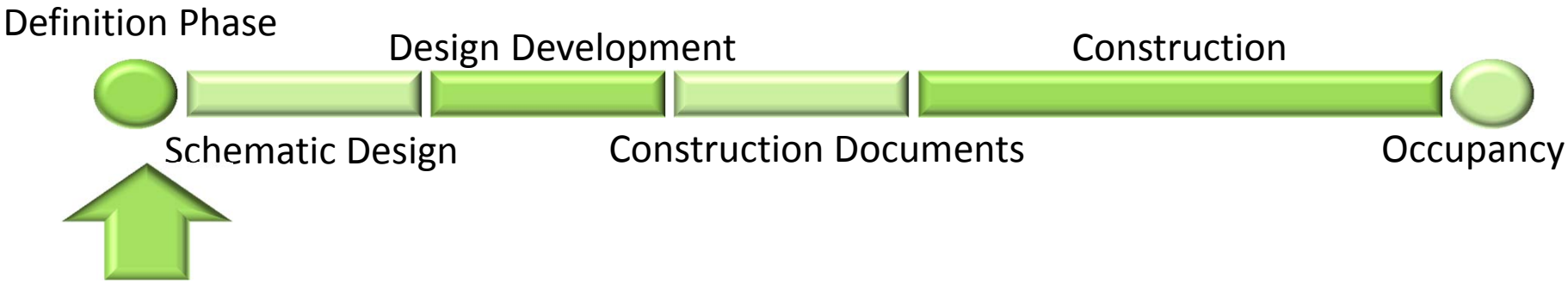
Using BIM … Cost Control

- Parametric Estimating (Red Rock)

A Better Tool – Parametric Estimating

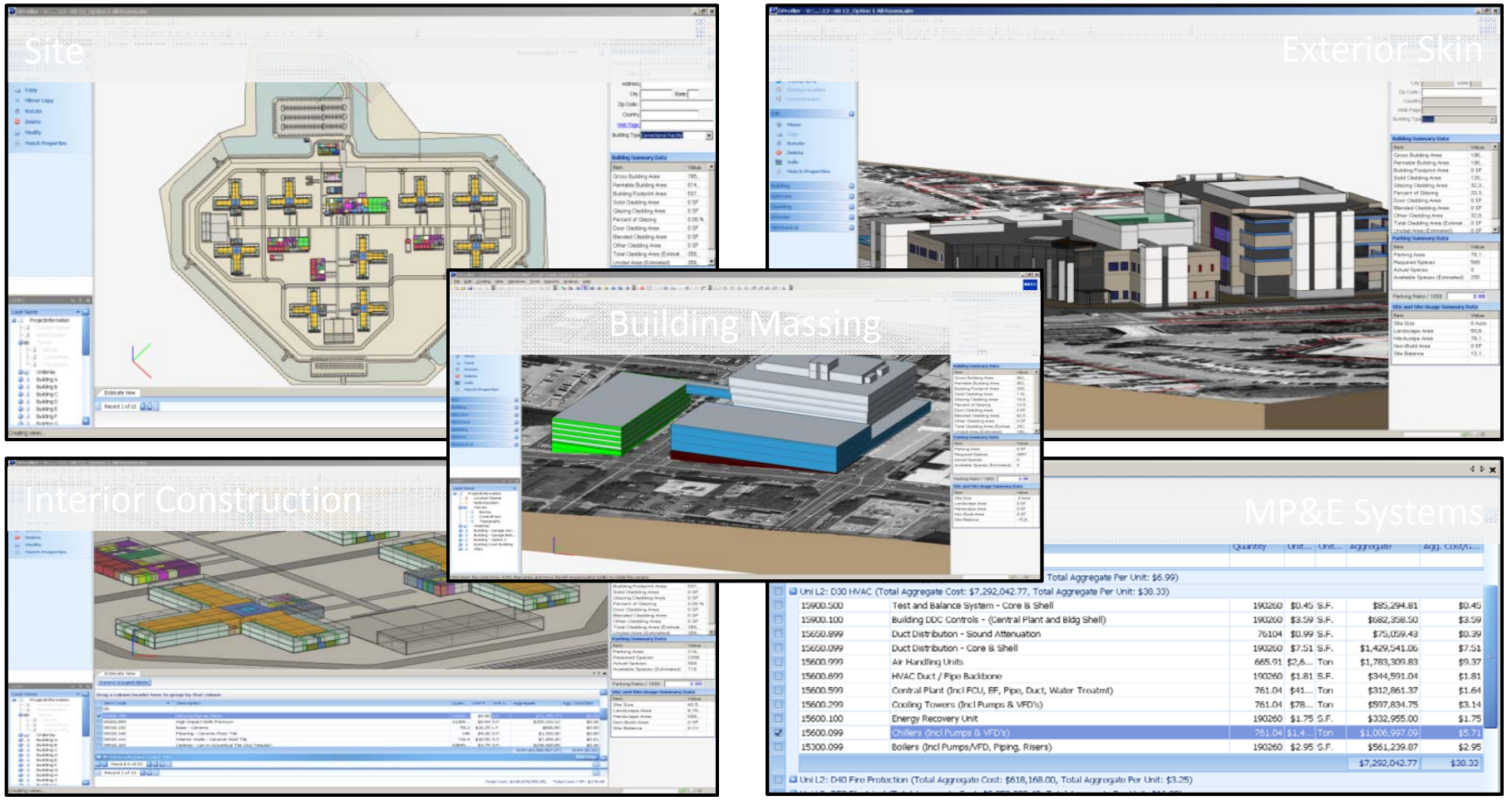


Parametric Estimating



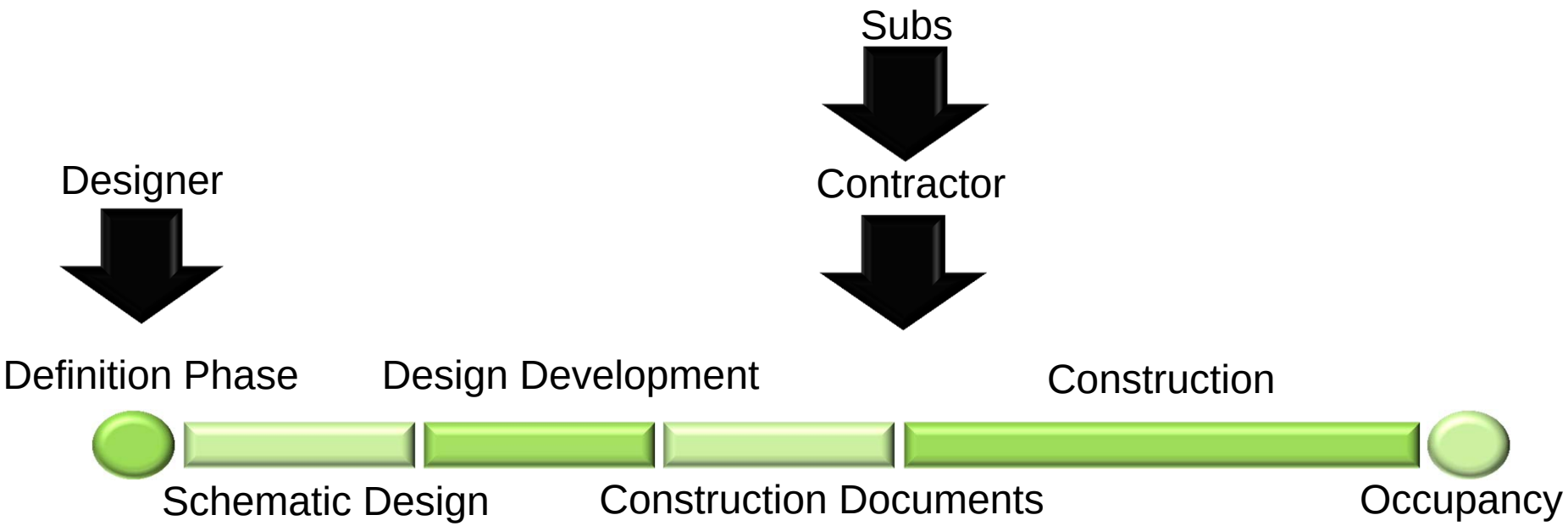
1 macro BIM model
14,000 algorithms
30,000 cost line items

Defining Systems In Detail

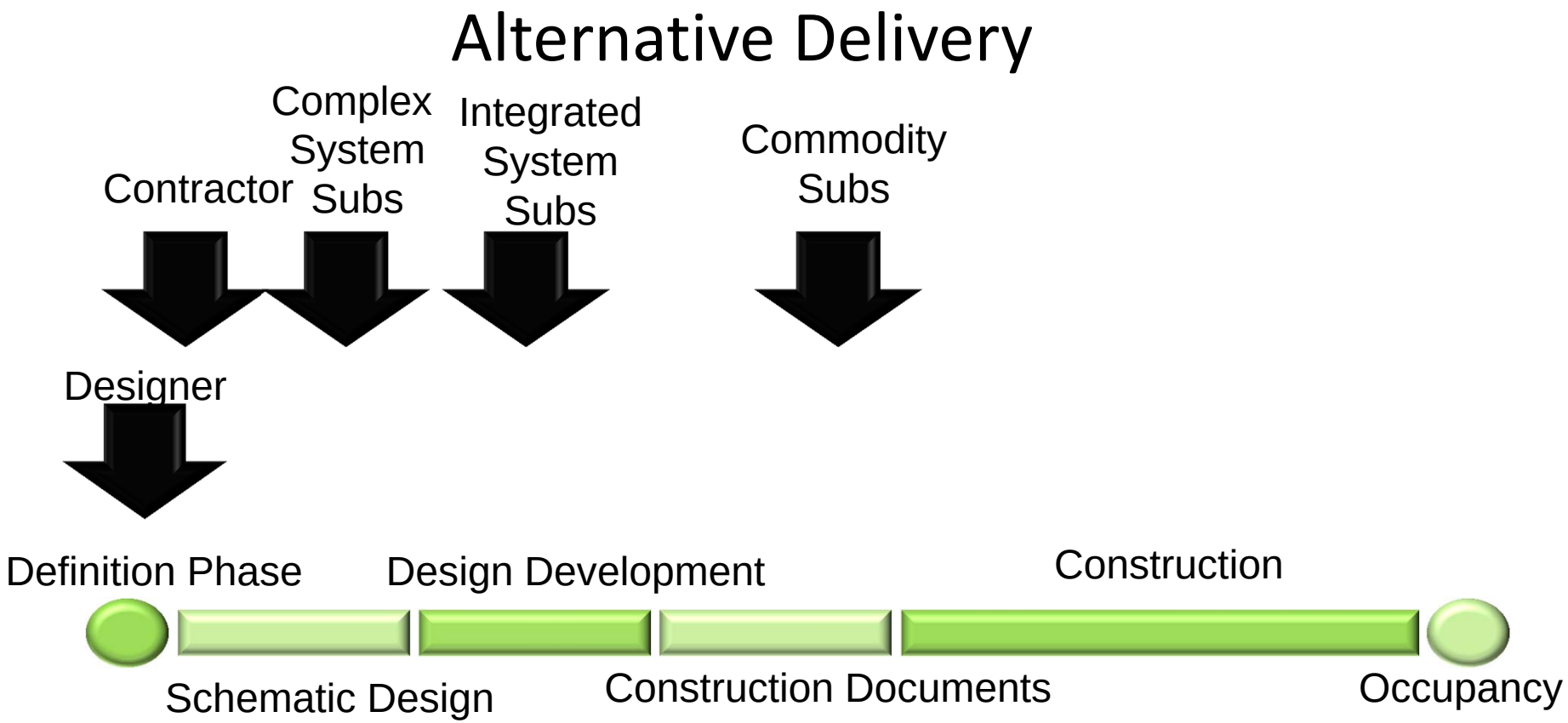


Increasing Predictability & Value

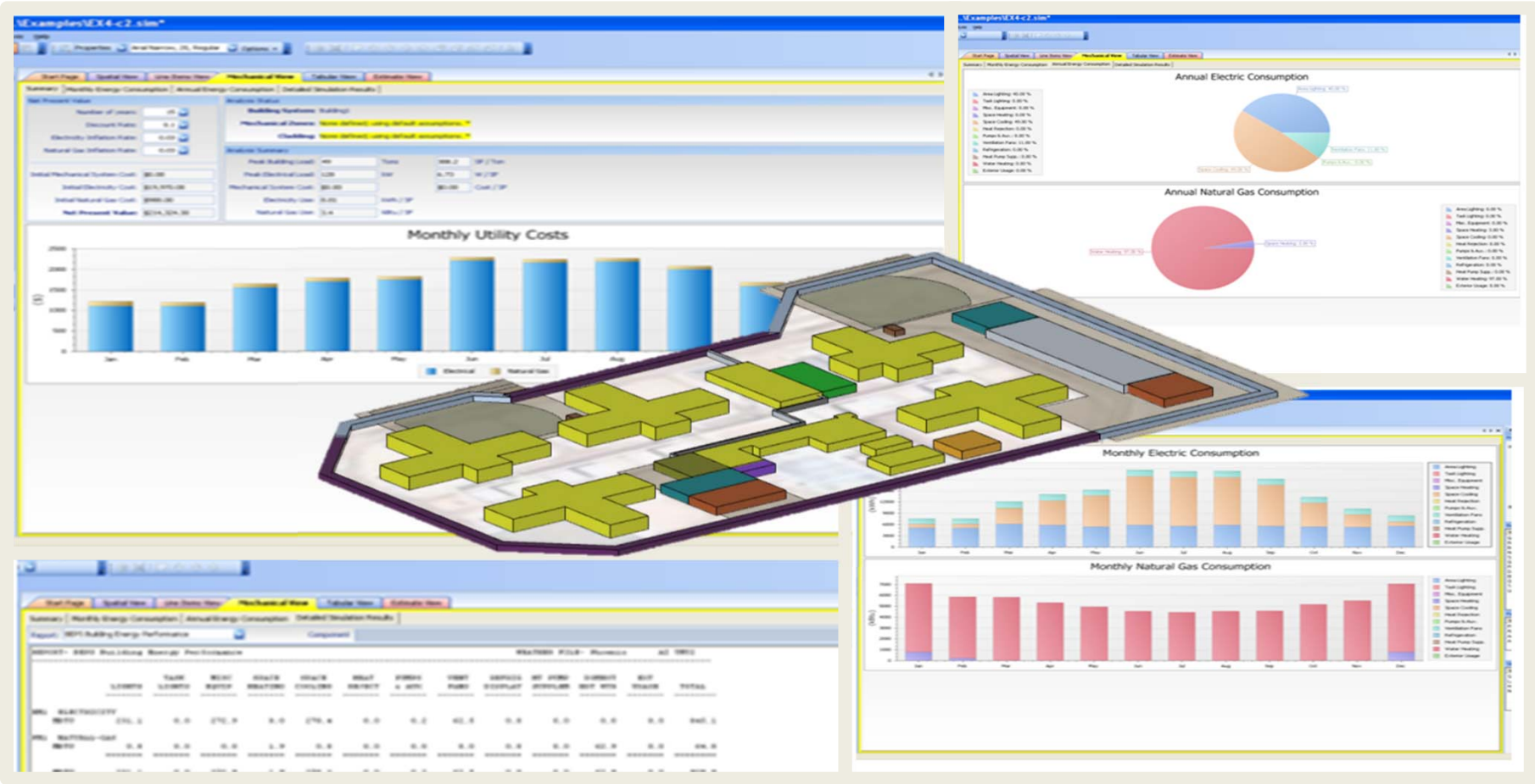
Conventional Design-Bid-Build



Increasing Predictability & Value



More Than The Cost of Construction



Communication

- D-B Advantage of streamlining information exchanges and data to expedite fabrication and installation. Demands constant communication between D-B Team and Owner.
  - Key … Owner & Agency review times to align with early design packages
- Project management is de-centralized to allow for more responsive decision maker to act.
  - Key … People make things happen.

It’s About Trust

Expectations

- Integrate design and delivery process in supervision to meet stakeholders expectations.
  - Key … take advantage of technology to reduce time.
- Continue to monitor, measure and re-align as you progress.
- Value for Client: Maintain focus on goals to achieve maximum efficiencies for the project.

Key to Successful Delivery

- Be willing to adapt to changes along the way … agile.
- Keep open line of communications to assure all parties understand delivery method.
- Adjust and adapt to client’s needs for each project.

Delivery Trend Development

- Old ways are fading into the sunset.
- Collaboration early … what owners really want.
- Work to remove “barriers” (i.e., old think) to allow for adoption of new technologies.
- Design roles are morphing into construction delivery options … via collaboration.
- Owners now looking past initial first cost – particularly true with CCA – 24/7/365.

Moving BIM Forward

- Go beyond design and construction
- Operation & maintenance integration
- Sustainability is now a base expectation for owners, such as CCA
- Performance-based design – lean practice gaining traction
  - Energy Modeling
  - Greenhouse Gases/Carbon Footprint (i.e., Otay Mesa project example)
  - Modular components help achieve goals

Schedule Demands

- “Fast-Track” seems to be what we consider “normal”.
- Pressure to shorten project time frame to allow owner to use building.
- Must be proactive in coordinating design and construction.
- Plan for performance – clients are demanding results from D-B team.

The Key To Early Price Selections

Wringing Out the Contingencies

It’s Not Always Pretty

“We are not used to seeing the sausage being made!”