



# JOC 101

## *Questions and Answers*

*Prepared by the Center for Job Order Contracting Excellence for  
The National Association of State Facilities Administrators*

10-2009

## Background

JOC Questions and Answers is produced by a liaison between the Center for Job Order Contracting Excellence (CJE) and the National Association of State Facilities Administrators (NASFA). This document emerged from a JOC 101 Webinar developed for NASFA which took place on March 4th, 2009. The interactive webinar format produced a large number of questions that could not be fully answered during the training, so the CJE-NASFA liaison worked together to produce this document to serve as a resource to owners considering Job Order Contracting. To review the slides from the webinar go to:

[http://www.jocexcellence.org/presentations/JOC\\_101\\_Presentation.pdf](http://www.jocexcellence.org/presentations/JOC_101_Presentation.pdf)

## Introduction

### *What is Job Order Contracting?*

Job Order Contracting (JOC) is an alternative delivery method used primarily for renovation, remodel and repair projects. It is a long-term contract based on unit prices, typically from a unit price book. A Job Order Contract provides owners with an “on-call” contractor for their ongoing construction needs. Projects completed under a Job Order Contract are typically small- to medium-sized, ranging from the tens of thousands to the low millions (though owners can place their own restrictions on project size).

### *What is a coefficient? A multiplier? A factor?*

These are all names for the number which is applied to the unit price book to arrive at the contractual cost of the work. It is the key to the competitive and standardized pricing component of JOC. For instance, a coefficient of 1.08 means that the contractor will perform each and every line item in the unit price book for an 8% markup. A coefficient of .97 would mean that the contractor would perform line items for a 3% discount. This number is carefully determined by the contractor at contract procurement to cover all costs including general conditions, overhead, and profit.

## Setting up a Contract

### *What are the different ways to access Job Order Contracting? Do I have to set up my own contract?*

While issuing a solicitation is the best way to ensure that you have a JOC with specific provisions to meet your needs, there are ways to access pre-established contracts. This is usually done by “riding” or “piggybacking” on another entity’s contract, or by tapping the contract of a purchasing cooperative, if allowed by applicable state laws. Setting up independent JOC contract or “riding” an existing one depends on an agency’s preference and volume of work.

To ride or piggyback, an owner finds another agency that has an existing JOC contract that allows for multi-agency usage that best fits their general and specific conditions for completing construction projects. You will typically be limited to the terms as set forth in the original solicitation as well as when the contract expires. If you decide to utilize an existing contract, be cognizant of the remaining term. Many owners find it convenient to test the JOC waters via a coop or piggybacking before making the commitment to solicit their own contract.



***“The NASFA/CJE JOC webinar was a very informative introduction to some of the key components of how JOC works. In Massachusetts we are working to establish JOC as an alternative approach to procuring and implementing smaller-scale repair and renovation projects. The information provided through the webinar will help us make a stronger case for initiating this delivery method.”***

***Hope Davis,  
Director of Facilities  
Management,  
Commonwealth of  
Massachusetts***

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There are also regional and national cooperative purchasing mechanisms available to public agencies, and a number of these offer Job Order Contracts. Many states have laws that allow them to cooperatively purchase from properly procured contracts within and outside of the state. You will need to check with your purchasing office or agent to determine what is allowed under your own procurement code.

***What are the advantages of working with a consultant to set up a Job Order Contract? Can an owner develop and implement a JOC program without a consultant? What is the in-house expertise that is required to do so successfully?***

If you decide to solicit your own JOC contract, you have two options:

1. Prepare a solicitation on your own, or
2. Engage the services of a consultant to assist you in preparing a solicitation.

Both approaches can be successful and much depends upon your preference and internal resources.

The requirements of a JOC solicitation are a little different than a stand-alone contract. The components include:

1. The contract General Conditions, with some language specific to Job Order Contracting,
2. The unit price book, and
3. Specification of any software which will be used to develop the line item proposals.

Some owners also like to tie the unit price book line items to standard technical specifications, which will govern all work performed under the contract. Other owners do not include specific technical specifications, instead relying on industry standards, the performance-based nature of JOC and carefully scoped projects to ensure the appropriate materials and workmanship are used.

Some owners have the internal skills and resources needed to implement JOC and prefer to manage their own program without a third party involved. Others feel that they need a little help. JOC consultants can guide an owner through the process of soliciting a JOC contract, including the development of contract language and the preparation of bid documents. A consultant may just provide additional expertise to support your own staff, they may spearhead the solicitation process for you, or they may continue to help manage the contract once it is up and running. Other JOC consultants offer more “turnkey” programs that may include the unit price book, software, training and ongoing management throughout the life of the contract.

To understand the advantages and disadvantages of different ways of implementing JOC, it is wise to contact a diversity of sources. The Center for Job Order Contracting and its members are a good resource, as are other owners who have successful JOC programs.

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### ***What are some of the things that must be considered in structuring a JOC program?***

Before setting up your JOC program you need to decide what you are trying to accomplish. Are you trying to save time, lower costs, increase minority or disadvantaged business participation, have more transparency in your contracting process, or perhaps achieve other goals?

What kind of volume do you anticipate, and where? An owner is advised to review “JOCable” projects over the previous 2-3 years, in order to develop a clear understanding of the need and provide useful information to contractors who will be proposing on the contract. Defining “JOCable” projects—how the JOC will be used—is also an important part of the planning process. Will there be a per project value cap? A total contract cap? Will it be used exclusively for renovation projects? Will it be used exclusively for multi-trade projects, or also for single-trade contracts? What are the other contract vehicles available to the owner and how will JOC fit into the facilities program?

Just like any other program, you will need a program manager. It is highly recommended that a JOC program manager be appointed to manage the JOC contract. This may or may not be a full time position depending on the size of the JOC program and expected number of projects.

An important consideration is the number and types of coefficients you will ask contractors to provide. It is very common to request different coefficients for regular work hours and off-hours work, or for projects that do and do not require professional design services provided by the contractor. If the area served by the contract extends beyond one campus, the multiple coefficients may be needed to reflect the differing cost of construction. An owner can carve an area into regions, each with a separate coefficient, or can base the contract in a metropolitan area and allow different coefficients based on bracketed distances from the base (i.e.-one coefficient for within 60 miles of the campus, another one for 60-200 miles of the campus, etc)

Of course, too many coefficients will make the contract harder for contractors to propose on and harder to administer, so owners are wise to really think through which variations are important!

### ***What specific skills should my staff have to set up and/or run a Job Order Contract? How do I go about training my staff?***

By far the most important skill is the ability to build line item estimates and review contractor proposals. Staff must develop familiarity with the unit price book. There are training programs and courses for the development of these skills.

### ***How many FTEs are needed to manage the Job Order Contract?***

Probably no more staff than you currently have managing your current contracts. You may need to take a pause to provide some JOC training in line-item estimating to that staff, but a well-run JOC contract should not require any more project management staff than running the same number of projects through a more traditional procurement method



### **States Facilities Agencies Utilizing Job Order Contracting**

*Georgia  
New York  
Missouri  
Pennsylvania  
Tennessee  
Washington*

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### **Contract Administration and Responsibilities**

#### ***Does the contractor prepare the work plan? What information must the owner bring to the table?***

When a facility owner has a project, they must know what they are trying to accomplish. The owner can bring a complete set of drawings to the table, or it can just be an idea, but the owner should have consulted with the end user and have clear goals for the project, in the form of a preliminary scope of work. The JOC process typically starts when the owner and contractor meet to discuss the owner's preliminary scope of work and then jointly develop the final scope of work. This process is collaborative and involves on-site meetings which may include subcontractors and design professionals. Many owners also share target budgets, so that the contractor can design to the budget within the parameters of the unit-price line items. Regardless of whether the owner or the contractor prepares the final scope of work, it is important that the final scope is carefully reviewed by both parties, to ensure that the contractor fully understands the owner's intent. This is usually done before proceeding with the line item proposal.

#### ***Who does the code review, ADA review, etc. when A/E is not utilized? Is permitting an issue?***

Job Order Contracting won't vary tremendously from your existing processes in this regard, though it may give you some additional flexibility. The contractor will be responsible for adhering to codes, meeting ADA requirements, and obtaining permits. If your projects are still going through a professional design process, the code and ADA review should happen there. Some owners with in-house design professionals provide code and ADA review of contractor-generated incidental design. Some require that the contractor provide that service through their own in-house staff or by subcontracting with a design professional. JOC provides the best value when there is some streamlining of these processes but you don't want to circumvent them!

### **Unit Price Books**

#### ***What are the different types of Unit Price Books? Are there electronic versions?***

There are a number of unit price books available, and most of them come in electronic versions. Unit price books can be categorized as standardized books, customized books, or owner-produced books. The main difference between these two types of books is that standard books use national average costs with a local cost index to adjust for regional pricing, whereas a customized book is based on local pricing;

#### ***How often is a typical UPB updated to reflect market conditions? How does the frequency and type of updates impact the coefficient?***

Pricing is a key element of risk for the contractor. The more pricing fluctuates the greater the risk and the higher the cost to the owner. Over the course of a four- or five-year JOC contract, the pricing structure is almost always modified to reflect changes in construction costs. If a contract is not structured that way, the owner is asking a JOC contractor to take on undue and unforeseeable risk and the owner will pay for this transferred risk in the form of a higher coefficient.

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Some price books are reissued annually, and can even be updated quarterly, so the contractual coefficient can stay the same but is applied to regularly updated cost information, which tracks price fluctuations. Or the UPB can be produced only at the outset of the contract, and construction inflation is addressed with the application of an annual price adjustment based on the Construction Cost Index, applied across the board to all line items.

### *Any statistics on what would constitute a fair coefficient?*

Coefficients vary greatly, based on many factors. You can find Job Order Contracts around the country with coefficients anywhere from .50 to 1.50. Some of the factors a JOC contractor will consider in putting together a coefficient include:

- **Overall contract volume.** Higher volume drives a lower coefficient through economies of scale.
  - **Geographic location.** Contracting situation in different parts of the country will have significant impact on the coefficient. Actually, coefficients within the same state may vary depending on the economic situation and resources availability.
  - **Contract terms and conditions.** Items such as bonding, insurance, labor rates will cause coefficients to vary by contract even within the same geographic area.
  - **Type of work anticipated.** The difference between the unit-price line items and the actual cost of the work may vary across divisions, so knowing the makeup of the work (lots of electrical, lots of concrete) may impact the overall coefficient.
  - **Any special security measures or processes.** Knowing that it will take staff an hour to enter a secure facility every morning, or knowing that 30% of subcontractor personnel will be denied badges, is a cost factor.
  - **The accuracy of the unit price book and local adjustment factor,** if any.
- It is also important to understand the different methodologies behind different price books. Some books endeavor to include overhead and profit in the final line item, and some aim to represent the raw cost of the work. Obviously, these factors have a big impact on the contractor's evaluation of the line items and the ultimate coefficient that is therefore derived.



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An owner can perform some internal evaluation to get a feel for how the unit price book compares to their current market costs, simply by taking a project they have procured in another way and generating an accurate line-item estimate on it, then applying the following simple equation:

$$\frac{\text{Actual Project Cost}}{\text{Unit Price Book Cost} \times \text{Local Adjustment Factor}} = \text{Theoretical Coefficient}$$

Of course, you need to have someone trained in line-item estimating to do this accurately. In performing this evaluation the owner should keep in mind that if they are comparing low bid contracts, they may not be comparing apples to apples, because a JOC contractor typically endeavors to plan well and include all costs up front rather than low-balling the initial bid and then trying to make it up in change orders. It might be more accurate to do the evaluation on total project costs, including any change orders and design services that JOC might incorporate, plus individual project procurement costs. The resulting coefficient will likely be different for different projects, but the average will give you an idea of what to expect in your local market.

#### *How do you ensure price reasonableness on individual job orders?*

Since the unit prices and coefficient are already established in the contract, the assurance of price reasonableness lies in appropriately-selected line items and accurate quantity takeoffs. This can be a major paradigm shift for owners who are accustomed to reviewing multiple quotes to provide a comfort level with the price. An owner should review the line item proposal with two questions in mind:

- 1. Are the line items appropriate?** They should be the best fit for the work items detailed in the scope of work.
- 2. Are the quantities correct?** Some spot checks of line item takeoff quantities should easily verify whether the quantities are in line with reality.

The owner should discuss any questionable line items with the contractor. Some owners prepare their own estimate independent of the contractor, and then compare the two.

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The long-term nature of a JOC program serves as additional insurance against price-gouging. Central to the JOC program is a relationship of partnering and trust between owner and contractor. The JOC contractor is invested in the profitability of a long-term relationship rather than the quick monetary gains on a single project, and is thus motivated to provide reasonable and accurate line item proposals.

### ***What prevents contractors from low-bidding with an unrealistic coefficient and how is the multiplier enforced?***

A realistic coefficient is one of the hallmarks of a successful JOC program. Enforcing the coefficient or multiplier isn't difficult—that is a contractual requirement—but ensuring that line items and quantities are appropriate can be a challenge when a contractor is trying to make their margins with an unrealistically-low coefficient.

One good way to ensure a fair and accurate coefficient is to implement a Best Value or Qualifications-Based Selection process, if allowed under relevant procurement codes. By focusing on contractor experience with JOC and qualifications rather than price alone, an owner can drive more realistic coefficients by rewarding cost-reasonableness and performance focus. An owner must carefully prepare the selection criteria in alignment with the type of contractor they hope to enlist, considering past performance and management ability in addition to other factors that may be important such as local presence, use of local subcontractors, and contractor size and capacity.

Inflating proposals by using inappropriate tasks and inaccurate quantities will undermine the trust that is so fundamental to a good Job Order Contracting program. The owner should not extend the contract options of a contractor who uses these business practices.

## **Subcontracting Issues**

### ***Are subcontractors approved by the Owner?***

The contract can require submittal of a subcontracting plan with each delivery order. Such a submittal would allow the owner to review proposed subcontractors. Most performance-based contractors will be looking to please an owner in this regard, and will avoid subcontractors that have a record of underperformance. But the price-effectiveness of JOC is based on having competitive subcontractor pricing, so the owner cannot “handpick” the subcontractors.

### ***How do you deal with DVBE requirements in JOC?***

DVBE or M/WBE goals, if any, can be established in the JOC solicitation. Contractor reporting requirements can also be established, and the contractor is measured against the goals on a cumulative basis. Job Order Contracting typically exceeds DVBE and M/WBE goals because the type of work performed is so well-suited to small startup companies. Many Job Order Contractors have strong outreach to small, local, and disadvantaged businesses.



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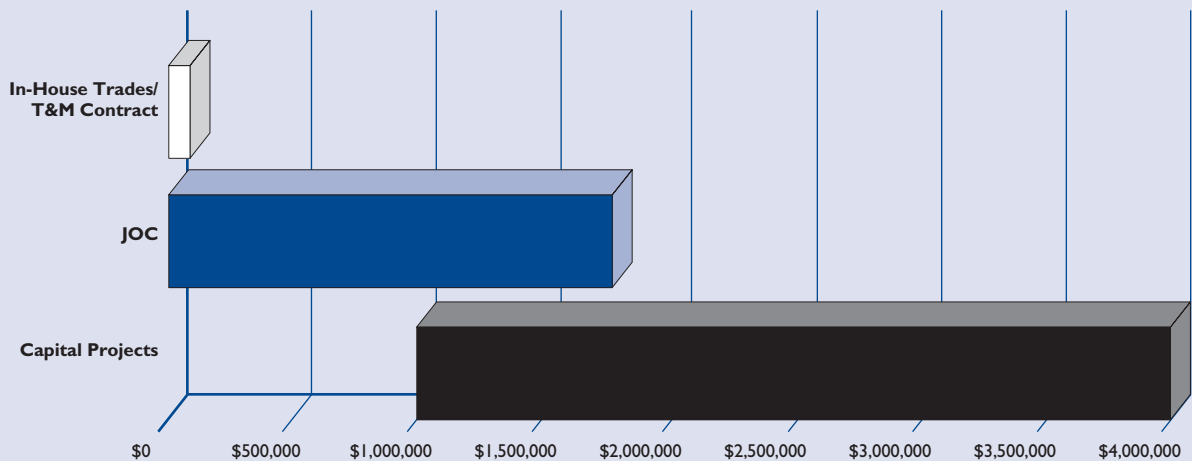
## Questions and Answers

### *Is it possible to mandate a minimum or maximum subcontract/self-perform percentage? What are the advantages and disadvantages of doing so?*

There are examples of JOC contracts with minimum self-perform percentages, and with minimum subcontract percentages, depending upon the goals of the owner. Some owners prefer a self-performing contractor because they feel this increases responsiveness, especially in emergency situations. Other owners prefer a JOC contractor that subcontracts a majority of the work, because that increases operational capacity and funnels work to a greater number of local businesses rather than concentrating it in the hands of one company.

Many owners choose not to include these mandates in the contract, but allow the contractor to determine how to most effectively and efficiently service the contract. If these mandates are desired, the percentage of self-performance should be carefully considered to meet the owner's goals.

### Where JOC Fits



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## Multiple JOCs and Contract Structure

### *What are the advantages/disadvantages of an Owner establishing multiple JOC's by trade?*

It all depends on the overall contract volume. A collection of trade contracts will not provide the same flexibility as an overall Job Order Contract. If an owner has enough volume in some trades, in addition to enough multi-trade JOC work, it might make sense to issue some trade-specific contracts. An owner can realize lower cost on the trade-specific work, benefit from a direct relationship with the specialty contractor, and see faster response times. The disadvantages are more contracts and contractors for the owner to manage, fewer subcontracting possibilities to meet DVBE and M/WBE goals, and a higher coefficient on the multiple JOCs driven by lower volume.

### *What the best way to handle multiple JOC contractors? Can the Owner compete delivery orders among JOC contractors?*

The contractors should not be competed against each other on Job Orders because the contractors already have been selected by a competitive process. To compete JOC contractors removes the fundamental motivation of a Job Order Contract. JOC works because the contractor knows that if it is responsive and performs high quality work it will be given additional work. If an owner competes each Job Order, the contractor no longer has the motivation for performing well.

Competing each Job Order may not be legal depending on your procurement code. JOC is awarded based on a competitive process that is based on a unit price book. When you compete JOC contractors against one another after the competitive process you invalidate the JOC procurement process and pricing structure, and the unit price book becomes meaningless. Bidding JOC contractors against each other can actually increase costs. Each contractor must increase staff to handle scope and proposal development for job orders that they will not receive. This causes an increase in overhead that must be passed on to the facility owner in the form of a higher coefficient

When there is enough volume to support multiple JOC contractors, the best way to award is based on distinct regions or trades. Some owners like to do multiple awards so that if there is a problem with one contractor they will have other options. However, an owner must carefully consider how the multiple contractors will be handled. Will the highest-scoring or low-bid contractor be offered all of the work, with the "runner-ups" only engaged if the first contractor fails to perform? Or will the work be divided among the contractors? If one contractor is "waiting in the wings," what level of staffing or preparedness are they being asked to provide, with no guarantee of work? Will a JOC with multiple contractors, and thus lower volume per contractor, attract qualified and experienced JOC contractors to participate?



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#### Standards

*What do you do regarding quality of materials? The UPB may not provide pricing for the level of quality the owner desires on a particular project.*

There are a couple of ways to ensure the desired level of quality on a project. A Best Value or Qualifications-Based Selection will help eliminate generally poor workmanship. Where specific materials are desired, the owner can provide technical specifications that tie to the unit price book, clarifying the requirements during the solicitation phase so that the contractor can incorporate this into developing the coefficient. If the owner desires specific items or types of items that cannot be found in a standard price book, it will be advantageous to have a customized unit price book developed to incorporate these line items and the appropriate pricing.

*Do you have records of bad experiences with JOC, and what the root causes were?*

One of the key causes of poor performing contracts goes back to the “low bid” award, lack of JOC experience, and subsequent low coefficients. In such cases the contractor might try to make up profit through other means because they had to provide a bare bones coefficient (similar to design-bid-build awards where the owner is deluged with change orders to make up for lost profit when a contractor provides an unrealistic low bid).

Another hallmark of a struggling JOC program is lack of total buy-in from owner’s staff. You’ve got to get everyone—facilities staff, accounting, procurement, executive leadership and in-house crews—on board with the concept. An up-front investment in education and relationship building with the selected JOC contractor will help accomplish this. The right consultant or contractor can also help you market the JOC concept internally, ensuring buy-in from all.

It’s also important that the JOC contractor really understand the performance-based methodology. An experienced JOC contractor obviously fits that bill, and many value-focused contractors will be able to run a successful JOC program with appropriate training. But contractors who thrive in the adversarial world of low-bid contracting and change orders do not always succeed at JOC. Skill in project planning and design, a willingness to advise the owner in programming and budgeting, a collaborative spirit, and a focus on “the big picture.”—these are the characteristics of a successful JOC contractor.



## Resource Directory

### Cooperative Purchasing JOC Contracts

The following purchasing cooperatives hold JOC contracts that may be utilized by public purchasing entities. Cooperative purchasing is subject to applicable procurement code and your organization's interpretation of that code.

Choice Facilities Partners [www.choicefacilitypartners.org](http://www.choicefacilitypartners.org)

Educational and Institutional Cooperative Purchasing [www.eandi.org](http://www.eandi.org)

Mohave Educational Services Cooperative [www.mesc.org](http://www.mesc.org)

National Joint Powers Alliance [www.njpacoop.org](http://www.njpacoop.org)

The Cooperative Purchasing Network [www.tcpn.org](http://www.tcpn.org)

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