Job Order Contracting for VA NRM and Minor Construction Execution

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VA NRM and Minor Construction Execution Options

- In-house Staff
- Sole Source to 8(a)/SDVOSB
- BOSS/BMC
- Job Order Contract (SABER, Construction IDIQ)
- SATOC
- Design-Bid-Build
- MATOC/MACC
- Design-Build

Unit Price Basis
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.
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 larger projects (SATOC).
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

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

JOC Benefits: What the Research Says

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

- Overall Satisfaction:

![Bar chart showing overall satisfaction](chart)

![Factors Studied](list)

Arizona State University Study, 2016

Proven Benefits of Job Order Contracting

- 99% of owner respondents recommended Job Order Contracting
- 96% of Job Order Contracting projects completed with satisfactory results
- 91% of Job Order Contracting projects delivered on budget
- 87% of Job Order Contracting projects delivered on time

# Owner Satisfaction

<table>
<thead>
<tr>
<th>Number of Responses</th>
<th>JOC</th>
<th>DBB</th>
<th>DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction rating (1-5)</td>
<td>4.1</td>
<td>2.3</td>
<td>2.0</td>
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<tr>
<td>Quality of Construction (1-5)</td>
<td>4.1</td>
<td>2.5</td>
<td>2.3</td>
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<tr>
<td>Quality of Design Services (1-5)</td>
<td>3.6</td>
<td>3.8</td>
<td>2.3</td>
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<tr>
<td>Quality of Design Drawings (1-5)</td>
<td>3.6</td>
<td>4.1</td>
<td>2.3</td>
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<tr>
<td>Level of Transparency (1-5)</td>
<td>4.2</td>
<td>2.3</td>
<td>2.2</td>
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<tr>
<td>Level of Flexibility (1-5)</td>
<td>4.3</td>
<td>2.0</td>
<td>2.0</td>
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<tr>
<td>Allows the achievement of organizational goals (1-5)</td>
<td>4.3</td>
<td>2.5</td>
<td>2.4</td>
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<tr>
<td><strong>Average Rating (1-5)</strong></td>
<td>4.0</td>
<td>2.8</td>
<td>2.2</td>
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</table>

## Contractor Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>JOC</th>
<th>DBB</th>
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<tbody>
<tr>
<td><strong>Number of responses</strong></td>
<td>11</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Contractor’s Satisfaction Rating</td>
<td>4.3</td>
<td>2.8</td>
<td>3.7</td>
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<tr>
<td>Average Customer Satisfaction Rating of the Contractor</td>
<td>4.4</td>
<td>3.3</td>
<td>4.1</td>
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<tr>
<td>% Projects on budget</td>
<td>89%</td>
<td>60%</td>
<td>69%</td>
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<tr>
<td>% Projects on time</td>
<td>94%</td>
<td>63%</td>
<td>73%</td>
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</table>
Major Findings: Cost Savings

Owners estimate a **24%** administrative cost savings

Contractors estimate a **21%** overall cost savings
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
## Proven Cost Savings

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

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

“What the Authorities Say”
Our contractors don’t understand JOC

We need functionality in the software for JOC and change order management

I haven’t had any training on unit price estimating

Our facility has 30 unfilled jobs and can’t keep up

Research studies show JOC is effective, but it hasn’t worked for us

Our estimates don’t reflect our market costs

RSMeans data doesn’t cover all of the work in a healthcare environment

Our contractors don’t understand JOC

We need a JOC but nobody has experience with this delivery method

“What VA Practitioners Say”

Sources: Survey of RSMeans users, interactions with stations and VISNs
Optimizing Unit Price Contracts within VA

- **Programmatic Approach**: Adopt a More **Programmatic Approach**

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

- **Technology Enablement**: **Technology Enablement**

- **SDVOSB Support Role**: Embrace and Improve **SDVOSB Support Role**
A Programmatic Approach

Policy and Procedures

Selection Criteria

Monitoring and KPIs

Training

VA

Contractor

Source Selection

Contracting

Formal Partnering

Resourcing

A Comprehensive Training Program

Business Process Mapping

JOC Standards and Procedures
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
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
## Customer-specific Data Enhancements

### 10 Specialties

#### 10 50 Storage Specialties

#### 10 51 Lockers

<table>
<thead>
<tr>
<th>MINOE</th>
<th>CSI</th>
<th>UOM</th>
<th>DESCRIPTION</th>
<th>LABOR</th>
<th>EQUIP</th>
<th>MATERIAL</th>
<th>TOTAL DIRECT</th>
<th>UNIT COST</th>
<th>DEMOLITION</th>
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<td>10 51 13 00-0202</td>
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<td>Locker Locks</td>
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<td>Locker Repair And Refinishing</td>
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<td>262.12</td>
<td>264.32</td>
<td>0.60</td>
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</table>
Data Governance

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 by 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 perform the task at the site. This includes cranes, forklifts, piling 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 O19660).
- 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, adhesives, washers, etc.
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

<table>
<thead>
<tr>
<th></th>
<th>$500,000 Task Order 200 line items</th>
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<tbody>
<tr>
<td></td>
<td>Standard Estimating Technology Enablement</td>
</tr>
<tr>
<td>Joint Scope Development</td>
<td>Paper process, 16 hours</td>
</tr>
<tr>
<td>Contractor Proposal</td>
<td>32 hours</td>
</tr>
<tr>
<td>IGE</td>
<td>32 hours</td>
</tr>
<tr>
<td>Negotiations</td>
<td>Manual price validation and comparison, 32 hours</td>
</tr>
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</table>
Collaborative Technology Enablement
Technology Enablement + Programmatic Approach
Allows for Analytics, Benchmarking, and Integration

KPIs - Database Averages

Procurement and Construction Timeline Stages:
- Stage 1: Job Created to IS
- Stage 2: IS to RFP
- Stage 3: RFP to First Proposal
- Stage 4: First Proposal to Approved
- Stage 5: Approved to PO/NTP
- Stage 6: PO/NTP to CS
- Stage 7: CS to CE

KPI #1: Job Created to PO/NTP
KPI #2: PO/NTP to CE

KPIs - Database Averages

2017 Database Averages
- OwnerAvg_KPI#1: 15.62
- OwnerAvg_KPI#2: 8.84
- OwnerAvg_KPI#3: 22.87
- OwnerAvg_KPI#4: 32.05
- OwnerAvg_KPI#5: 39.40
- OwnerAvg_KPI#6: 64.55
- OwnerAvg_KPI#7: 83.70

2017 Database Averages
- OwnerAvg_KPI#1: 85.56
- OwnerAvg_KPI#2: 77.12
- OwnerAvg_KPI#3: 61.70

Proposal Reviews - Database Averages

2017 Average Number of Approved Proposals
- 29

2017 Average Number of Proposal Reviews
- 61

Average Number of Proposal Reviews Over Time, Database

Dollar Volume - Database Averages

2017 Average Total Proposal Amount
- $2M

Average Total Proposal Amount Over Time, Database

JOC-specific Support Technology

Delta - Database Averages

2017 Average Delta per Proposal
- $8.143

2017 Average % Delta
- 4%
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

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

Comprehensive Business Development Programs
Lisa Cooley
505-239-3446
l.cooley@gordian.com
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

Army policy requires specific documents at each stage.
Delivery Order Process

Reiterative process providing for continuous improvement of results over time.
Delivery Order Process

Joint Scope Development
✓ Notice of Work Requirement
✓ Initial Scope of Work by Gov’t
✓ Site Visit/Documentation for Scope Validation
✓ Scope of Work Revisions, as necessary
✓ This may be a multi-step process depending on task order complexity
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.

Owner Provides:
- Project Need, Target Budget
- Defined Scope Document
- Complete Bid Documents

Range of Owner Preparation

More turnkey, contractor led involvement

More proactive owner
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
- Remove and reinstall existing 3 urinals and 2 commodes
- Demo ceramic tile, floors and walls, (exist ceramic on walls is approx. 8’-0” high)
“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

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
• 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 small margin of variation) in both contractor proposal and IGE?
• Technology is critical in facilitating this step
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