



Job Order Contracting 101

A Facilities Management Tool



Sponsored by the Center for Job Order Contracting Excellence and...

The National Association of State Facilities Administrators



Advance

Collaborate

Enrich

Job Order Contracting Definition

- **Job Order Contracting (JOC)** is a way for organizations to get numerous, commonly encountered construction projects done quickly and easily through multi-year contracts. JOC reduces unnecessary levels of engineering, design, and contract procurement time along with construction project procurement costs by awarding long-term contracts for a wide variety of renovation, repair and construction projects.

Job Order Contracting Definition

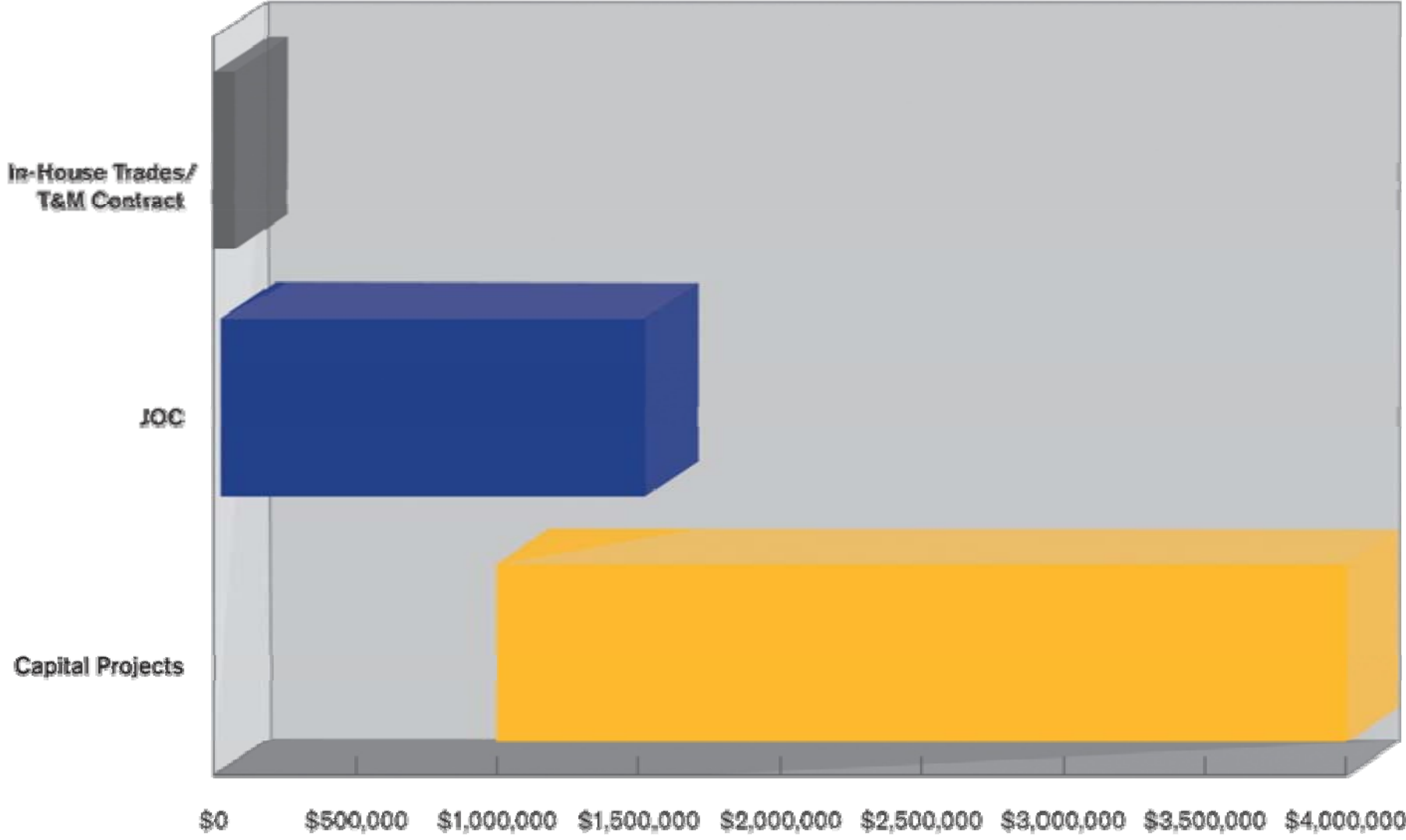
- With an emphasis on collaboration and team work between owners and contractors, JOC provides the methodology to execute a wide variety of indefinite delivery, indefinite quantity, fixed price, multiple simultaneous orders for renovation, rehabilitation and repair work for large facilities and infrastructures.

Job Order Contracting

Key Features

- Multi-year contract for on-call construction services
- A type of IDIQ (indefinite delivery indefinite quantity) contract
- Competitively procured
- Performance focused
- Supports a long-term owner-contractor relationship

Job Order Contracting Market



Job Order Contracting History

US Army, 1980's

- Smaller projects were taking up to 1 year to procure
- 8-22% of project costs were consumed in design and procurement
- Change orders could increase project costs by 50%
- Excessive claims and litigation
- Low bid procurement produced low quality results
- Large backlog of projects



Job Order Contracting History

The Solution

- A long-term (3-5 years) contract for on-call construction
- Competitive pricing established at outset of the contract through the use of a *coefficient* applied to a *unit price book* (UPB)
- Qualifications-based selection to ensure contractor performance
- Individually-priced job orders

Job Order Contracting History

- Pilot at Supreme Headquarters Allied Powers Europe, then at West Point
- A huge success, subsequently expanded to other military and federal branches
 - Air Force (SABER)
 - GSA (IDIQ)
 - NASA, HUD, etc.
- Gained momentum resulting from the Federal Acquisition Streamlining Act (FASA) of 1994

Job Order Contracting History

The Results*

- Faster project delivery (3-9 months less)
- Streamlined engineering and design (\$ and time, collaborative approach)
- Assurance of cost reasonableness
- Better contractor performance, a partnering relationship
- More opportunities for small and disadvantaged business
- Effective use of year-end funds

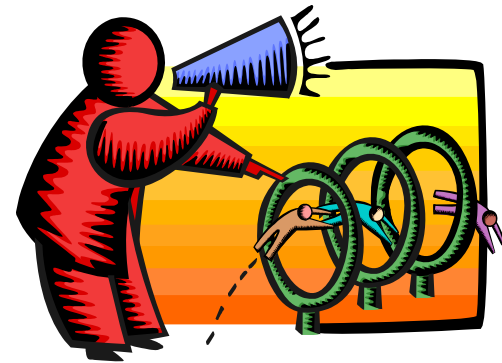


*Cassell, Jordan W., and Linda T. Gilday. *Improving the Army's Job Order Contracting Program*. Logistics Management Institute, September 1997.

Job Order Contracting Now Expanding

Current Facilities Challenges:

- Growing demands to renovate existing facilities and upgrade infrastructure
- Pre-2009 Stimulus: Over \$100 billion a year in the U.S. is being applied to renovation, remodeling and up-keep projects in school, federal, state, and city facilities
- Back-log of projects
- Not enough time, people or resources



The Competitive Pricing Component

- Pricing structure relies on a Unit Price Book (over-the-counter or customized)
- Competitive coefficient (multiplier, factor) establishes pricing at the outset of the contract
- Effectively bidding every imaginable component of construction

Example:

1 sf drywall	\$1.00	
Coefficient .92		=
<u>.08</u>		
Contractual Price	\$.92	



Job Order Pricing

Job orders are *firm, fixed price, lump sum*

- UPB is an estimating tool, not a billing tool.
- Unit price proposals represent contractor's committed price—converts to lump sum
- Owner driven change orders will happen
- Contractor driven change orders are almost non-existent
- Always a consistent pricing structure with the UPB
- Different from other on-call contracts. Not Time and Materials, not cost-plus-fee, not Construction Management
- Incentive to perform efficiently
- No surprises!



Performance Focus

JOC is all about Performance!
Great JOC contractors strive for:

- Fast Delivery
- High Quality
- No Change Orders
- No Warranty Hassles
- Maximize budgets
- Improved results



The Performance-Based Character of JOC

- Contract has no or minimal work guarantee
- Contract has clear volume potential (\$2m minimum, up to \$10m annually)
- Base year with 3 or 4 option years
- Incentive to perform



Happy Customer = More Work

The Importance of Relationships

- Long-term contract fosters a higher level of investment in making the working relationship work
- Allows development of a trusted partner
- JOC Team operates as an extension of owner's staff
- Improved communications, improved results



Job Order Contracting Process

- Once a JOC Program is in place, client project demands/requests happen over the year(s). This starts the JOC Process:
 - Scope
 - Proposal
 - Execution



Job Order Contracting Process: Scope

- Detailed Scope Developed
 - Notice of Work Requirement
 - Site Visit
 - Detailed Scope Development & Incidental Design
 - Scope Approval

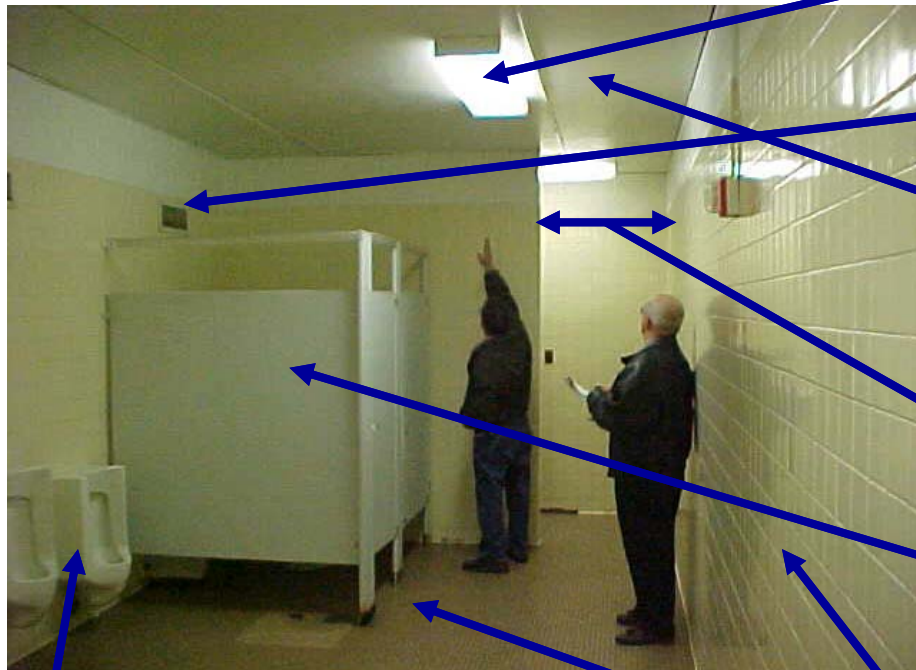


Site Visit or Job Walk

- Typically within days
- Collaborative Process
- Identifying components of work and discussing the options
- Value Engineering suggestions



Developing The Project Scope



- Demo / dispose of 3 existing lights. Reuse existing circuit for new lights

- Remove & replace 2 existing HVAC grilles

- Install gyp ceiling at 8' 8" with 4 new surface mounted explosion proof lights. Relocate existing smoke detector to new ceiling

- Demo CMU for 42" opening min. (exist opening +/- 36")

- Demo & dispose of existing metal partitions and replace with new 4" CMU covered completely with ceramic tile, with one block scupper at bottom of each

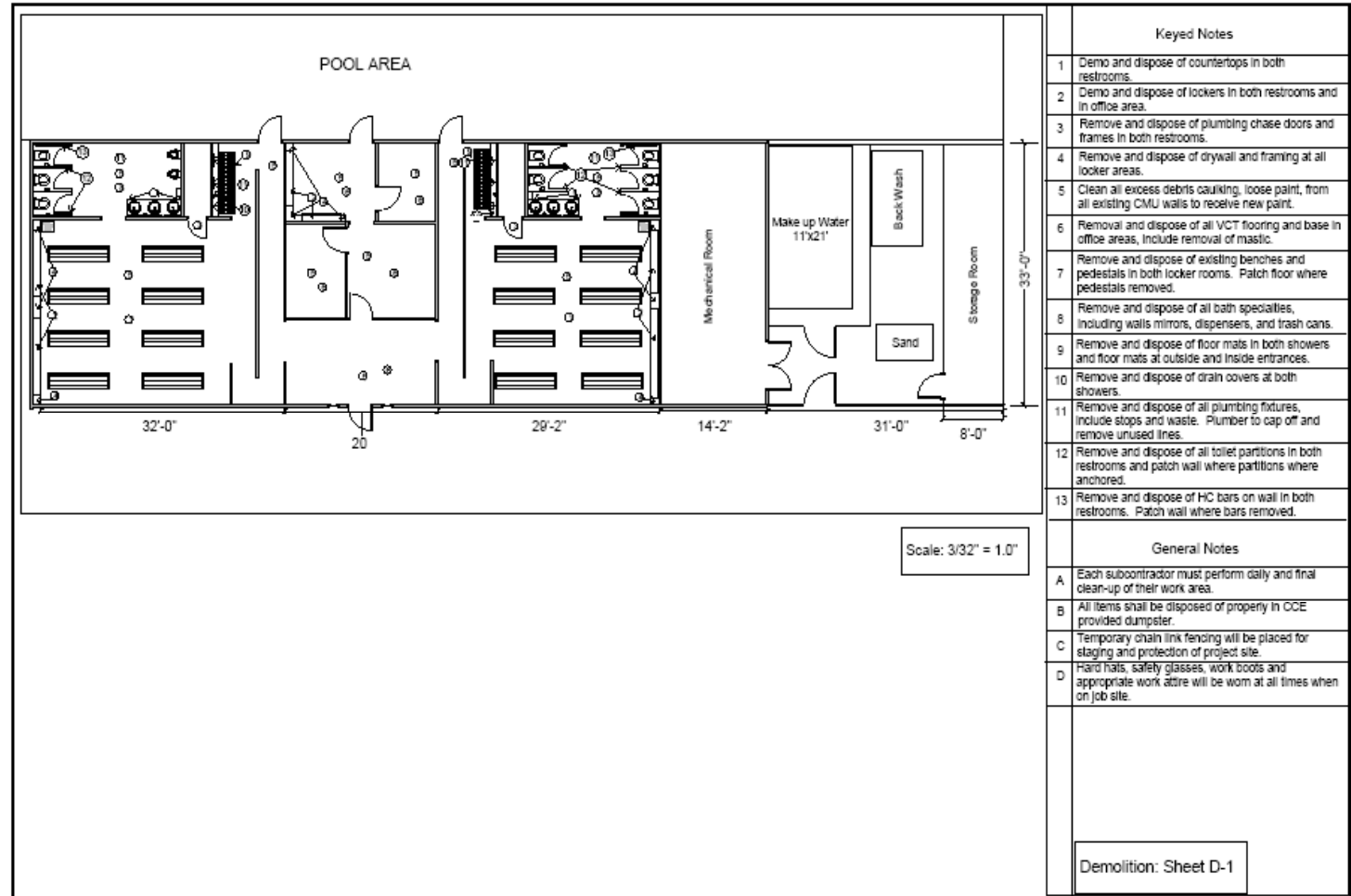
- Remove and reinstall existing 3 urinals and 2 commodes

- Demo ceramic tile, floors and walls, (exist ceramic on walls is approx. 8'-0" high)



Targeted or Incidental Design

- Performed in-house
- Included in coefficient
- Will engage design professional when necessary (line item fee)



Scope and Work Plan Submitted

- Presented to owner for approval
- Revised as needed
- This step is crucial for aligning vision and expectations

DELIVERY ORDER PROPOSAL AND WORK PLAN

Project: Socorro Pool Renovation **Date:** 2-21-07
CCE#: 83-0060 **Location:** Socorro, NM
Estimated Construction Duration: 90 Calendar Days **Owner Rep:** Pat Salome
(Excluding Weather)

Description of Delivery Order: Renovation of Pool Heating, Interior Renovation, Pool Repairs

I. Scope of Work

Design & Administration:

Perform site investigations & programming meetings to develop project requirements. Administer all bidding, preconstruction, construction, permitting, & project completion activities.
Coordinate all construction scheduling to complete project within contract duration.

General conditions

1. Provide and install temporary Chain link fence for staging and protection of project site.
2. Provide Temporary road during construction renovation.
3. Provide a 30 CY dumpster for the duration of the project for construction debris.
4. Provide exterior cleaning of debris around building created by this work.
5. Progress cleaning of project
6. Final cleaning

Selective Demolition

1. All existing countertops related in bathrooms
2. All lockers in locker room and offices
3. Plumbing chase doors and frames
4. Removal of drywall, framing @ all locker areas.
5. Clean all excess debris caulking, loose paint, from existing CMU walls to receive new paint.
6. Removal of all existing VCT flooring and base in offices and locker room complete including mastic.
7. Existing locker benches and pedestals (patch all pedestal removal locations TYP.)
8. Removal of all bathroom specialties including wall minors, dispensers, complete
9. Removal of all Bathroom fixtures (Plumber to cap off and remove un-used lines, complete include slopes and waste.
10. Partitions at all locations and patch back all anchored areas
11. All shower floor mats



Job Order Contracting Proposal

- Project Proposal Presented
 - Job Order Request (RFP)
 - Proposal Package
 - Negotiations / Further Input
 - Revised Detailed Scope and Proposal (if necessary)
 - Preliminary Schedules Developed
 - Final Job Order Form Approved
 - Job Order Issued by Client



Components of the Estimate

- Determine quantities of work
- Build the estimate from UPB
- Summarize the estimate and apply coefficient
- Apply city cost index

JOC Estimate Example Interior Wall Partition Detail

3/5/2003

Group	Phase	RS Means Index No.	Description	Quantity	Takeoff Quantity	Total Unit w/OH&P & CCI	Total Adjusted Amount	City Cost Index %
07200.000	07210.960		THERMAL PROTECTION Wall clng/insul, non-rigid			0.46 Jst	459.00	111%
09100.000	09110.100		METAL SUPPORT ASSEMBLIES Metal studs, partitions			0.68 Jst		
09200.000	09260.700		PLASTER & GYPSUM BOARD Drywall			0.91 Jst		
				1,000.00 sf	1,000.00 sf	0.92 Jst	929.00	82.3%
			FLOORING Resilient flooring			1.42 Jst	284.60	96.0%
09900.000	09910.920		PAINTS & COATINGS Walls and ceilings			0.26 Jst	520.00	85.9%
				2,000.00 sf	2,000.00 sf	0.40 Jst	806.00	85.9%
Estimate Totals								
			Material	5,242			1,649	98.03%
				4,784	4,784		109.13%	109.13%
			W/P Factor (2.20)	0,358		0,000	7.08%	
				0,358	4,449		2.08%	94.09%
			Sales/Gross/Receipts/Tax	234		5,200	4.95%	
				234	4,685		4.95%	90.00%
			Performance & Payment Bond	42		1,000	0.99%	
				42	4,730		0.99%	89.99%
			Total	4,730	4,730			

CSI #

Quantity

Unit Cost w/OH & P

Apply City Index

UPB Index #

Apply Coefficient

Total Cost



The Summary of the Estimate

- Very different approach
- Assurance of a fair price
 - Are the line items chosen appropriate?
 - Are the quantities correct?
- Owner needs to have a strong basis of estimating

PROPOSAL
Contract #: 683000

Date: February 20, 2007 # 68-0050

Title: Socorro Pool Renovation

Location: Socorro, NM

Proposal Data Calculation:

1) Socorro Pool, Mechanical Room	\$ 218,036.96
2) Socorro Pool, Interior Renovation	\$ 181,805.69
3) Socorro Pool, Pool & Deck Repairs	\$ 208,382.70

Total Means Cost	\$ 608,175.35
Coefficient	0.917 \$ 50,478.55
City Index	0.883 \$ 65,250.53
Burdened Means Cost	\$ 482,446.27

Burdened Means Cost	\$ 492,445.27
Non-Prep/Load:	\$ -
Design Services:	\$ -
Bond:	\$ 3,767.21
Sales Tax @ 6.8750%	\$ 33,855.68
Total Purchase Order Amount:	\$ 530,069.17

Total Performance Time required: 90 Working Days after CES Purchase Order Received
 Progress Payments shall apply to this proposal for work in place and stored materials.

"Delivering Solutions, Building Relationships"

 Pam

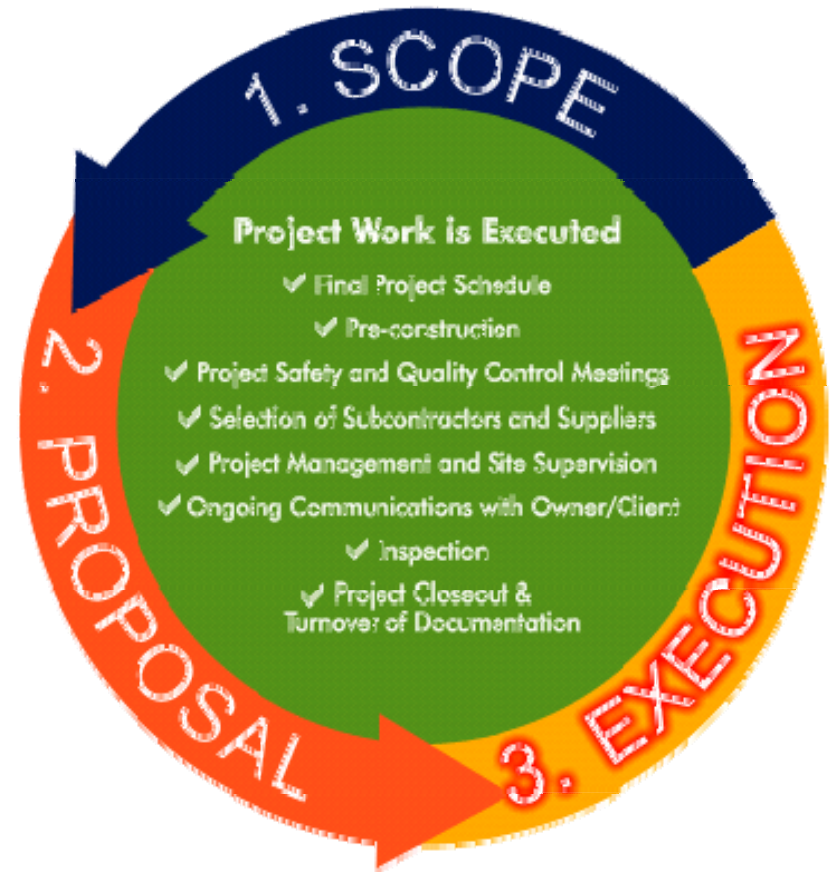
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 Suite 300 Project General Manager
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Job Order Contracting Process Execution

- Project Work is Executed
 - Final Project Schedule
 - Pre-construction
 - Project Safety and Quality Control Meetings
 - Selection of Subcontractors and Suppliers
 - Project Management and Site Supervision
 - Ongoing Communications with Owner/Client
 - Inspection
 - Project Closeout and Turnover of Documentation

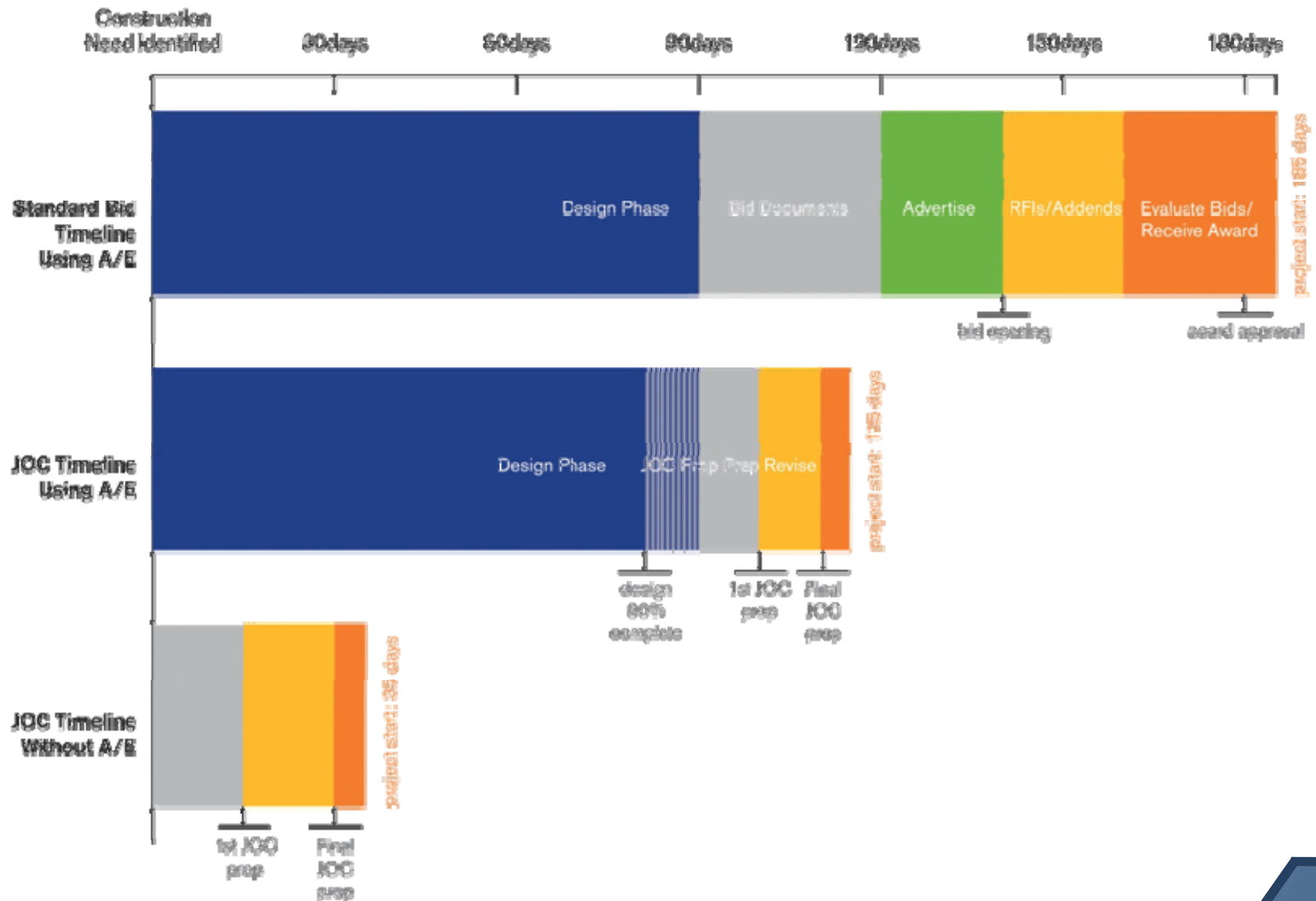


Benefits to Owners

- Focus limited people resources on mission critical and priority needs
- Expand and change based on the needs and demands of your facilities and organization
- Getting more done – generating a positive impression & experience
- Improved quality of delivery and results
- Flexibility, matching scope to budget
- Saves time and can be more cost-effective
- More dollars to the project, less to procurement costs
- Can help improve small & disadvantaged business goals

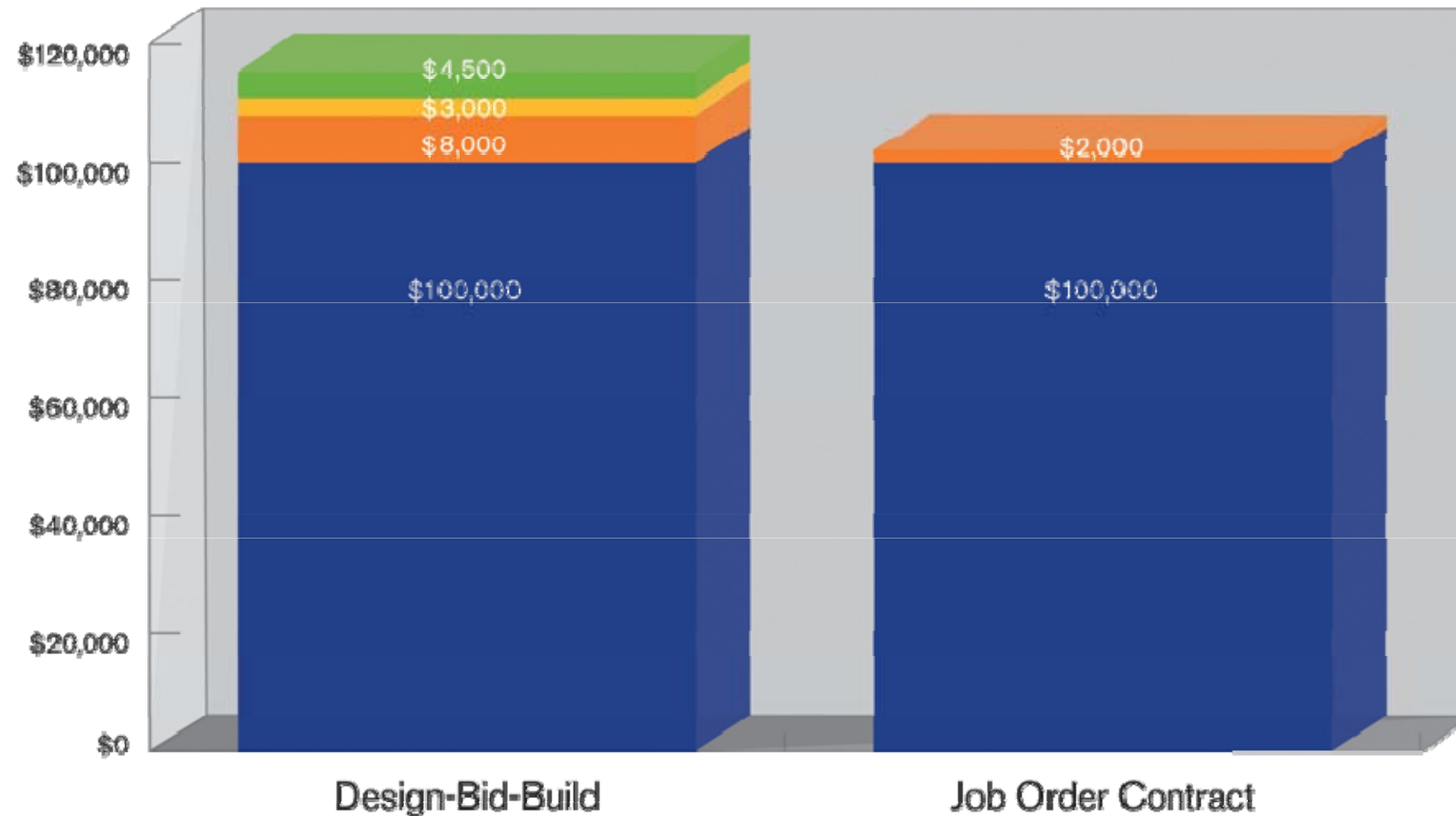


Timeline Comparison



Cost Comparison

■ Construction Contract ■ Design Fees ■ Change Orders/Claims ■ Procurement Costs



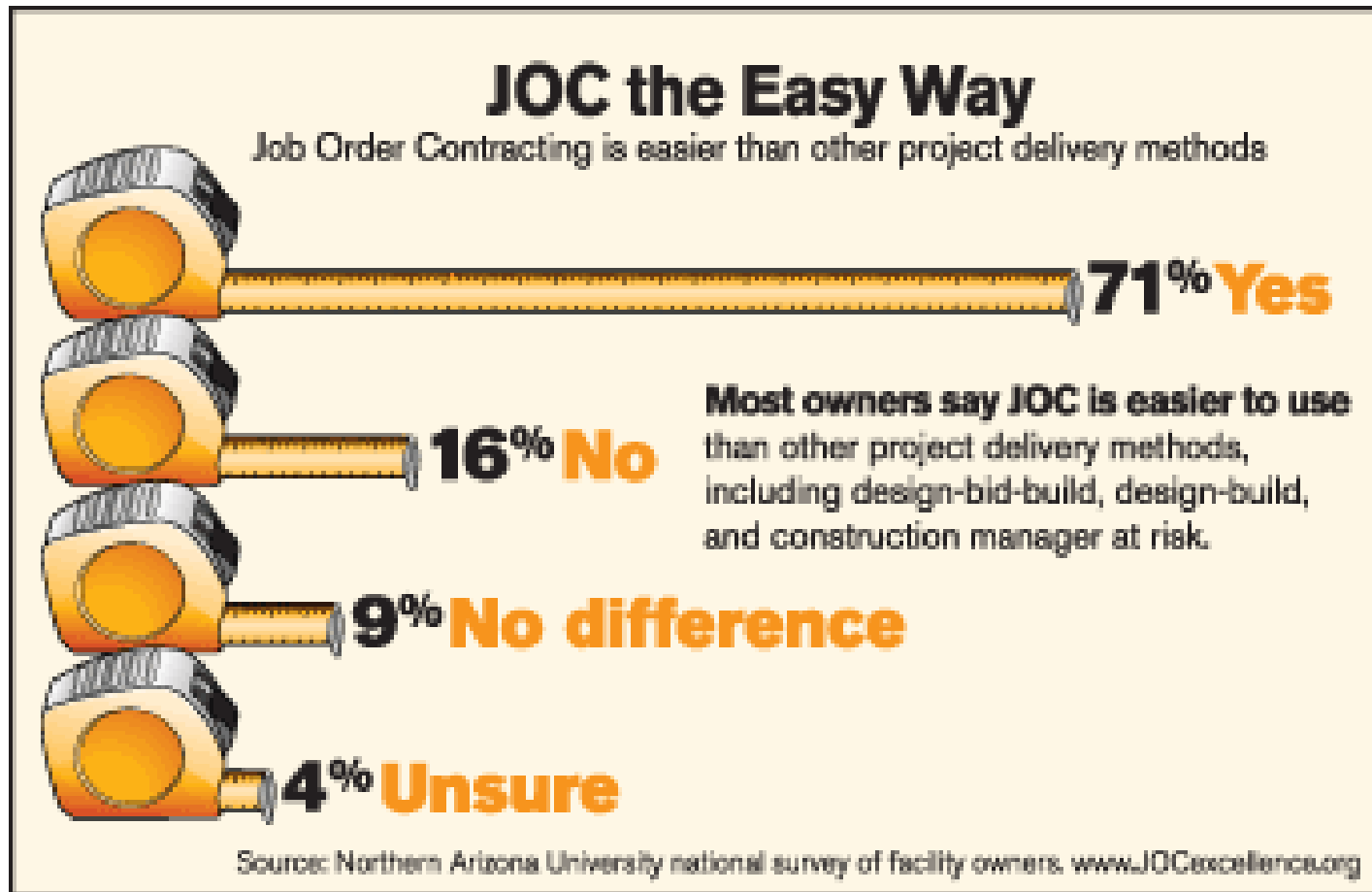
source: study by Logistics Management Institute



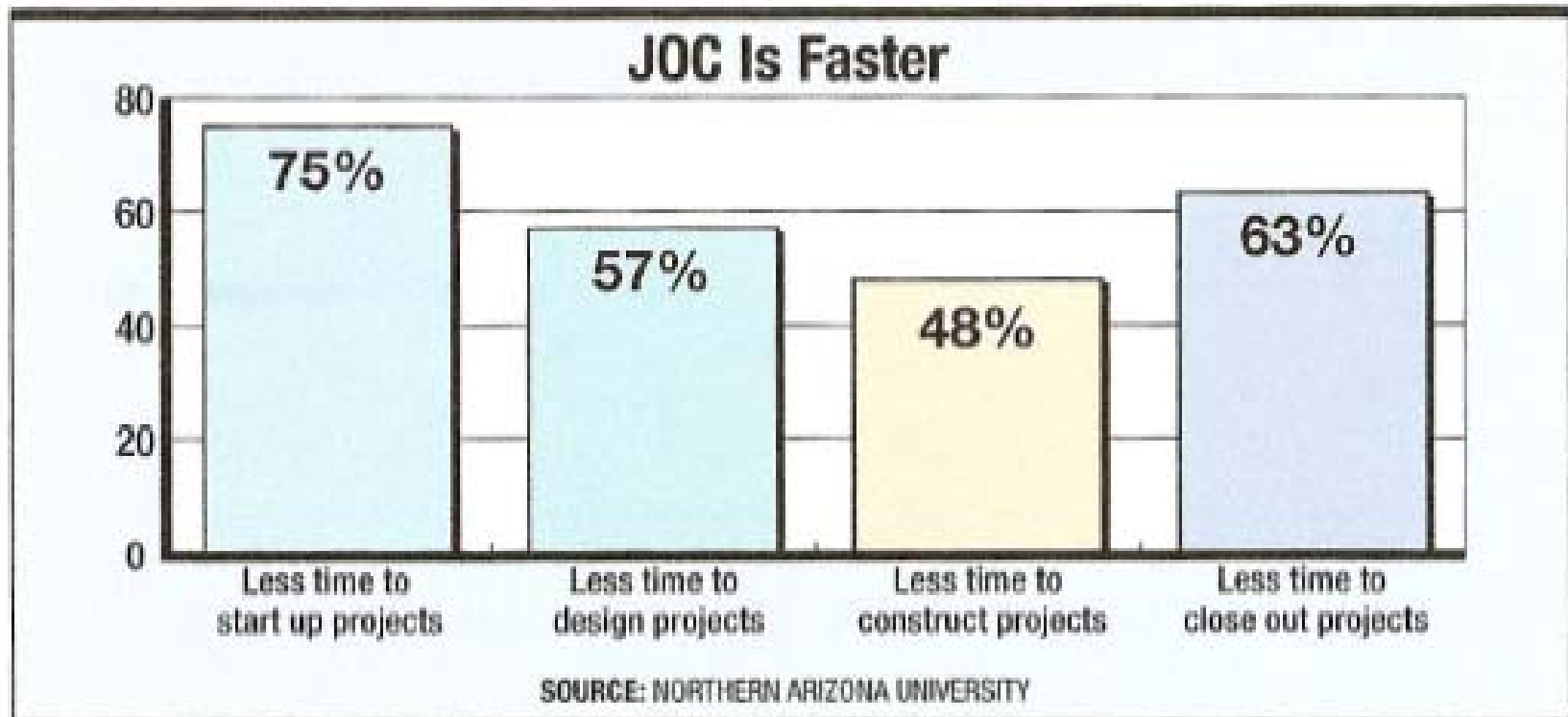
What Job Order Contracting is *Not*

- Cheap construction
- A one-time fix for a problem project
- A no-bid contract
- The right contracting vehicle for every owner
- The right contract for every contractor
- It is another tool in your toolbox

Job Order Contracting Owner Research



Job Order Contracting Owner Research



Job Order Contracting Owner Research

JOC Cuts Costs				
	% Costs less	% Costs same	% Costs more	% Unsure
Procurement	42	27	26	5
Administration	44	29	23	4
Design	44	26	25	5
Change orders	47	23	25	5
Claims	45	15	13	27

SOURCE: NORTHERN ARIZONA UNIVERSITY



Job Order Contracting

A Few Final Thoughts

- Job order contracting allows for sustainable green solutions; you can be as green as you want
- Ability to quickly respond to the stimulus funds and get work going in your communities ASAP
- It is different than traditional design-bid-build construction: you must be ready for a different relationship environment

Job Order Contracting Additional Resources

(CJE)

Center for Job Order Contracting Excellence

www.jocexcellence.org

Learn, Share and Succeed

- Best Practices Sharing
- Networking
- Training & Education
- Career Development
- Research
- Legislative Support
- Resources/Materials
- National & Regional Industry Forum: Owners, Contractors, Consultants & Educators



Washington State General Administration



WA GA supports the operations of Washington State government by completing \$500 million in design and construction annually.

Dedicated JOC Legislation—passed in 2003 and expanded in 2007.

2005 Legislature created CPARB (Capital Projects Advisory Review Board) to review alternative delivery methods.

Contract volume limits \$4 million annually, 2 base years plus 1 option year.

Four JOC Contracts. State is geographically divided in half (east and west). Some contractors serve statewide and some are limited to one half the state.



Each contract allowed two delivery orders up to \$350,000 annually. All other delivery orders must be under \$300,000.

Washington State General Administration

RSMeans

- RS Means Unit Price Book. Administered directly by WA GA.
- 90% of work must be subcontracted—subcontractor usage reporting requirements.
- RS Means City cost index applied to unit prices. Contractors also propose coefficients on up to five regions, to account for additional geographic differences in cost of doing the work. Unit prices based on most current RS Means data (annual, or quarterly updates).
- Different coefficients for regular hours work and after hours work.
- Architectural and Engineering services provided at an hourly negotiated rate
- Contractors selected with Best Value two-step process:
 1. Written qualifications
 2. Interview and coefficient
- All delivery orders comply with WA State Prevailing Wage Rates



Washington State General Administration

- Program Started in 2004
- Completed \$40 million total construction value
- 410 Work Orders
- Average Project Size \$98k
- Largest Project \$350,000
- Smallest Project \$1,500

Washington State General Administration

- Sample Projects
 - Classroom Renovations
 - Parking Lots and Sidewalks
 - Electrical Generator Upgrades
 - Roofing
 - Boiler Replacements