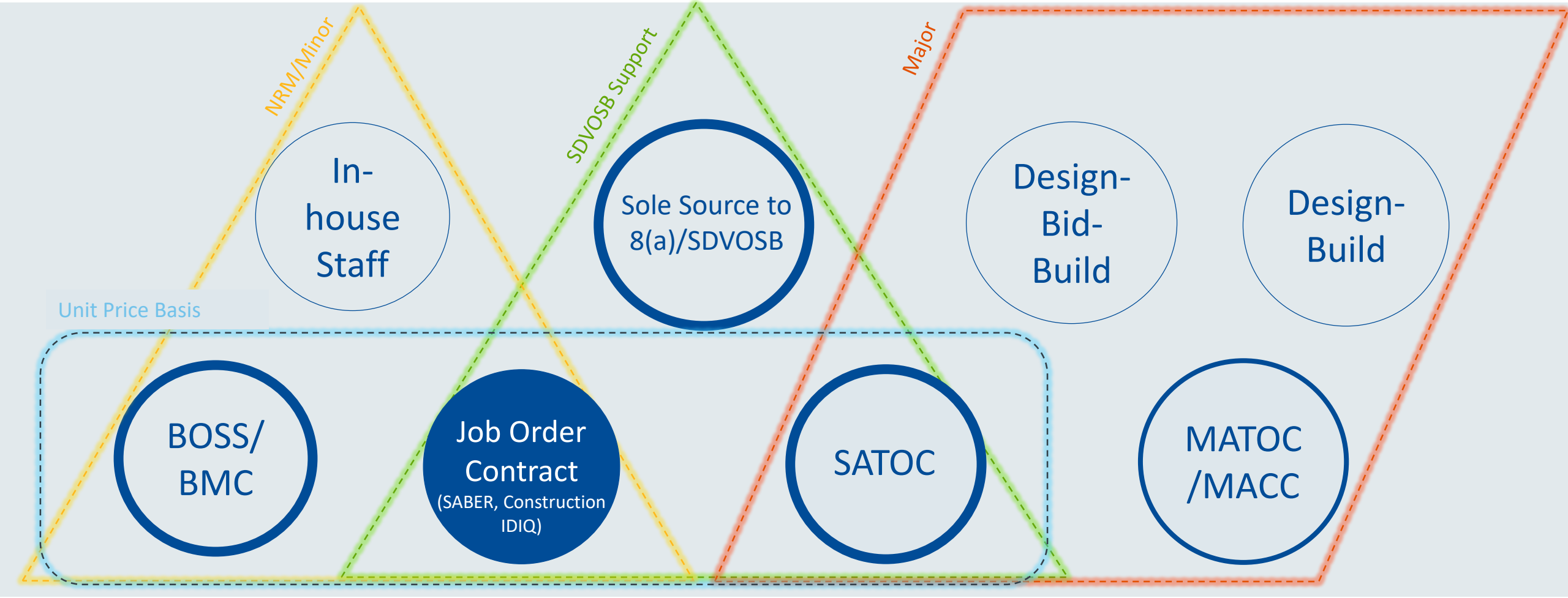
GORDIAN®
Building knowledge

Job Order Contracting for VA NRM and Minor Construction Execution

Lisa Cooley, Director Federal Solutions, Gordian

February 20, 2019

VA NRM and Minor Construction Execution Options



GORDIAN®

Job Order Contracting

- One option in the acquisition and execution toolbox.
- One type of IDIQ contract.
- Distinguished from traditional DBB and even multiple award contract vehicles—different motivators and results, different staffing requirements.
- Shares features with IPD and other Performance-based contracting methodologies, but is uniquely suited for smaller projects.

GORDIAN®

Key Features of JOC

JOC Characteristics

- Use of a **Unit Price Book** (direct material, labor, and equipment) + **Coefficients** (contractor profit and indirect costs)
- Long-term contract has **potential for a large volume** of pre-priced task orders, but **guarantee is low**.
- Competitive source selection based on capability and past performance, technical and management proposals, sample task proposal, and coefficients, ensuring **performing contractor**.
- Utilizes a pre-defined, streamlined and collaborative process for the **scoping**, **pricing** and **execution** of delivery order.
- Each signed task order becomes a **fixed price, lump sum** contract and is managed accordingly.

Applicability

- Used to execute small projects, such as NRM and Minor Construction.
- BOS and SATOC share similarities in unit price, IDIQ execution for ongoing maintenance (BOS) and lager projects (SATOC).

GORDIAN®

JOC Benefits: What the Research Says

- ✓Faster project delivery (3-9 months less)
- ✓Streamlined engineering and design efforts
- ✓Assurance of cost reasonableness
- ✓Better contractor performance
- ✓Partnering relationship
- ✓More opportunities for local small and disadvantaged business
- ✓Effective use of year-end funds

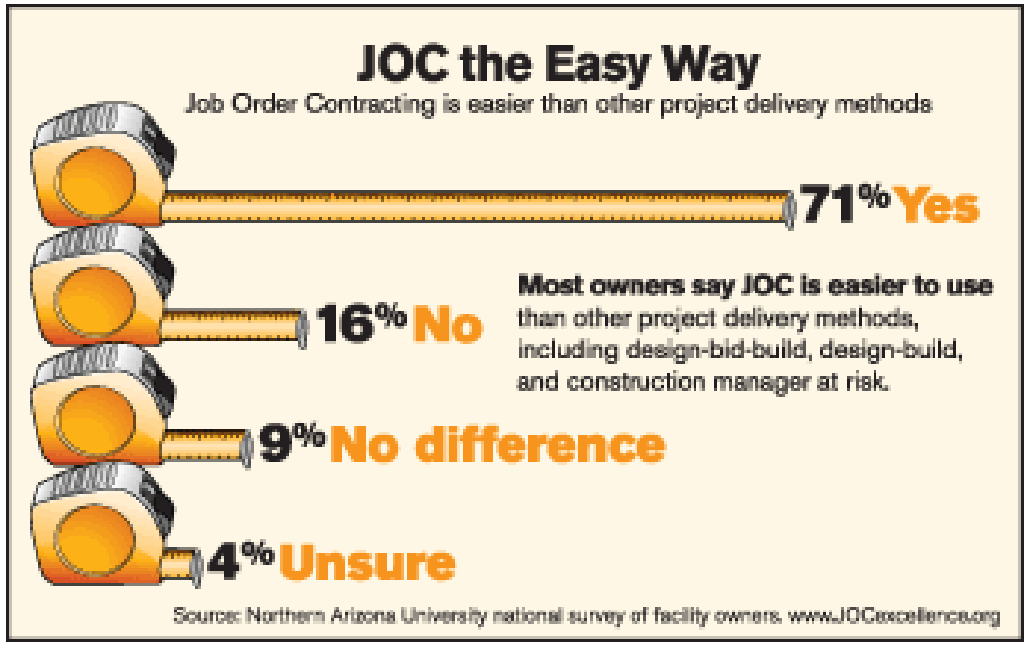
Moore, William B. and Carl F. Stout. *JOC: A Procurement Success Story.* Logistics Management Institute. 1988.

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

JOC Benefits: What the Research Says

Qualitative Study of Owners

- 75% Say JOC Requires Less Time To Start Up A Project
- 57% Say JOC Requires Less Time To Design A Project
- 63% Say JOC Requires Less Time To Close Out A Project
- 71% Say JOC Is Easier To Use

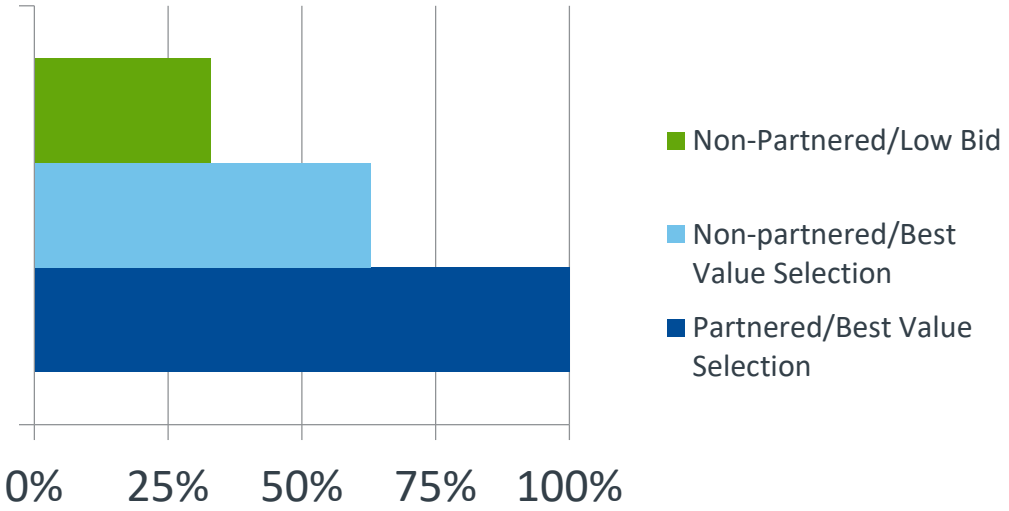


Ohrn, Greg. *The Influence of Job Order Contracting as a Construction Project Delivery Method on Owner Satisfaction,* PhD Dissertation Indiana State University – 2009.

GORDIAN®

JOC Benefits: What the Research Says

- Different JOC contracts judged based on a variety of performance factors:
- Overall Satisfaction:



Mulcahy, Francis S. *The Effectiveness of Partnering and Source Selection in Job Order Contracting*. Master's Thesis, University of Washington, 2000.

Factors Studied:

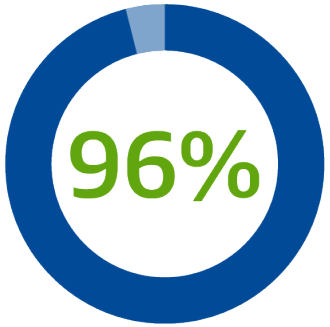
- Quality
- Safety
- On-Time Completion
- Scheduling and Performance of Subs
- Warranty Service
- Responsiveness of Support
- Innovation and Value Engineering
- Responsiveness to Client Needs
- Preventing and Solving Problems
- Contractors Management Effectiveness
- Dispute Resolution
- Level of Trust
- Communication

GORDIAN®

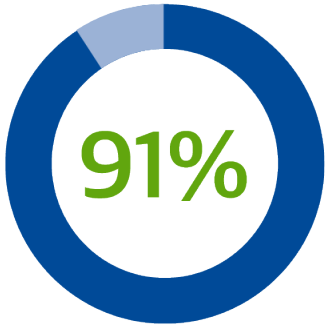
Arizona State University Study, 2016

Proven Benefits of Job Order Contracting

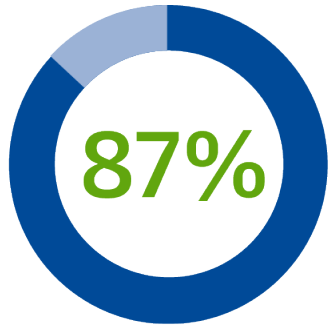
of owner respondents **recommended Job Order Contracting**



of Job Order Contracting projects completed with **satisfactory results**



of Job Order Contracting projects delivered **on budget**



of Job Order Contracting projects delivered **on time**

*Performance Based Studies Research Group (PBSRG), 2016. Job Order Contracting Performance: 2015 Industry Survey.

GORDIAN®

Owner Satisfaction

	JOC	DBB	DB
Number of Responses	*33*	*24*	*14*
Overall Satisfaction rating (1-5)	4.1	2.3	2.0
Quality of Construction (1-5)	4.1	2.5	2.3
Quality of Design Services (1-5)	3.6	3.8	2.3
Quality of Design Drawings (1-5)	3.6	4.1	2.3
Level of Transparency (1-5)	4.2	2.3	2.2
Level of Flexibility (1-5)	4.3	2.0	2.0
Allows the achievement of organizational goals (1-5)	4.3	2.5	2.4
Average Rating (1-5)	**4.0**	**2.8**	**2.2**

Performance Based Studies Research Group (PBSRG), 2016. Job Order Contracting Performance: 2015 Industry Survey

GORDIAN®

Contractor Satisfaction

	JOC	DBB	DB
Number of responses	*11*	*8*	*10*
Contractor's Satisfaction Rating	4.3	2.8	3.7
Average Customer Satisfaction Rating of the Contractor	4.4	3.3	4.1
% Projects on budget	89%	60%	69%
% Projects on time	94%	63%	73%

GORDIAN®

Major Findings: Cost Savings

Owners estimate a **24%**

administrative cost savings

Contractors estimate a **21%**

overall cost savings

GORDIAN®

Top Reasons for Cost Savings

Owners Survey

1. Procurement Administrative Time **(75%)**
2. Project Manager Support Time **(52%)**
3. Design and Drawing Costs **(30%)**
4. Decreased Documentation Demands **(30%)**
5. Minimized Admin Transactions **(14%)**

Reduces non-value added activities

Contractors Survey

1. Acquiring and Bidding New Projects **(73%)**
2. Decreased Change Orders **(45%)**
3. Decreased Time Requirements **(27%)**
4. Design **(27%)**
5. Overhead **(27%)**

Reduces non-value added activities

GORDIAN®

Proven Cost Savings

Benefit	Definition	Range of responses
Design Cost	Construction Task Catalog specs and project scoping service reduce design costs	70% to 80% savings
Procurement Cost	Job Order Contracting process reduces procurement costs	40% to 50% savings
Direct Construction Cost	Effective IGE process controls direct construction costs	3% to 35% savings
Post Award Cost	UPB eliminates overcharging on change orders	10% to 20% savings
Tasks Eliminated	Job Order Contracting process makes construction procurement faster by eliminating tasks	40% to 50% savings
Backlog Reduction (Avoided Inflation Cost)	Job Order Contracting process reduces the impact of inflation on projects in backlog	1.7% to 5% savings

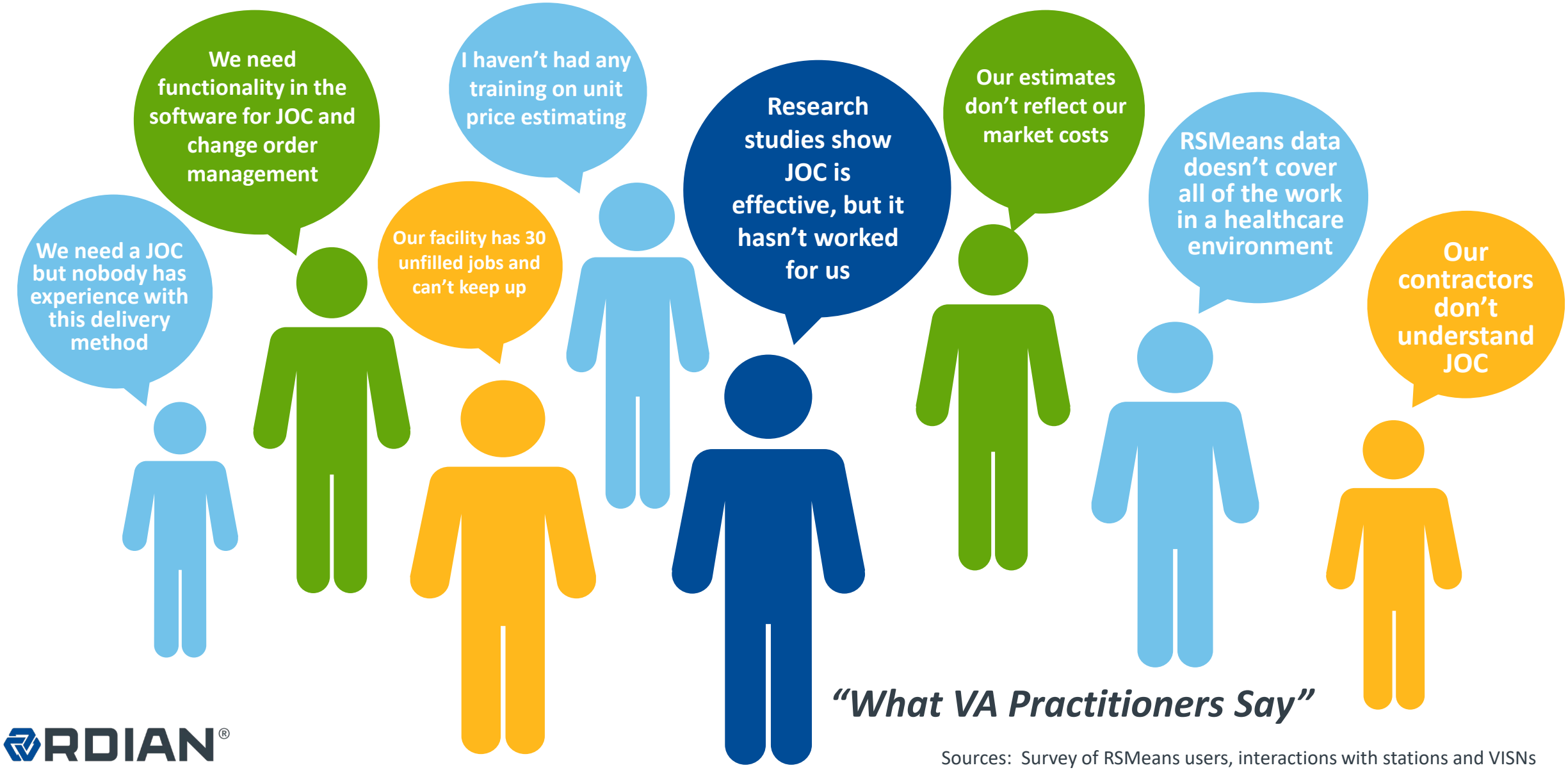
Source: Holden Advisors

VA NRM/Minor Challenges and Opportunities

- Need to streamline project delivery to improve cycle time and throughput
- Capital Planning Process needs more analytical rigor
- Staffing and skillset constraints
- Need Total Cost of Ownership approach
- Lack of standardized cost estimating process and tools
- Lack of accurate project data
- SDVOSB requirements: emergent business capabilities and restricted competition impact delivery and costs
- Change order process is slow and lacks business insight

Sources: Assessment K, GAO Reports

VA NRM/Minor Challenges and Opportunities



"What VA Practitioners Say"

GORDIAN®

Sources: Survey of RSMeans users, interactions with stations and VISNs

Optimizing Unit Price Contracts within VA

Adopt a More **Programmatic Approach**

Leverage **Enhanced Unit Price Data** for more accurate costing

Technology Enablement

Embrace and Improve **SDVOSB Support** Role

GORDIAN®

A Programmatic Approach

Policy and Procedures

Training

Resourcing

Selection Criteria

Monitoring and KPIs

VA

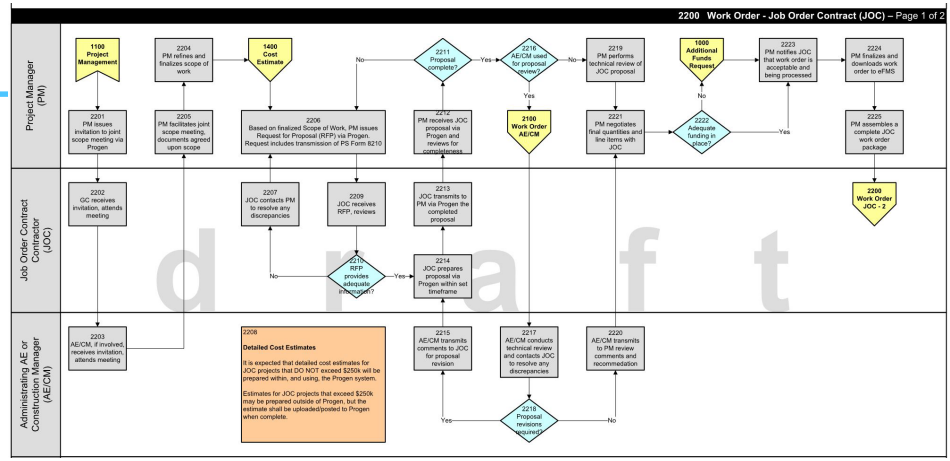
Contractor

Source Selection

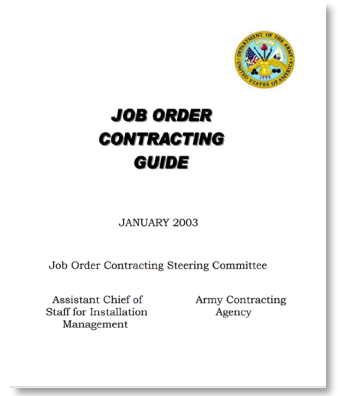
Engineering

Contracting

Formal Partnering



Business Process Mapping



JOB ORDER CONTRACTING GUIDE

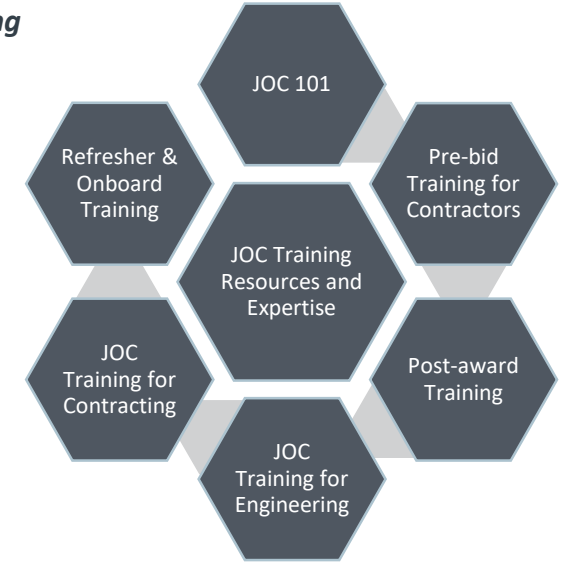
JANUARY 2003

Job Order Contracting Steering Committee

Assistant Chief of Staff for Installation Management

Army Contracting Agency

JOC Standards and Procedures



A Comprehensive Training Program

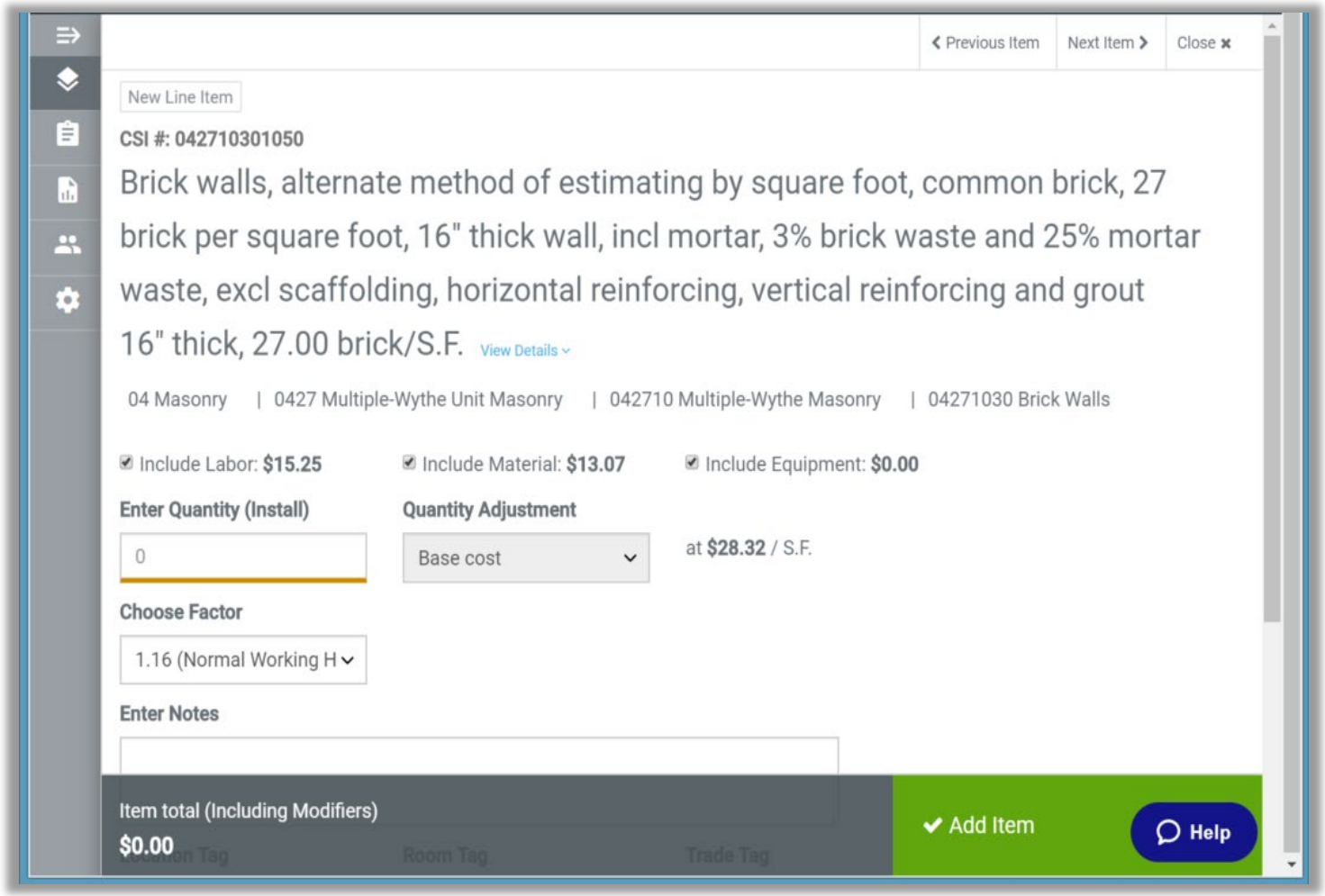
GORDIAN®

Federal and Healthcare Users of JOC Program Management Systems

Enhanced Data

Procurement-specific Data Supports JOC Programs Better

- Includes more precise task descriptions to eliminate ambiguity and reduce friction in negotiations
- Includes quantity and labor modifiers as recommended by Army JOC Guide
- Greater detail requires technology enablement



GORDIAN®

Customer-specific Data Enhancements

- Custom data supports unique facilities or requirements and provides higher pricing fidelity
- More robust data sets can be up to 250,000 items
- Integrated performance specifications

26 55 70 Healthcare Lighting *(26 55)*

26 55 70 00-0001 Surgical Lighting Fixtures *(26 55 70)*

26 55 70 00-0002	EA	Surgical Lighting Fixture, 120 Volt, Max Va 126, 100 Volt Halogen	2,979.20
26 55 70 00-0003	EA	Install Owner Furnished Surgical Lights	389.42

26 55 70 00-0004 Patient Care Fluorescent Fixtures *(26 55 70)*

26 55 70 00-0005 Ambient And Exam Combination, Patient Care Fluorescent Fixtures (Cooper Fail-Safe) *(26 55 70 00-0004)*

Note: Includes ambient and exam lights, 20 gauge steel housing with powder coated finish, acrylic diffuser and

22 66 Chemical-Waste Systems for Laboratory and Healthcare Facilities *(22 60)*

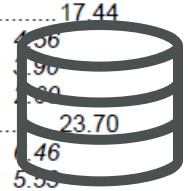
22 66 53 Laboratory Chemical-Waste And Vent Piping *(22 66)*

22 66 53 00-0001 Polypropylene Acid Resistant Drain-Waste-Vent (DWV) Pipe And Fittings *(22 66 53)*

22 66 53 00-0002 Schedule 40 Polypropylene Acid Resistant DWV Pipe And Fuseal Fittings *(22 66 53 00-0001)*

22 66 53 00-0003 Schedule 40 Polypropylene Acid Resistant DWV Pipe *(22 66 53 00-0002)*

22 66 53 00-0004	LF	1-1/2" Schedule 40 Polypropylene Acid Resistant DWV Pipe	8.92
		For Schedule 80, Add	*1.87*
		For Fire Retardant Thermoplastic Pipe (Proxylene), Add	*1.60*
		For Work In Restricted Working Space, Add	*1.60*
22 66 53 00-0005	LF	2" Schedule 40 Polypropylene Acid Resistant DWV Pipe	10.84
		For Schedule 80, Add	*2.52*
		For Fire Retardant Thermoplastic Pipe (Proxylene), Add	*2.16*
		For Work In Restricted Working Space, Add	*1.80*
22 66 53 00-0006	LF	3" Schedule 40 Polypropylene Acid Resistant DWV Pipe	17.44
		For Schedule 80, Add	*4.36*
		For Fire Retardant Thermoplastic Pipe (Proxylene), Add	*3.90*
		For Work In Restricted Working Space, Add	*2.60*
22 66 53 00-0007	LF	4" Schedule 40 Polypropylene Acid Resistant DWV Pipe	23.70
		For Schedule 80, Add	*5.46*
		For Fire Retardant Thermoplastic Pipe (Proxylene), Add	*5.55*
		For Work In Restricted Working Space, Add	*3.38*
22 66 53 00-0008	LF	6" Schedule 40 Polypropylene Acid Resistant DWV Pipe	38.94



GORDIAN®

Customer-specific Data Enhancements

MINOR CSI	UOM	DESCRIPTION	LABOR	EQUIP	MATERIAL	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
10 51 13 00-0202		**Locker Locks**					
10 51 13 00-0203	EA	Built In Combination Lock	3.89	0.04	19.67	23.60	1.96
10 51 13 00-0204		**TA-50 Military Gear Lockers**					
10 51 13 00-0205		**Expanded Metal TA-50 Military Gear Lockers**					
		1-1/2" 13 gauge expanded metal that is securely welded to 1-1/4" x 1-1/4" x 1/8" angle and channel frame.					
10 51 13 00-0206	EA	42" x 24" x 78" Expanded Metal TA50 Military Gear Lockers With Bolted Construction Of Doors, Sides And Back Panel	17.02	0.18	1,276.00	1,293.20	12.03
10 51 13 00-0207	EA	42" x 24" x 78" Expanded Metal TA50 Military Gear Lockers With Welded Construction Of Doors, Sides And Back Panel	17.02	0.18	1,240.80	1,258.00	12.03
10 51 13 00-0208		**Welded Metal TA-50 Military Gear Lockers**					
		1-1/2" square 10 gauge welded wire that is securely welded to 1-1/4" x 1-1/4" x 1/8" angle and channel frame.					
10 51 13 00-0209	EA	42" x 24" x 78" Welded Wire TA50 Military Gear Lockers With Bolted Construction Of Doors, Sides And Back Panel	17.02	0.18	1,232.00	1,249.20	12.03
10 51 13 00-0210	EA	42" x 24" x 78" Welded Wire TA50 Military Gear Lockers With Welded Construction Of Doors, Sides And Back Panel	17.02	0.18	1,196.80	1,214.00	12.03
10 51 13 00-0211		**Locker Repair And Refinishing**					
10 51 13 00-0212	EA	Replace Single Tier Locker Door	60.77	0.63	123.56	184.96	0.00
10 51 13 00-0213	EA	Replace Two Tier Locker Door	48.62	0.50	96.09	145.21	0.00
10 51 13 00-0214	EA	Replace Three Tier Locker Door	43.76	0.45	79.67	123.88	0.00
10 51 13 00-0215	EA	Replace Four Tier Locker Door	38.90	0.40	64.66	103.96	0.00
10 51 13 00-0216	EA	Replace Six Tier Or Sixteen Person Locker Door	31.60	0.33	22.84	54.77	0.00
10 51 13 00-0217	EA	Realign Metal Locker Door For Proper Closure	15.11	0.10	0.00	15.21	0.00
10 51 13 00-0218	SF	Patch Small Drill Holes in Locker	3.02	0.02	0.00	3.04	0.00
10 51 13 00-0219		**Steel Basket Racks Mounted On Concrete Base**					
		Includes electroplated baskets with 3/4" x 1" wire mesh sides and bottom with perforated sheet steel front and backs.					
10 51 13 00-0220	EA	9" x 13" x 8" Baskets, 28 Wire Mesh Baskets And Rack	72.93	0.75	1,061.17	1,134.85	36.84
10 51 13 00-0221	EA	12" x 13" x 8" Baskets, 21 Wire Mesh Baskets And Rack	72.93	0.75	893.52	967.20	36.84
10 51 13 00-0222		**All-Welded Steel Lockers**					
10 51 13 00-0223		**All-Welded Steel Lockers**					
		Price per frame. Includes diamond perforated, standard louvered or solid doors and sides. Includes all-welded construction with 16 gauge solid top, bottom, and shelves, 14 gauge doors and 4" legs. Includes electrostatically applied enamel powder coat paint finish. Excludes slope top, base fillers, and locks.					
10 51 13 00-0224		**Single Tier, All-Welded Steel Lockers**					
		Includes one hat shelf, two single hooks and one double hook.					
10 51 13 00-0225	EA	12" x 12" x 48" Single Tier, All-Welded Steel Locker	12.15	0.12	222.12	234.39	8.60
0001		*For >25 To 50, Deduct*				*-11.11*	
0002		*For >50 To 100, Deduct*				*-22.40*	
0003		*For >100, Deduct*				*-33.69*	
10 51 13 00-0226	EA	12" x 15" x 48" Single Tier, All-Welded Steel Locker	12.15	0.12	235.24	247.51	8.60
0001		*For >25 To 50, Deduct*				*-11.76*	
0002		*For >50 To 100, Deduct*				*-23.71*	
0003		*For >100, Deduct*				*-35.65*	
10 51 13 00-0227	EA	12" x 18" x 48" Single Tier, All-Welded Steel Locker	12.15	0.12	247.86	260.13	8.60
0001		*For >25 To 50, Deduct*				*-12.39*	
0002		*For >50 To 100, Deduct*				*-24.97*	
0003		*For >100, Deduct*				*-37.55*	
10 51 13 00-0228	EA	12" x 12" x 60" Single Tier, All-Welded Steel Locker	12.15	0.12	232.95	245.22	8.60
0001		*For >25 To 50, Deduct*				*-11.65*	
0002		*For >50 To 100, Deduct*				*-23.48*	
0003		*For >100, Deduct*				*-35.31*	
10 51 13 00-0229	EA	12" x 15" x 60" Single Tier, All-Welded Steel Locker	12.15	0.12	245.57	257.84	8.60
0001		*For >25 To 50, Deduct*				*-12.28*	
0002		*For >50 To 100, Deduct*				*-24.74*	

Data Governance

GORDIAN®

Using The Construction Task Catalog®

CTC Information:

- ☑ This Construction Task Catalog® was developed and customized by The Gordian Group, Inc. specifically for **New York State Department of Transportation**, priced locally using current labor, material and equipment costs, and published in January 2013.
- ☑ The Gordian Group, Inc. licenses the use of this CTC and other proprietary information and software for the sole purpose of providing Job Order Contracting services to **New York State Department of Transportation**. Use of The Gordian Group's CTC and other proprietary information and software for any other purpose or any other entity is expressly prohibited without the express written consent of The Gordian Group, Inc.

The Unit Prices Include:

Labor Costs:

- ☑ Labor costs include direct labor through the working foreperson level at straight-time prevailing wage rates including fringe benefits and an allowance for Social Security and Medicare taxes, worker's compensation, unemployment insurance and employee benefits.
- ☑ Labor costs are based on workers familiar with and skilled in the performance of the task following OSHA requirements.
- ☑ Labor costs include time lost for normal work breaks, layout, measuring and cutting to fit, clean-up of regular construction debris, inspection, permit compliance, job meetings and start-up.

Equipment Costs:

- ☑ Equipment costs include all equipment required to pile drivers, bulldozers, excavators, backhoes, bobcats etc.) which exclude mobilization.
- ☑ Equipment costs include all operating expenses such as fuel, electricity, lubricants, etc.

Material Costs:

- ☑ Material costs include the cost of the material being installed and all incidentals and accessories integral to the installation.
- ☑ Material costs include manufacturer's and/or fabricator's shop drawings.
- ☑ Material costs for roofing, drywall, VCT, carpet, wall covering, ceiling tile, pipe, conduit, concrete, etc. include an allowance for waste. This list is not intended to be all inclusive, but descriptive of the types of construction materials that are typically sold in standard lengths, sizes and weights.

Complete and In-Place Construction:

- ☑ Unit prices are for complete and in-place construction and include all labor, equipment and material required to complete the task as described in the CTC.
- ☑ Unit Prices include delivery, unloading and storing materials, tools and equipment on site; moving, materials, tools and equipment from storage area or truck up to 2 ½ stories (2 stories with an attic) and within 125' to reach the site.
- ☑ Unit prices exclude moving material and equipment greater than 2 ½ stories and handling material and equipment more than 125' (See 01660).
- ☑ Unit prices for imported materials (aggregate, sand, soil, etc.) include delivery up to 15 miles from the closest approved source.
- ☑ Unit prices include all fasteners such as anchor bolts, lag bolts, screws, adhesive, wedge anchors

Unit Price Books designed specifically for JOC have integrated data governance terms, specifications, and quality assurance standards, consistent with the cost data research basis.

Eliminates ambiguity and ensures consistent interpretation of the data with contract terms and conditions.

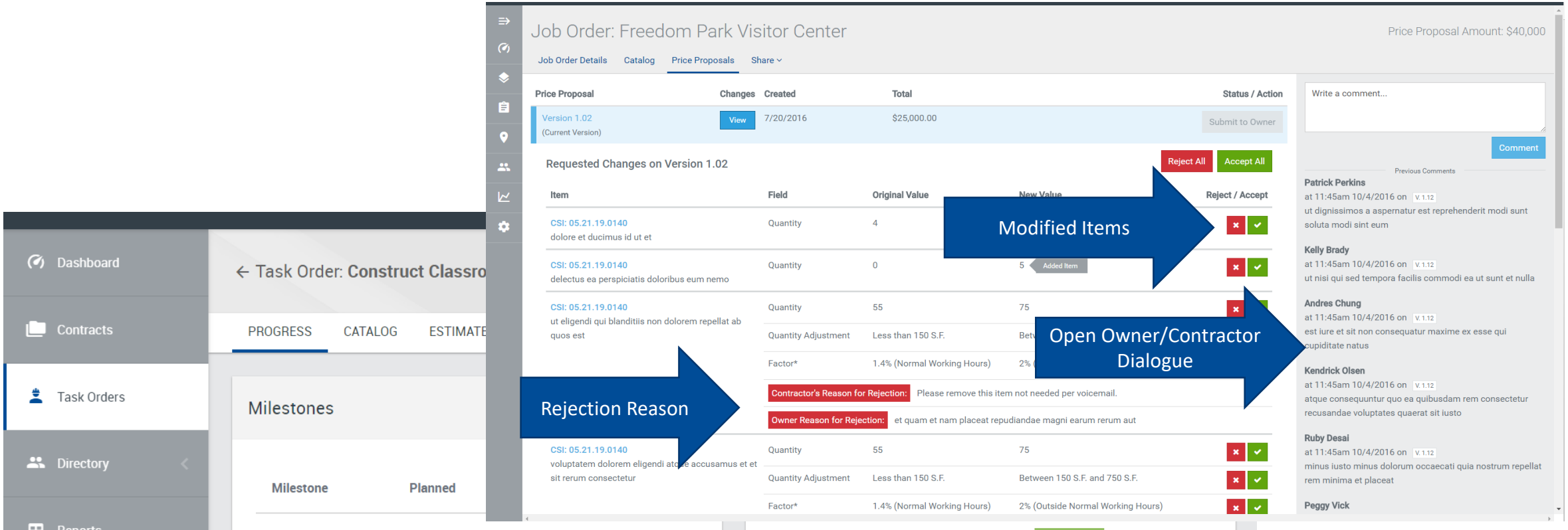
Technology Enablement

- Management of vast cost datasets
- “Self-auditing” or automatically validated systems save significant staff time and ensure contractual compliance
- Supports IGE and task order negotiation process
- Saves significant labor hours

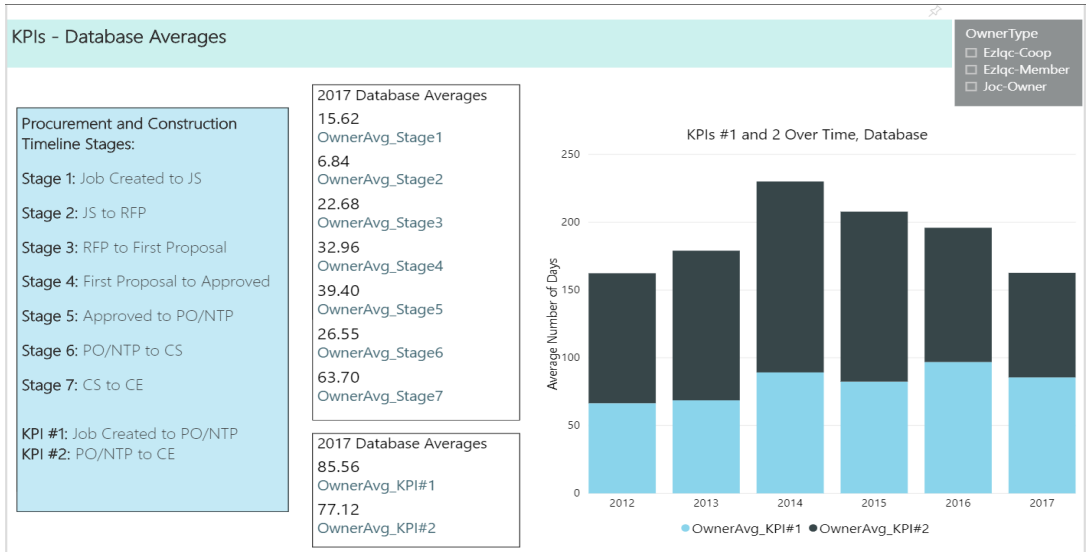
	$500,000 Task Order 200 line items	
	Standard Estimating Technology Enablement	**JOC-Specific Technology Enablement**
Joint Scope Development	Paper process, 16 hours	Connected process, 8 hours
Contractor Proposal	32 hours	16 hours
IGE	32 hours	16 hours
Negotiations	Manual price validation and comparison, 32 hours	Manual price validation and comparison, 8 hours

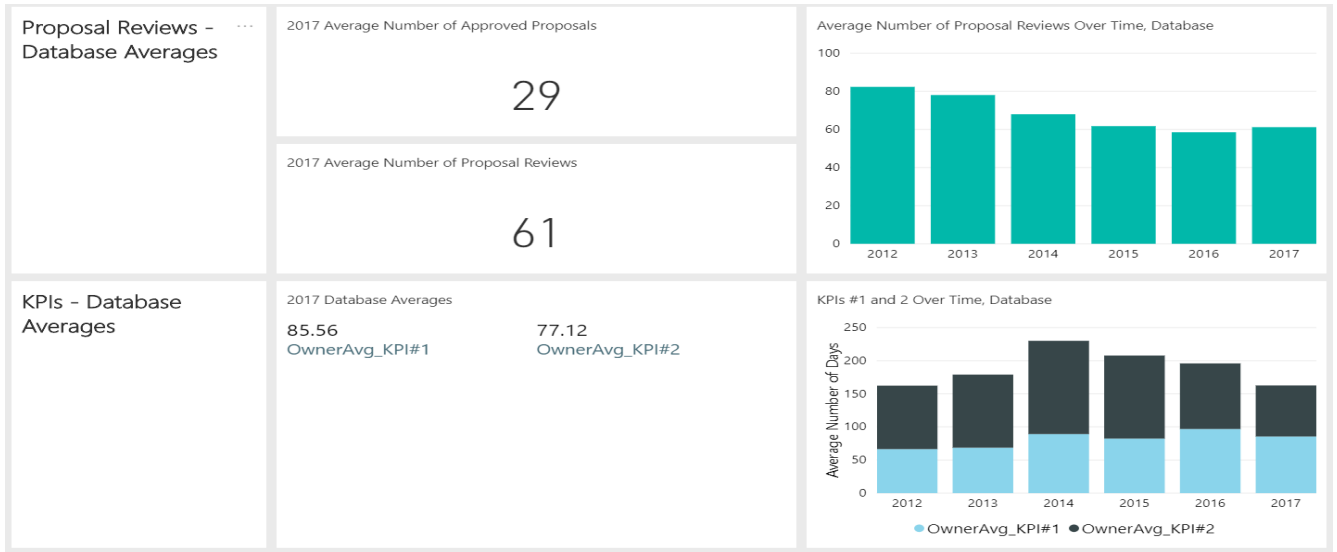
GORDIAN®

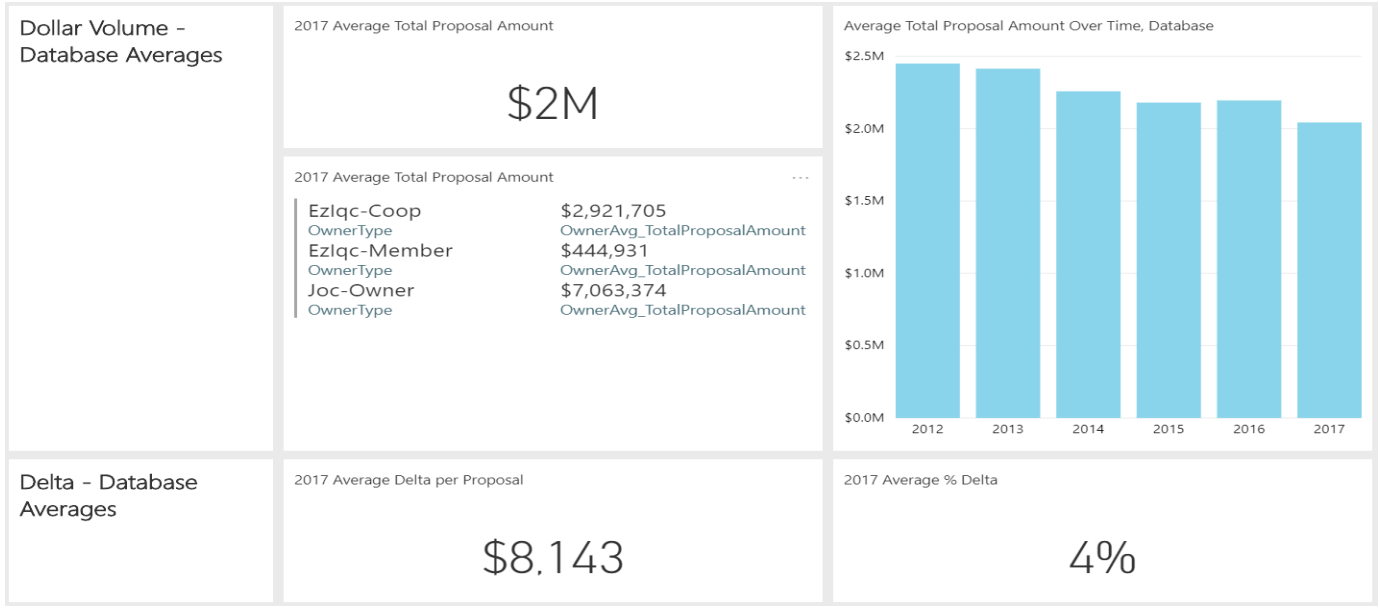
Collaborative Technology Enablement

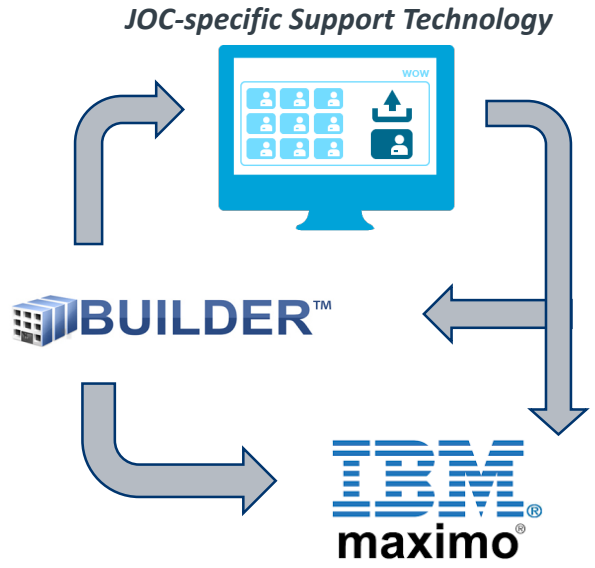


Technology Enablement + Programmatic Approach Allows for Analytics, Benchmarking, and Integration



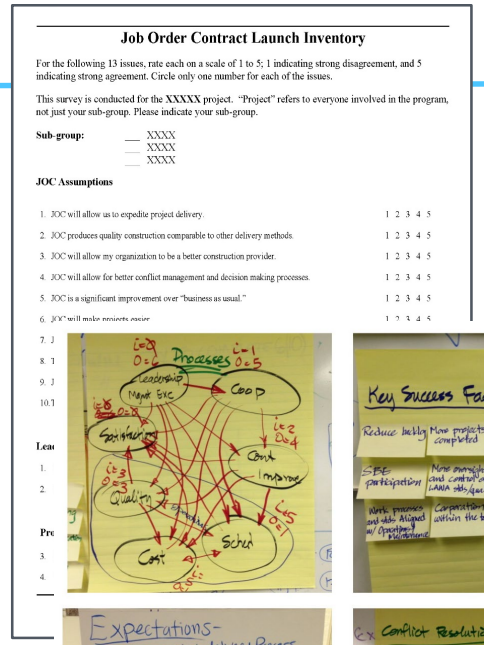






Supporting the SDVOSB Community

- Contractor Outreach and Pre-bid Training
- Formal Partnering Support
- Dedicated Business Support Programs (e.g. HUD Section 3)
- “Pay as you go” system support to minimize cash flow impact



Job Order Contract Launch Inventory

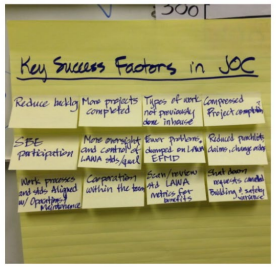
For the following 13 issues, rate each on a scale of 1 to 5; 1 indicating strong disagreement, and 5 indicating strong agreement. Circle only one number for each of the issues.

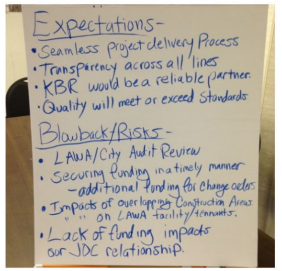
This survey is conducted for the XXXXX project. “Project” refers to everyone involved in the program, not just your sub-group. Please indicate your sub-group.

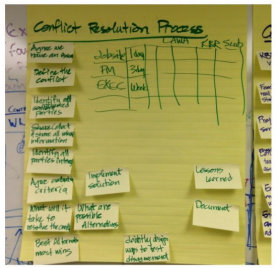
Sub-group: ___ XXXX ___ XXXX ___ XXXX

JOC Assumptions

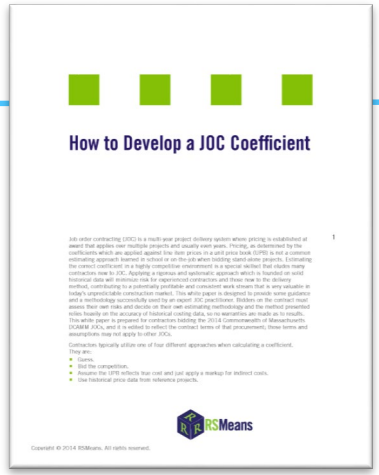
1. JOC will allow us to expedite project delivery. 1 2 3 4 5
2. JOC produces quality construction comparable to other delivery methods. 1 2 3 4 5
3. JOC will allow my organization to be a better construction provider. 1 2 3 4 5
4. JOC will allow for better conflict management and decision making processes. 1 2 3 4 5
5. JOC is a significant improvement over “business as usual.” 1 2 3 4 5
6. JOC will make projects easier 1 2 3 4 5







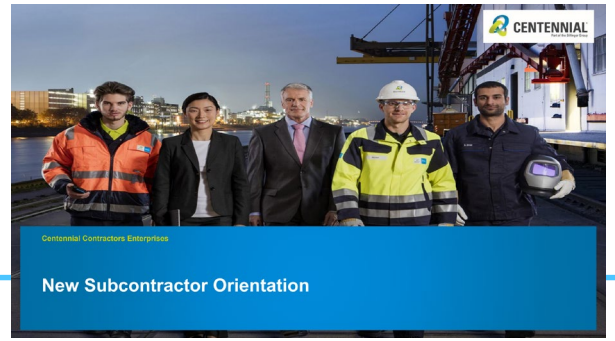
Formal Partnering Support



Coefficient Development Guidance

CHA
CHICAGO HOUSING AUTHORITY

https://www.thecha.org/doing-business/section-3-job-order-contracting-joc-program
https://www.youtube.com/watch?v=pDIaH4g-z2Q



Healthcare Environment Training

GORDIAN®

Comprehensive Business Development Programs

GORDIAN®

Building knowledge

Lisa Cooley

505-239-3446

l.cooley@gordian.com

GORDIAN®

Building knowledge

Backup: The JOC Delivery Order Process

Delivery Order Process Summarized

Reiterative Process. LEAN. Continuous Improvement.

Work Requirement

-Identify and Document
-Initial Scope of Work by Gov't

Joint Scope Meeting

-Site visit/documentation
-Scope validation and revisions

Proposal and IGE Preparation

-Gov't Issues RFP
-Contractor prepares Proposal package including Pricing
-Gov't prepares IGE

Review Proposal

-Compare IGE to proposal pricing
-Prepare documentation for Negotiations

Negotiation and Revisions

-Task Order Issued

Start Construction

-Contractor begins work

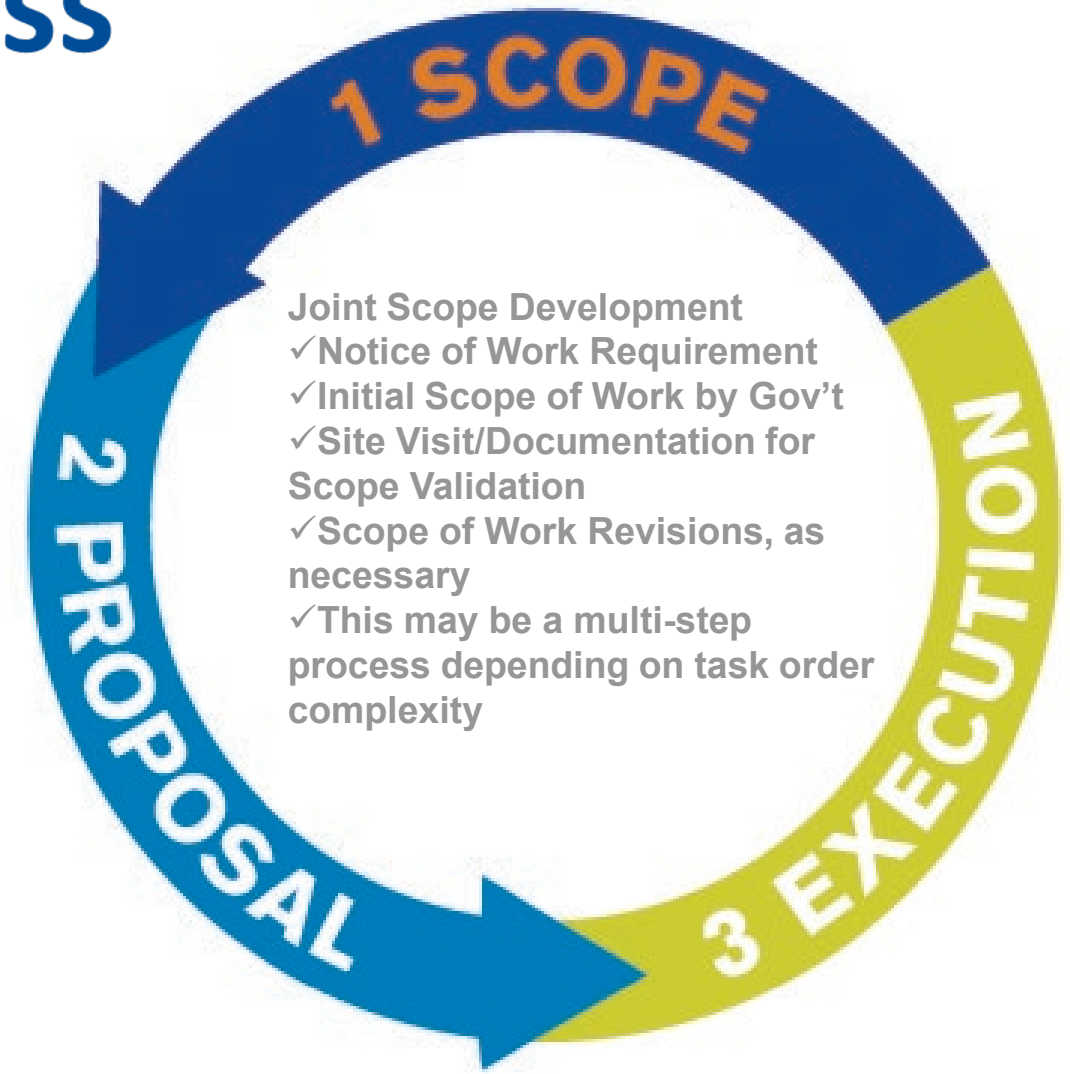
GORDIAN®

Army policy requires specific documents at each stage.

Delivery Order Process

GORDIAN®

Delivery Order Process



Notice of Work Requirement

Level of owner scope preparation varies according to:

- Owner preference and skillset
- Owner people resources available
- When in planning cycle project was identified for JOC

However, DOD JOC Policy establishes formal, written Scope of Work as best practice.

Range of Owner Preparation

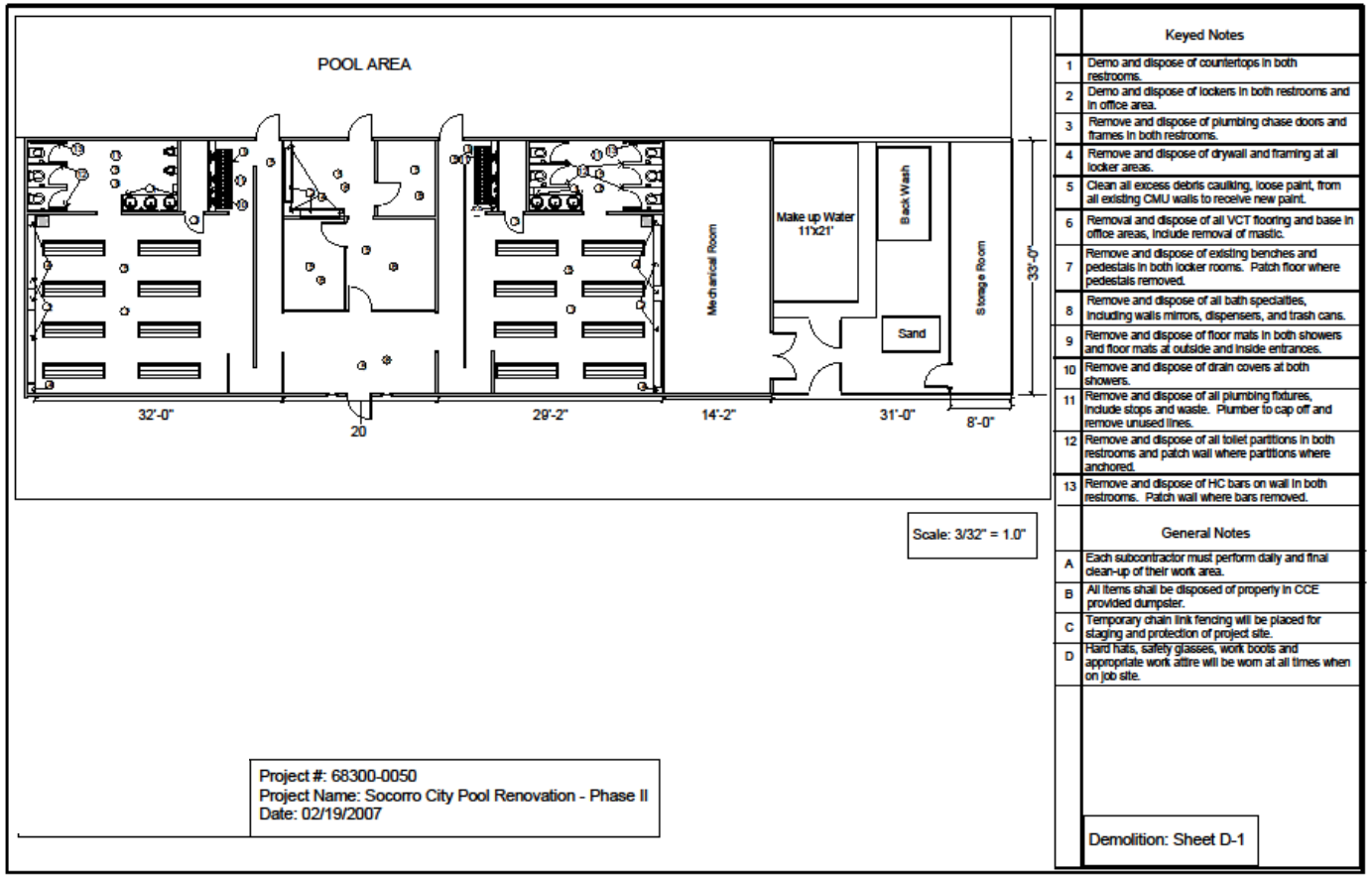
Site Visit for Scope Development and/or Validation

- Collaborative, problem-solving Process
- Documentation will inform Scope Development
- Goal of capturing every necessary component of work to inform the refined SOW in Contractor's Proposal
- Tools: photographs, measuring, as-builts

Joint Scope Development
Site Visit Documentation

- 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
- Demo ceramic tile, floors and walls, (exist ceramic on walls is approx. 8'−0″ high)
- Remove and reinstall existing 3 urinals and 2 commodes

“Incidental” Design

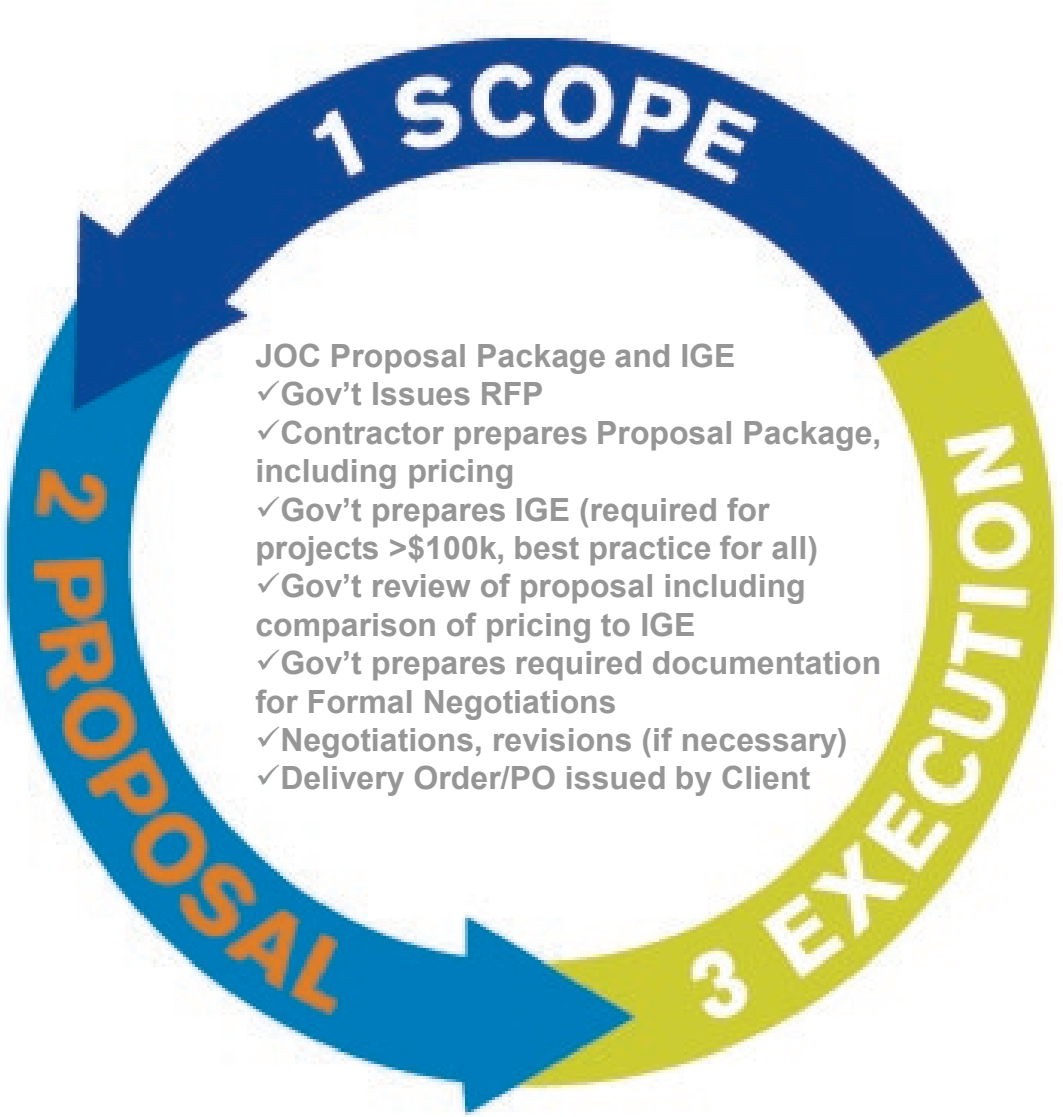


- Performed by contractor and subs
- Service included in coefficient
- Should never circumvent professional design where required or advisable
- Shop drawings, simple line drawings, annotated photos or as-builts, narrative design detail

Scope Revisions to Inform RFP

Validation of Scope is a critical step in aligning expectations and should be completed prior to Gov’t Issuance of formal RFP and pricing exercises

Proposal


1 SCOPE
2 PROPOSAL
3 EXECUTION
JOC Proposal Package and IGE
✓Gov't Issues RFP
✓Contractor prepares Proposal Package, including pricing
✓Gov't prepares IGE (required for projects >$100k, best practice for all)
✓Gov't review of proposal including comparison of pricing to IGE
✓Gov't prepares required documentation for Formal Negotiations
✓Negotiations, revisions (if necessary)
✓Delivery Order/PO issued by Client

Proposal Package

- Generation of the line item price proposal
- Simultaneous preparation of Independent Government Estimate (IGE)
- Assurance of a fair price:
  - Are line items and quantities within identical (or within smal margin of variation) in both contractor proposal and IGE?
- Technology is critical in facilitating this step

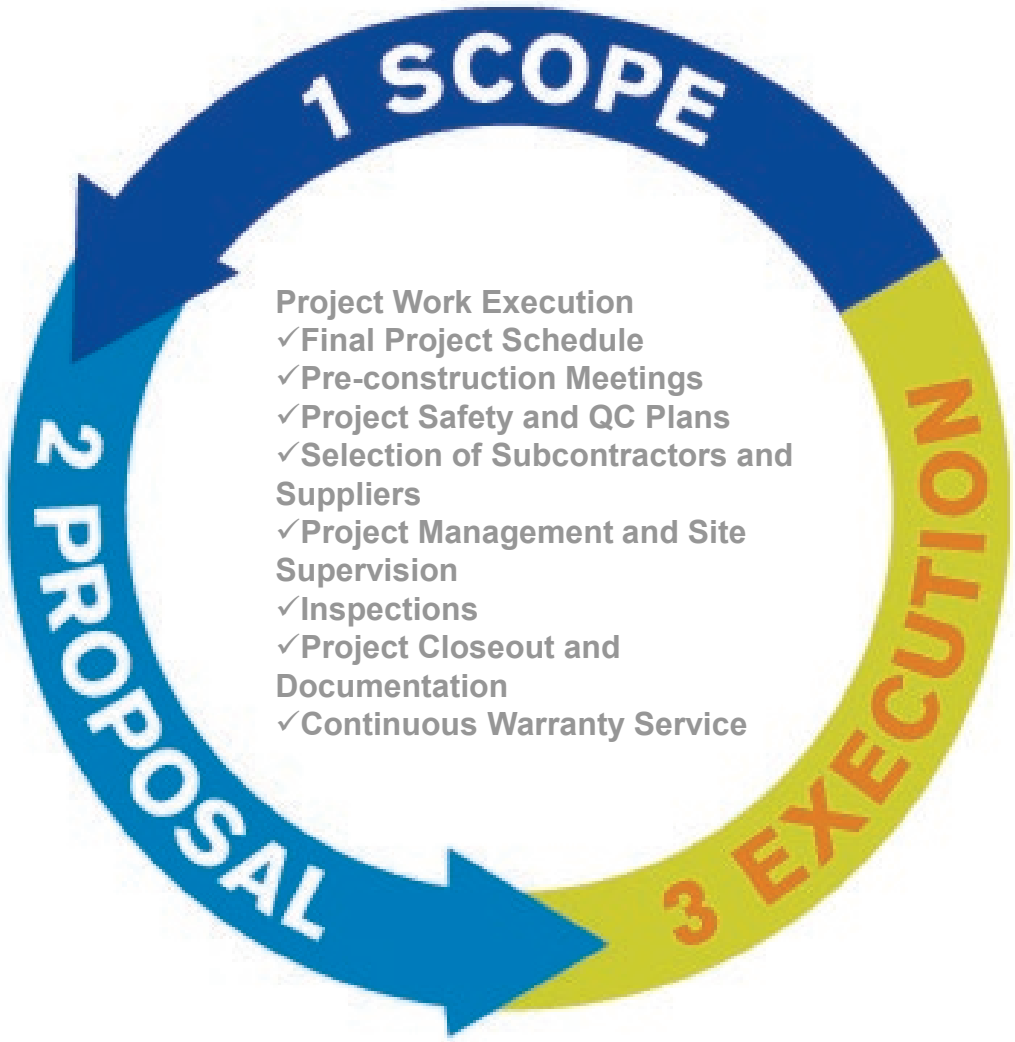
Estimate Details

Estimator: **09 Womens bathroom finishes**

09 - Finishes

	Item	Description	UM	Crew	Quantity	Material	Labor	Equipment	Unit Cost	Total
23	09-53-23-30-1040	Ceiling suspension systems, hanging wire, 12 gauge, 4' long	C.S.F.	1 CARP	3.3800	7.45	5.45	0.00	$12.90	$43.60
24	09-65-13-13-1150	Resilient base, base, cove, rubber or vinyl, standard colors, 0.080" thick, 4" high 17.5+22+12+7+6 = 64.50	L.F.	1 TILF	64.5000	1.01	1.04	0.00	$2.05	$132.23
25	09-91-13-90-0370	Walls, masonry (CMU), exterior, concrete masonry units, smooth surface, brushwork, latex, first coat	S.F.	1 PORD	40.0000	0.06	0.48	0.00	$0.54	$21.60
26	09-91-13-90-0380	Walls, masonry (CMU), exterior, concrete masonry units, smooth surface, brushwork, latex, second coat	S.F.	1 PORD	40.0000	0.05	0.32	0.00	$0.37	$14.80
27	09-91-13-90-0390	Walls, masonry (CMU), exterior, concrete masonry units, smooth surface, brushwork, waterproof sealer, first coat	S.F.	1 PORD	40.0000	0.24	0.42	0.00	$0.66	$26.40
28	09-91-13-90-0400	Walls, masonry (CMU), exterior, concrete masonry units, smooth surface, brushwork, waterproof sealer, second coat	S.F.	1 PORD	40.0000	0.24	0.28	0.00	$0.52	$20.80
29	09-91-23-72-0940	Walls and ceilings, interior, concrete, drywall or plaster, latex, paint two coats, sand finish, roller (338.056)+(17.5+22+12+7+6+10+4.5)*10 = 1,128.06	S.F.	1 PORD	1,128.0560	0.12	0.30	0.00	$0.42	$473.78
30	09-91-23-72-0940-1700	Walls and ceilings, interior, for oil base paint, add (Modified using 09-91-23-72-1700)	S.F.	1 PORD	1,128.0560	0.01	0.00	0.00	$0.01	$11.28
31	09-97-10-10-1200	Coatings and paints, in five gallon lots, paint, interior, alkyd, oil base, enamel undercoat	Gal.		3.0000	32.50	0.00	0.00	$32.50	$97.50
		09 - Finishes Total				$5,301.11	$6,268.66	$0.00		**$11,569.76**
10 - Specialties										
32	10-21-13-13-2500	Metal toilet compartments, cubicles, floor anchored, headrail braced, powder coated steel	Ea.	2 CARP	2.0000	385.00	118.00	0.00	$503.00	$1,006.00
33	10-28-13-13-0510	Commercial toilet accessories, dispenser units, combined soap and towel dispensers, mirror and shelf, flush mounted	Ea.	1 CARP	1.0000	310.00	35.50	0.00	$345.50	$345.50
34	10-28-13-13-0610	Commercial toilet accessories, dispenser units, towel dispenser and waste receptacle, 18 gallon capacity	Ea.	1 CARP	1.0000	325.00	35.50	0.00	$360.50	$360.50
35	10-28-13-13-3800	Commercial toilet accessories, mirror, with stainless steel 3/4" square frame, with 5" stainless steel shelf, 72" x 24"	Ea.	1 CARP	1.0000	291.00	59.00	0.00	$350.00	$350.00

Execution


1 SCOPE
2 PROPOSAL
3 EXECUTION
Project Work Execution
✓Final Project Schedule
✓Pre-construction Meetings
✓Project Safety and QC Plans
✓Selection of Subcontractors and Suppliers
✓Project Management and Site Supervision
✓Inspections
✓Project Closeout and Documentation
✓Continuous Warranty Service

JOC Process Drives Superior Results

Summarizing the Benefits

- Streamlined Acquisition
- Faster and more efficient
- Transforms contractor behavior
- Reduced Change Orders and virtually eliminates defaults, terminations and claims
- Fully transparent and auditable process

GORDIAN®