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# Forest Service Use of Best Value Contracting

## A Sample from the Southwest Region

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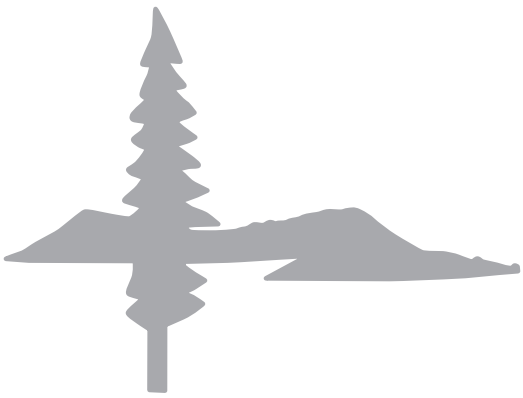

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## Introduction

About a decade ago, the USDA Forest Service began to replace sealed bidding processes that required awards to go to the lowest qualified bidder with negotiated contracts that permit the agency to consider best value to the government when awarding contracts. Best value contracting allows the government to take into account factors such as past performance, technical capability, and experience in addition to price. Under some circumstances, the Forest Service may also consider local community benefit when evaluating offers from contractors.

However, in policy debates, some contractors, workers, and community groups have asserted that the Forest Service weighs price most heavily and, consequently, essentially continues to do "low bid" contracting. They feel that low-priced contractors are sometimes given contracts with little concern for the quality of the work or treatment of workers. Others argue that the Forest Service considers best value when awarding contracts. Recently, newspaper articles have focused on the working conditions of immigrant, seasonal, guest, and undocumented workers performing labor-intensive activities such as tree thinning, tree planting, and other reforestation activities (Knudson 2005). There has also been concern that the Forest Service may not be considering local benefit when evaluating contract offers. Finally, some of these same constituents have expressed concern that the Forest Service awards contracts well below the government estimate of the cost to complete the work. Although the federal government cannot reject an offer simply because of its relationship to the government estimate, some are concerned that, when bid prices are well below the government estimate, these contracts may be awarded at prices below the cost necessary to treat workers according to the law (Dietz 2006; U.S. Senate 2001, 2006).

Despite this political debate, there is relatively little documentation about how the Forest Service evaluates its contracts and how that affects contract awards. In addition, the relationship of government estimates and award prices has not been systematically evaluated. These gaps in information exist, in part, because the federal government is limited in the kind of information it can release about individual bidders and their offers when using best value contracting mechanisms. However, by reporting aggregate information about a sample of contracts, we can begin to understand contracting patterns without revealing information about specific contractors and their offers.

## Purpose

The purpose of this project is to gain a better understanding about how the Forest Service uses best value and government estimates in contract awards. Specifically, this paper analyzes evaluation criteria and proposal-rating documentation, calculates the frequency of awards to the lowest price offer and the highest ranked non-price offer, and compares the government estimate and award prices. It does this using a random sample of forest management contracts.

## Methods

We selected a random sample of 60 contracts from fiscal years 2004 through 2006 from five national forests in New Mexico in Forest Service Region 3 using contract data from the Federal Procurement Data System. Of the 51 contracts for which we received information, 33% were from 2004, 28% from 2005, and 39% from 2006.

All the contracts were for forest and land management services, including, but not limited to: thinning, tree planting, roadwork, recreation, surveys, studies, and environmental analysis. The data exclude all supplies contracts, any activities not associated with land management, and fire suppression. Because this is an evaluation of procurement contracting, it does not include timber sales.

Our initial sample included 12 disadvantaged business set-aside [so-called 8(a) set-aside] contracts or other sole-source contracts, which were not awarded on a best value basis. In addition, it included five contracts awarded to the lowest cost technically acceptable bidder. The sample included three contracts whose files could not be found, likely because they had been placed in storage and six contracts that were delivery orders against other contracts already in our sample. All of these contracts were excluded from further analysis. This reduced our sample to 34.

We asked five national forests to provide the following information for each contract:

- Evaluation criteria and weighting as described in the solicitation
- Price offers of all bidders
- Documentation of contract evaluations and rankings of offers
- Government estimate
- Documentation of how the government estimate was calculated

The types and amounts of information provided varied from case to case.

Because this is a relatively small sample compared to the overall all procurement of the Forest Service and the contracts are from a single state in a single Forest Service region, it is important to interpret the findings conservatively and avoid broad generalizations. This is particularly true because of the diversity of arrangements we found.

## Findings

Based on the contract information we received, we estimate that the Forest Service awarded between 61% and 67% of sample contracts on a best value basis.

Our sample of 34 contracts included 18 tree thinning contracts (53%), eight road construction contracts, four survey contracts, one recreation maintenance contract, one fire rehabilitation contract, and two other natural resource conservation services contracts. The 17 contracts excluded from the study because they were not awarded on a best value basis included seven tree thinning services contracts, five construction and maintenance contracts, four survey/studies, and one other natural resource service contract.

Of the 34 contracts in the sample, the Forest Service solicited 56% using a request for quote (RFQ) and 32% using a request for proposal (RFP). For 12%, we could not determine whether they were solicited using an RFQ or RFP with the information provided; these were typically commercial items contracts.

Requests for proposal and requests for quote are two forms of contract solicitations that allow for consideration of best value to the government. RFPs are typically used for large contracts where formal solicitation procedures are appropriate. RFQs are more typically used for smaller contracts, typically less than $100,000, when more informal solicitation processes are appropriate. RFQs are part of the simplified acquisition procedures. Commercial items contracts can be used when the goods or services being purchased are available commercially or when they are being purchased using a performance-based contract. Commercial items contracts can use simplified acquisition procedures up to $5 million.

The Forest Service received between one and 10 offers per solicitation in our sample, with the average number of offers being 4.6. The median number of offers was 3.5. That is, half of the contracts had four or more offers and half had three or fewer bidders.

Although tree thinning contracts comprised 53% of the sample, they made up 69% of the contracts with five or more bids. This suggests that the contract thinning market may be slightly more competitive than other parts of the market. In addition, five other contracts were awarded on the basis of technically acceptable lowest quote in our original sample. Of those, the two that received more than five offers were for tree thinning services.

## Best Value Evaluation

A central purpose of this paper is examine the factors that the Forest Service uses to evaluate offers and how those criteria are weighted. The evaluation criteria provided to bidders in solicitations establishes the standards for assessing offers. The evaluation factors that the Forest Service chooses can create or limit the opportunity for the Forest Service to consider factors other than price when they decide whom to award contracts to. When non-price evaluation criteria are limited in scope and weighted heavily toward price, we might expect that the lowest bidder would be more likely to be awarded the contract. By contrast, when non-price evaluation criteria are extensive and heavily weighted, we might expect that factors other than price would play a larger role in decision-making. In these cases, we would expect that they lowest bidder would not be significantly more likely to win than others.

### Criteria Provided to Bidders

#### Evaluation Factors

In our sample solicitations, the Forest Service included seven major types of evaluation criteria. The most common non-price factors were past performance (87% of the solicitations), personnel (39%), and technical skills (39%). Technical approach and experience appeared less frequently.

Solicitations combined these factors in a wide variety of ways. The most common combinations were:

- past performance, technical skills, and price (24% of solicitations)
- past performance, technical skills, personnel, and price (18%)
- past performance, experience, personnel, and price (15%)

In 26% of the cases, the solicitations included these general evaluation categories with little additional detail about what would constitute a satisfactory answer. In 38% of the cases, a detailed description of what was required was in the evaluation criteria section. In 15% of the cases, additional explanation was included elsewhere in the solicitation.

None of the solicitations in our sample indicated that local benefit would be a factor in evaluation. We asked three contracting officers whether they used local benefit criteria to see if our sample was representative. One said that he/she did sometimes consider local benefit, but was unsure what affect that it had because he/she weighted price equal to all factors combined. He/she did point out, however, that they had more ability to direct micro purchases locally and felt that this occurred fairly frequently. (We did not analyze micro purchases.) A second contracting officer said that he/she had used local benefit criteria once in the early 2000s. A third contracting officer said that he/she had considered local community benefit in the early 2000s but no longer does so in service contracts. However, he/she indicated that they do include local benefit criteria in their stewardship contracts. The lack of local community benefit criteria in our sample contracts combined with discussions with contracting officers suggests that the national forests in this study rarely consider community benefit in contract selection outside of stewardship contracting.

### Weighing Criteria in Solicitation

Contract solicitations in our sample used three main methods for indicating the relative importance of various criteria. First, and most commonly, solicitations qualitatively listed or described the relative importance of price to other factors. Solicitations might say, for example, that price is of equal important to past performance and technical capability combined. In addition, four solicitations (all RFPs) assigned numerical points to each factor. Finally, four of the solicitations did not provide any information about the relative importance of the factors.

We coded all of the solicitations into groups based on the relative importance of price to other factors. Of the solicitations that listed evaluation criteria, 24 (71%) said price would be equal to all other factors combined, and four indicated that price would be less important than all other factors combined. None indicated that price would be greater than all other factors combined. However, three of the awards in our sample indicated that price was the only factor being evaluated. The remaining three awards did not indicate how the criteria would be weighted. In addition, five contracts in our larger sample were awarded to the lowest priced technically acceptable proposal.

## Evaluation Process

We examined documentation of the evaluation processes that the Forest Service used to select awards to understand what role non-price factors played in the selection of contractors.

### Weighting During Evaluation

We sought to understand how the Forest Service weighted factors when conducting their evaluation. The Forest Service typically used the criteria provided in the solicitation. In the four cases with numerical weighting in the solicitation, this simply meant assigning points as were described in the solicitation. Similarly, in most of the cases where qualitative, relative weighting was in the solicitation, evaluations used those qualitative ranking in the evaluation.

However, in 12 cases, the Forest Service created a numerical point or grading system for evaluating bids that were used internally but had not been provided to prospective bidders. By and large, these reflected the qualitative descriptions provided in the solicitations. Of the 12 awards, six were RFQs and six were RFPs. The approaches varied with some using grading systems such as excellent/good/poor while others assigned points or percentage values.

The Forest Service did not provide documentation of their evaluation process in three cases.

### Conducting Evaluations

The amount of detail provided about evaluation processes varied considerably from case to case. Given this variety, we can describe the range of approaches used, but we cannot provide definitive answers about the relative frequency of approaches.

Three main configurations of staff conducted the evaluations. In 41% of cases, a team of Forest Service non-contracting staff evaluated offers. In 15% of cases, a single non-contracting staff person evaluated offers. In 12% of cases, the contracting officer appeared to evaluate offers without assistance from other agency staff. In

these instances, there was no documentation of conversations with other staff, although we could not typically rule out staff input. In another 9% of cases, the contracting officer conducted the evaluation with input from other staff.

The documentation of evaluation processes varied considerably from case to case. In some cases, evaluation team members filled out worksheets in which they rated the non-price factors and wrote comments. The team then discussed their evaluations as a group without reference to price. After completing the review of the non-price factors, they reviewed the price offers, considered trade-offs between price and other factors, and made a recommendation to the contracting officer. These recommendations often included a written justification of why the preferred contractor.

In some cases, the Forest Service eliminated the high priced offers and evaluated the remaining offers using the process described above, if any.

When the evaluation was qualitative or there was no team evaluation, the types of notes included in the file varied considerably. At one end of the spectrum, narrative evaluations sometimes provided comments about reference checks, discussion of the skills and past performance of bidders, and discussions about why one contractor may be more appropriate than another in a particular case. At the other end of the spectrum, some evaluations were completely undocumented or documented with a file note saying that an evaluation had occurred and which offer had been accepted but little to indicate why, except in several instances, to indicate that they were the low-price offer.

In general, then, we saw a variety of evaluation processes ranging from ones in which there was detailed consideration of multiple non-price factors by a number of staff to a briefer consideration of price in relation to other factors, primarily by the contracting officer and perhaps one other non-contracting staff person. We also saw a considerable number of file notes that indicated that the lowest price offer was justified.

## Offers and Awards

With greater knowledge about the evaluation process, we can turn to the question of how that process might be affecting who wins contracts.

Of the 34 contracts in our sample, the Forest Service awarded 25 (74%) to the contractor offering the lowest price. The Forest Service awarded 78% percent of tree thinning contracts to the contractor with the lowest price bid, whereas 63% of construction contracts were awarded to the lowest bidder, which is suggestive of different market patterns. Given the sample size, however, we cannot say definitively whether this represents a larger trend.

Five of the nine (56%) contracts awarded to someone other than the lowest bidder were RFPs. Thirty-two percent of the whole sample were RFPs. In five of the nine cases, the award amount was below the government estimate, which was just less than the rate at which the sample as a whole. But, this was not enough of a difference to suggest a pattern (more about the government estimate below).

By itself, it is difficult to interpret whether awarding 74% of contracts to the lowest bidder is a high or low number. In part, it depends on ones perspective about what the priorities should be when awarding contracts. We can, however, shed additional light on the question by comparing the evaluation criteria and process used to select contractors to the winning offers. It may be that the lowest price offers are also best technical proposals, which would support the notion of a high percentage of awards to the lowest bidder. On the other hand, it may be that low price is valued over other factors, either in the criteria or in the evaluation process.

As discussed above, the Forest Service awarded 74% of contracts in our sample to the lowest bidder. Of the 21% (nine contracts) awarded to someone other than the lowest bidder, one was awarded to the second lowest bidder even though price was the only factor considered because the lowest bidder could not meet the schedule.

In eight remaining cases, price was equal in weight to all other factors combined. In seven of the eight cases, the Forest Service convened a review team to evaluate all offers. The review team ranked each technical proposal. They were then given the price offers to consider a trade off against technical scores. Typically, the Forest Service documented and justified reasons for accepting an offer other than the lowest price. In the remaining case, the highest price offers appeared to have been eliminated prior to evaluation. It was unclear if a team or individual conducted the evaluation.

The frequency of thorough, multi-person evaluations among the contracts awarded to someone other than the lowest bidder, along with the absence of limited reviews, suggests that team reviews might be a necessary component of a process that makes awards to someone other then the lowest bidder a real possibility.

Of the 34 contracts in our sample, the Forest Service awarded 32% of contracts to the highest ranked non-price proposal and 26% to a contractor that did not

rank highest technically. Eighteen percent (6 of 34) of winning bidders offered the lowest price and the highest ranked non-price proposal. In 15% of cases, the evaluation process did appear to focus on identifying the lowest cost acceptable bid. In these cases, the evaluation seemed to work from the lowest price upwards until a technically acceptable bid was identified. In another 26% of cases, we could not determine the technical ranking of the winning bidder or no evaluation was conducted.

In reviewing the notes and correspondence associated with proposal evaluation, we noticed that the Forest Service seemed more concerned with clearly justifying an award that rejected the lowest price offer than with justifying an award that rejected the highest scoring technical proposal. In addition, as noted above, we saw a greater rate of rejection of the highest ranked technical proposals than rejection of the lowest bidders. These patterns, combined with the ranking of price equal to all other factors combined, and the number of instances in which the Forest Service appeared to seek for the lowest priced acceptable proposal, suggest a system in which price is a very important factor. Clearly, it is not the only important factor in all cases as evidenced by the considerable number of thorough evaluations and the smaller number of awards to someone other than the lowest bidder.

## Government Estimates

### Relationship to Winning Offer

If the government estimate reflects the market for providing the requested services, we would expect that the winning bids would center on the government estimate. That is, the number of awards above and below the government estimate would be similar and the distribution would look like a bell curve.

We examined the relationship between the government estimate and award prices. The pattern was not quite a bell curve although there were awards both that were above and below the government estimate (Figure 1). Awards below the government estimate were somewhat more likely than awards above the government estimate. Of the 33 contracts in our sample for which we had a government estimate, the Forest Service awarded 21 (63%) below the government estimate, including eight (24%) awarded at more than 20% below the government estimate. The agency awarded 8 contracts (24%) at prices above the government estimate, including four awarded more than 20% above the government estimate.

We found similar patterns when we compared the tree thinning contracts to other contracts in the sample including construction or surveys. Although our sample size is small and it is difficult to draw definitive conclusions, it does suggest that problems with working conditions in the labor-intensive markets such as tree thinning may be not readily measured by comparing the government estimate and the award amounts.

There are, however, two possible challenges to this conclusion. First, in New Mexico, not all tree-thinning contracts are labor-intensive, and thus might not be part of the problematic contracting market. Second, before drawing this conclusion we would need to understand whether the government estimates reflect the costs of following all labor laws rather than simply the market. If the government estimates are a reflection of a market that has incorporated labor-law violations and other cost-savings strategies into it, government estimates based on historical market prices are likely to underestimate true costs. Thus, it is important to consider how the government estimates are calculated before drawing firm conclusions.

Before turning to the question of how government estimates are calculated, it is worth considering some possible explanations for why awards appear more likely to be below the government estimate. One possibility is that a government estimate may, at times, represent the most money available to complete a project. We saw correspondence to that effect in a couple of files. When this is the case, we would expect the Forest Service either to award the project below the government estimate or to not award the contract. This scenario would increase the likelihood of having awards below the government estimate. A second possibility would be an emphasis on purchasing services at the lowest possibly price. We saw some evidence of the evaluation processes for some contracts. A third possibility would be inaccurate estimates. We can shed light on this possibility by examining the ways in which the Forest Service calculates the government estimate in practice.

### Calculating the Government Estimate

The government estimate calculations were documented in a number of different ways. For 13 contracts in our sample, the Forest Service used a template to calculate the government estimate. These templates typically included project-specific costs such as production rates, typical crew sizes, mileage to and from work site, and project size. In addition, the template included a number of fixed assumptions such as the Service Contract Act wage rates, workers compensation rates, mileage rates, payroll tax rates, and the like. These

templates often included modest indirect costs and profits rates. For another group of 11 contracts, the government estimate was based on historical costs without any documented calculations. In another 10 cases, there was apparently no documentation in the file about how government estimates were calculated.

Given that nearly two-thirds of estimates are either undocumented or based on historical market prices without current cost calculations, it is difficult to know the extent to which government estimates reflect the costs of paying full Service Contract Act wages, workers compensation, and the like. This is of particular concern in parts of the market where there may be difficulty with labor law compliance.

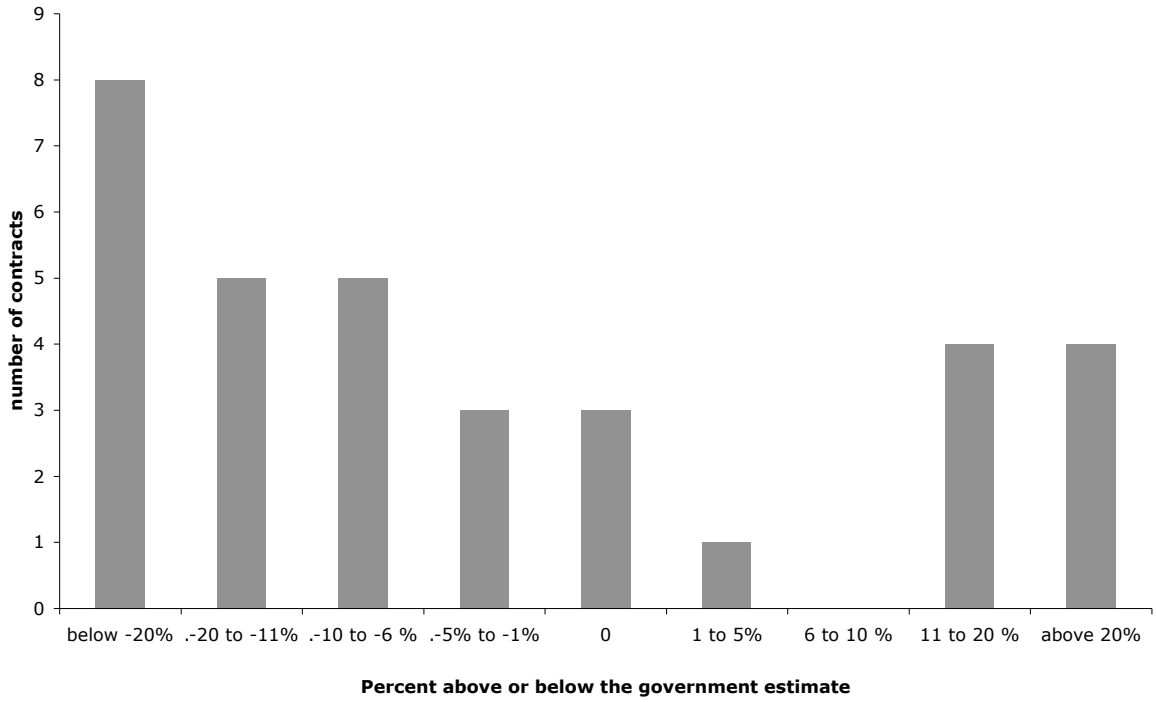
If the market has supported the full costs of paying Service Contract Act wages, workers compensation costs, and other costs of completing the activities then inflation-adjusted market-based or historical estimates would likely reflect the costs of strictly following all labor and contracting laws. But, if the historical market prices have included underpayment of wages, workers compensation or other costs, then market-based government estimates are too low to account for the full costs of completing the work legally. If this were the case, it may make sense for the Forest Service to calculate estimates from scratch rather than relying on historical market-based estimates. This may be particularly true for activities that involve a seasonal, guest worker, or immigrant workforce such as tree thinning, tree planting, and other reforestation activities. Again, given the data available we cannot say which of these scenarios are in play, only that the Forest Service is more frequently than not relying on market-based estimate of prices. Given this reliance on market-based estimates, the relationship of government estimate to award amount is probably not a good indicator of the extent of "below cost" awards.

## Conclusion

This project sought to understand how the Forest Service evaluates contract offers and how that affects who is awarded contracts. In addition, it sought to understand how the Forest Service calculates the government estimate and how it compares to award prices. Given the limited geographic scope and the small number of contracts included in the study, broad generalizations are probably not appropriate. That said, there are several patterns worth highlighting.

Best value contracting is one of several types of mechanisms that the Forest Service uses to awards contracts. The national forests in this sample appeared to use best value about two-thirds of the time. They also solicited offers from a sole source under a variety of circumstances including, for example, when expedit-

Figure 1 - Relationship of Award Amount to the Government Estimate



ing awards for post-fire rehabilitation or when contracts were set aside for 8(a) contractors.

For best value contracts, the Forest Service uses a wide variety of evaluation criteria including price, past performance, technical skills and experience, and personnel. None of the contracts in our sample used local community benefit as an evaluation factor.

Although the non-price criteria varied considerably from contract to contract, price was typically equal to all other factors combined. With this sort of weighting, price and non-price factors can be thought about in at least two ways. First, one might think about price first and only seriously consider non-price factors when offers were very close in price. Second, one might focus first on non-price factors and then consider price differences in relation to quality of technical proposals. We saw both of these approaches in the sample.

The national forests in the study evaluated offers in a number of different ways. At one end of the spectrum, teams evaluated non-price offers in considerable detail and only later focused on price. At the other end of the spectrum, the focus seemed to be on price, with limited attention to non-price factors, except to ensure that they met minimum standards.

National forests awarded contracts both above and below the government estimate. However, the national forests in this study appear somewhat more likely to award contracts below the government estimate than above. Awards well below or well above (more than 20%) the government estimate were relatively rare. At the same time, however, most government estimates appeared to be based on historical market prices rather than on cost-based calculations. In this context, it is difficult to use the government estimate to evaluate the extent to which the market reflects the full cost of following all labor, insurance, safety, and contract laws because the government estimate often reflects the market prices as opposed to these cost estimates.

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