

# **Subcontractor Perspectives: Factors that Most Affect Their Relationships with General Contractors - A Pacific Northwest Study**

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This Pacific Northwest study was conducted to determine the most important factors in general contractor - subcontractor relationships. Interviews were conducted with twenty four subcontractors from eight disciplines to evaluate their opinions about the general contractor's personnel, procedures and practices that improve or damage their relationships. The study reveals the top three relationship factors to be bid shopping, project manager relationship and superintendent capability, respectively. A mixed method research design was utilized where subcontractors were asked to rank their top three relationship factors and determine which factors are important enough to end their relationships with general contractors. Subcontractors stated that bid shopping is a serious betrayal of trust with 75% of respondents indicating that they have ended a relationship after being bid shopped. The project manager and superintendent have key roles in maintaining the subcontractor relationship; honesty, fairness and capability were determined to be their most important traits.

**Key words:** Subcontractor, Specialty Contractor, General Contractor, Mixed Methods Research

## **Introduction**

Subcontracting is a common practice in the commercial construction industry. On any particular project, general contractors may rely on 20 to 40 subcontractors to perform the specific work items that are required. A typical group of contractors that work together on a project may include such diverse trades as electrical, drywall, roofing and steel erection to name a few. The characteristics of the project dictate the type, size and capabilities of each subcontractor that may be required (Knutson, Schexnayder, Fiori & Mayo, 2003). Each project has a unique combination of job-specific subcontractors that are typically assembled under a general contractor acting as the head. The general contractor may also have his own labor force working alongside the various subcontractors throughout the project. There is a team approach to completing the work on most projects with the general contractor taking the lead to manage the jobsite and direct the personnel. Subcontractors are a vital component of the success of every construction project.

General contractors utilize subcontractors for various reasons such as: they lack expertise in these types of work, it enables them to limit their risk exposure or it expands their available workforce so they have more opportunities to bid on new projects (Gould & Joyce, 2009). Approximately 80% of the dollar value of construction is accomplished under subcontracts therefore the subcontractor's perspective is important (Currie, Sweeney & Hafner, 1991). Subcontractors rely on general contractors for virtually all of their work and the relationships they maintain with general contractors in their geographic area directly affect their long term success. Generally, a subcontractor evaluates the performance of the general contractor on a project-by-project basis. A subcontractor can choose which general contractor to work with and this business decision can be affected by a number of factors. The perceived fairness and capability of the general contractor can be significant factors when considering future work with that general contractor (Knutson et al, 2003).

The focus of this study was to gain an understanding of the factors that affect the relationship between the subcontractor and the general contractor from the subcontractor's perspective.

## **The General Contractor – Subcontractor Relationship - Background Information**

Since subcontractors secure virtually all their work through general contractors, the success of the typical subcontractor depends directly on the relationships they establish and maintain with those general contractors that need their expertise. Once the relationship is established, most subcontractors work with the same general contractors on a regular basis and they tend to maintain the relationship over time. Shash (1998) stated that “general contractors and subcontractors may not cooperate in a highly recurrent way; nevertheless they entertain long term business relations” (p. 446). Statistics presented in the publication indicate that 76% of commercial subcontractors have maintained their relationships with general contractors for an average of 21.1 years (Shash, 1988, p. 442).

In his paper, Golden Rule of Contractor-Subcontractor Relations, Proctor (1996) emphasized the importance of developing a spirit of trust between general contractors and subcontractors which requires a long-standing practice of fair dealing between parties. He detailed the four C’s of the general contractor-subcontractor relationship: consideration, communication, cooperation and compensation stating that “the ultimate responsibility for successful completion of a project lies with the general contractor” (Proctor, 1996, p.14). Constantino, Pietroforte & Hamill (2001) emphasize that the construction business is a relationship business:

Subcontracting develops a set of stable relationships between general contractor and subcontractors...on a project basis, this relationship takes the form of “classical” contracting, but as parties cooperate over the years, the same relationship takes the form of “relational” contracting. ( p. 440)

The subcontractor must evaluate each general contractor that may be bidding on a project based on what is in the best interest of their company. General contractors that do not treat their subcontractors well may not receive bids from them in the future or the subcontractors may decide to raise their bids to general contractors that don’t treat them well (Currie et al, 1991). A publication prepared by the American Subcontractor Association reinforces this practice.

Tremendous differences exist among various contractors in experience, financial stability, technical ability and business acumen that will define whether a particular prime will be a good team member or not. These differences can and should be taken into account in fashioning a bid proposal to more than one prime contractor on a project. The price or other terms quoted need not be the same nor must a subcontractor bid to all primes. The bid to each prime must reflect a careful assessment of relative risks, benefits and burdens expected to arise out of a subcontract relationship (Hendrick & Schemm, 1991, p. 11).

Through interviewing subcontractors and general contractors, Birrell (1986) identified the most significant criteria that affect the subcontractor’s efficiency in conducting their operations. This study focused on how subcontractors evaluate the management capability and business practices of general contractors. The study identified a framework to evaluate a general contractor in order to provide subcontractors with useful information to structure their future bidding practice toward general contractors. The better a general contractor was at management, the lower the subcontractors pricing could be. Conversely, the poorly managed firms should receive higher pricing from subcontractors when bidding new projects (Birrell, 1986).

Tracey (1991) studied the subcontractor-general contractor relationship with the purpose “to better understand this relationship and possibly improve it” (p. 3). The results of this research detail the common experiences of subcontractors and determined that they have many common concerns: one-sidedness of subcontracts, the bidding process favors the general contractor and the general contractors have the upper hand in the relationship. The most divisive areas in their relationships with general contractors were identified by the subcontractors as bid shopping and onerous contractual clauses such as: pay-when-paid provisions, indemnification clauses and retainage practices.

This research project studied the subcontractor-general contractor relationship from the subcontractor’s point of view. Specific attention was focused on what relational factors are most important in maintaining the bond. Emphasis was placed on what particular actions or practices of the general contractors are cause for the subcontractor to suspend or even end the relationship. This study included the more common relationally-linked factors such as payment issues, bid shopping and subcontract provisions. Other dynamics in the relationship that were included in this study are less frequently studied or not at all: backcharging, financial capacity of the general

contractor, future work/types of work prospects, insurance and bonding issues, safety requirements, superintendent capability, project manager relationship and previous claims & disputes.

## Research Methodology

A mixed methods approach was utilized in this research to enable a comprehensive collection of data. Qualitative and quantitative components were combined to provide both anecdotal and numerical representation of participant's opinions and experiences. This approach was designed to counter the inherent limitations of a strictly qualitative or strictly quantitative study (Creswell, 2007). Mixed methods research can mitigate bias and allow salient subcontractor perspectives to emerge while providing a solid basis of numerical data for a better understanding of the topics (Gliner & Morgan, 2000). To gain valuable, broad-based information from participants, an interview was developed that had elements combining deductive and inductive questioning (Patton, 2002).

There were 24 interviews conducted with subcontractors that perform work in the geographic *Location* United States, chiefly the Spokane and Seattle area markets. The interviews were recorded either via telephone or face-to-face. Quotations from each participant were included to add depth and understanding from their perspective. This qualitative method provides a general picture of trends, associations and relationships to capture the uniqueness of individuals in a way that quantitative research cannot (Creswell, 2007). The incorporation of a structured survey into the interview provided an ordered means to enable comparisons and grouping of data for later assessment.

Three subcontractors were selected from each of the following eight disciplines: excavators, masons, steel erectors, roofers, finish contractors (flooring & drywall), elevator contractors, mechanical contractors (HVAC) and electrical contractors. Subcontractor's annual volume ranged from \$2 million to \$32 million. The majority of participants stated that they perform a minimum of ninety percent of their work as a subcontractor working for a general contractor. Representatives from each company were chosen to participate if they had a minimum of five years' experience in a position in which they worked directly with a general contractor that specialized in commercial construction.

A survey and a guided interview with the same questions asked of each participant along with probing questions relevant to each participant. In the survey, each participant was asked to rate the importance of the factors on a ten point scale and to identify any particular factors that are important enough to end the relationship. Questions and answers were audio-recorded and then transcribed. NVivo 8 software was utilized to analyze the data. The discussions from all 24 respondents were grouped by each of the seventeen relationship factors presented in Table 1. These relationship factors were either anticipated by the researchers (deductive) or emerged from the data (inductive). The researchers have extensive experience working for general contractors.

Table 1  
*Seventeen Relationship Factors*

1a. Pay-when-Paid	6. Safety	10b. Insurance
1b. Timeliness of Payments	7. Previous Claims	11a. Termination for Convenience
2. Bid Shopping	8a. Project Manager – Capability	11b. Takeover of Equipment
3. Backcharging	8b. Project Manager – Fairness	11c. Indemnity
4. Financial Capacity	9. Superintendent	12. Retainage Practices
5. Future Work	10a. Bonding	

## Research Results Summary

The responses and discussions from all twenty four participants were analyzed and evaluated separately by each specific subject question in order to establish trends. The category with the highest average rating was Bid Shopping (Item 2) with 8.67 average points. Project Manager (Item 8) was second with an average point total of 8.08. The two subcategories of the Project Manager relationship factor were Fairness and Capability. The Fairness factor was listed more often by respondents than Project Manager Capability, but only slightly. Superintendent (Item 9) was third on

the 10 point scale rating with 7.63 average points. The relationship factors with the lowest average rating were Insurance and Bonding (Item 10) with 4.00 average points and Onerous Subcontract Provisions (Item 11 - indemnity; takeover of equipment; termination for convenience) with an average point total of 3.66. These results are summarized in Table 2.

Table 2  
*Relationship Factors*

<b>Relationship Factors Ranked in Order of Importance</b>		
1. Bid Shopping	7. Financial capacity	13. Backcharging
2. Project manager capability	8. Retainage practices	14. Insurance
3. Project manager fairness	9. Future work	15. Bonding
4. Superintendent	10. Previous claims	16. Takeover of equipment
5. Timeliness of Payments	11. The pay-when-paid clause	17. Termination for convenience
6. Safety	12. Indemnity	
<b>Factors that End the Relationship</b>		
1. Timeliness of Payments 15/24	3. Financial Capacity 5/24	5. Retainage Practices 3/24
2. Previous Claims or Disputes 7/24	4. Project Manager 5/24	6. Superintendent 1/24

## Specific Results and Conclusions for Top Eight Factors

### *Bid Shopping*

Few general contractors have the capacity or expertise to self-perform all aspects of a construction project so they typically solicit bids from subcontractors when preparing a bid. When determining which subcontractor to hire for a particular construction project, the general contractor may indulge in the practice of bid shopping or bid chiseling (Knutson et al, 2003). Bid shopping by general contractors was addressed in a 1998 Supplement to the Construction Subcontracting Manual stating that:

Bid shopping occurs when a general contractor seeks other bids, using the lowest bid as leverage for better offers... bid chiseling involves the general contractor's seeking a reduction in the original subcontractor's bid after award of the general contract by threatening to subcontract the work to another party (Wickwire, 1998, p. 9).

These practices are harmful to the subcontractor, contributing to poor quality workmanship and sometimes even the insolvency of the subcontractor. Bid shopping is considered to be a serious problem that promotes an adversarial relationship between subcontractors and general contractors. The practice of bid shopping by general contractors is considered to be a serious breach of trust from the subcontractor's perspective (Arditi & Chotibhongs, 2005).

When discussing issues that affect the relationship, Tracey (1991) said one of the most divisive issues was bid shopping. Tracey presented statistics indicating that 53% of subcontractors said they don't bid to bid shoppers and 68% offer differing prices to multiple general contractors when tendering the same bid (p. 30). According to Tracey, subcontractors offer better prices to those general contractors they like the most.

Subcontractors view bid shopping by general contractors as unethical and therefore they tend to avoid the general contractors that have "shopped" their bids in the past. According to Shash (1998), subcontractors hesitate to submit quotations to general contractors who do not adhere to common professional ethics and 37% limit their bids based on the perceived fairness of certain general contractors (p. 103). Many subcontractors believe that general contractors are not concerned about what is in the best interest of subcontractors and that ethics in the relationship regarding bid shopping should be emphasized (Hinze & Tracey, 1994).

### **Results**

Bid Shopping received the highest average importance rating of all seventeen factors with a rating of 8.67 and was listed the most times as the number one factor from the twenty four respondents. It is also the factor most cited by subcontractors to be important enough to end the relationship.

All respondents stated they had experienced having their bid shopped by a general contractor numerous times. When asked if their bids had ever been shopped, one interviewee said, "It happens almost every bid we do now, we think it does..." Another said, "...there's always a lot of scuttle right after the bid and of course right before the bid closing time, and we constantly get calls back, 'what else can you do here' or 'what else can you do there', and then time will pass and you get another call back or you hear back through the grapevine from another contractor...that numbers are being shopped." All 24 subcontractors said they would consider not entering into a relationship with a general contractor known to be a bid shopper. A common response of interviewees was exemplified in this response from a masonry subcontractor, "If he's got a reputation, he's not going to get my bid."

Seventy-five percent of the subcontractors (18/24) said they have ended a relationship with a general contractor that shopped their bid in the past. This is the largest ratio of all the factors. When asked why he would terminate the relationship for bid shopping, one participant summarized the responses of many subcontractors "I consider that to be purely unethical ... I would terminate that relationship in a heartbeat".

### **Conclusions**

Bid shopping was identified by respondents as the most important factor in their relationship.

General contractors who are interested in maintaining good subcontractor relations would be well served by not engaging in the practice of bid shopping. Virtually all of the interviewees stated that they either raise their bids to known bid shoppers or they stop bidding to them entirely. The implication is that general contractors should avoid the practice of bid shopping because it reduces their competitiveness. Those general contractors that do not engage in bid shopping are more likely to receive more bids and more competitive bids than their bid-shopping counterparts.

### ***Project Manager Capability and Fairness (combined factors)***

The general contractor typically employs a project manager to take the lead managing the daily affairs of each construction project. The administrative skills and people management skills of the project manager have a direct effect on the success of every project. Subcontractors rely on the project manager to act in their best interest when dealing with the owner and architect and to facilitate their change order requests when there are changes to the work. In each project there can be literally hundreds of questions that need a formal answer or clarification and the timelines of the answer can greatly affect the flow of the subcontractor's work on the jobsite. The project manager is responsible to process subcontractor questions and to coordinate the various entities to facilitate the flow of information (Gould et al, 2009). This enables the subcontractors to efficiently and effectively perform their work. When an answer is delayed to a critical question it can force a subcontractor to move to a different task or even to leave the jobsite until an answer is received. This can negatively affect their productivity which, in turn, reduces their profit margins (Garrett, 1979).

The project manager also is responsible to process the subcontractor's requests for changes and for changes to the work initiated by the owner. Subcontractors expect the project manager to treat them fairly when evaluating their change order requests. If the subcontractor perceives that the project manager is unfair or not working toward their best interests, they may be less inclined to want to continue their relationship with that particular project manager on future projects (Clough et al, 2005). Each construction project is uniquely different and typically has a unique mixture of subcontractors that likely have never worked together before as a team. It's the responsibility of the project manager to promote the teamwork atmosphere and facilitate a spirit of cooperation on the project (Rahman and Kumaraswamy, 2005). As the project progresses, the project manager's style of management can promote or deter communication and teamwork. The administrative competency and perceived fairness of the project manager can directly affect the subcontractor's willingness to maintain a long term relationship with a general contractor (Sears et al, 2008).

### ***Results***

Project Manager as a factor received the second highest average importance rating of all seventeen factors and was listed the most times as the number two factor from the twenty four respondents. The fairness of the project manager was ranked slightly higher than project manager's capability on the ten point scale. Project manager fairness rated 8.08 and project manager capability rated 7.63. Honesty, fairness and good communication emerged from the data as characteristics of a good project manager.

Several subcontractors discussed their desire for the project manager to be their advocate. As stated by one participant, the project manager should "get in there and fight for more money..., put his gloves on for you." One subcontractor discussed his dislike of project managers that take unfair advantage of subcontractors, saying, "they were always ... finding a way to increase the profitability of their projects on the back of the subcontractors."

Communication was listed as a key element of a good project manager. One interviewee stated his view, "good communication...and willing to discuss issues, and not, you know, be like they won't take your input because you're a subcontractor." Another said, the best project managers are "the ones that are good at conversation as far as interacting and talking about issues... When you have a project manager that just sends you nasty emails instead of trying to work out something ... that's an issue."

Nearly half of the participants (11/24) pointed out that they would alter their pricing based on the particular project manager assigned to a project (if they knew who the assigned project manager would be prior to their bid submission). Subcontractors said they raise their pricing for poor managers. No respondents indicated that they would reduce pricing based on the project manager. When asked how he would adjust his bid, one subcontractor said, "It would only go up. We typically bid everybody the same unless there's a real problem ... we're gonna put a

little extra in there to deal with them.”

### ***Conclusions***

Many of the participants mentioned the importance of the project manager to promote a team environment on each project and for them to be their advocate when dealing with the owner or architect on each project. The implications of these findings are that general contractors that want good subcontractor relations will consider recruiting and developing good project managers. Focusing on the positive traits of honesty, fairness and communication and avoiding the opposite negative traits will enhance their relationships with subcontractors. This could enhance the competitive advantage to those general contractors that make it a priority to retain good project managers.

### ***Superintendent Capability***

The superintendent exerts control over virtually all aspects of the jobsite operations such that the capabilities of the superintendent can greatly affect the outcome of the project. The subcontractor's success depends heavily on the capabilities of the particular superintendent selected for the project. Over time, the expertise and reputation of each particular superintendent becomes known throughout the subcontracting community. Subcontractors may decide not to bid to a general contractor that has lower caliber superintendents (Knutson et al, 2003). They may even ask which superintendent will be on the project before deciding to enter into contract. Some subcontractors may adjust their bid when a particular project superintendent based on the expertise of the superintendent (Garrett, 1979). Subcontractors put a heavy emphasis on the general contractor's experience in building and managing similar projects when they decide on a bid price (Shash, 1998, p.105). Because of their contractually-dependent status, subcontractors continually evaluate general contractors' capabilities and conduct on a project-by-project basis because it directly affects their profitability and long-term success as a business (Huycke, 1999).

Subcontractors expect that the general contractor will take the lead on the jobsite to organize and direct operations but prime contractors are “taking a lesser role in coordination between trades and instead specify coordination as a subcontractor requirement” (Dossick & Schunk, 2007, p. 262). Studies by Adrian (1987) and Hsieh (1998) indicate that subcontractors bear responsibility to manage their own affairs on the jobsite without much support from the general contractor. The superintendent's capabilities in directing the daily operations of the jobsite can greatly affect the productivity and profitability of the subcontractor. How subcontractors view the organizational and leadership abilities of the superintendent is therefore an important factor to study.

### ***Results***

The Superintendent Capability was identified by subcontractors as the third most important element in their relationships with general contractors. The average rating of the Superintendent factor was 7.63 on a ten point scale. The superintendent is a vital component that ranks very closely to the project manager for many of the same reasons. During the interviews, respondents conveyed that the superintendent is the main point of contact on the project worksite acting as the daily overseer of all the subcontractor's personnel. The superintendent's role in promoting an environment of mutual respect with good communication was emphasized as vital to maintaining jobsite relations.

Characteristics of a good superintendent that were mentioned most often were capability and organization. The majority (20/24) of subcontractors said that the overall quality of the pool of superintendents at a particular general contractor affects their relationships with that general contractor. One subcontractor said, “I strongly feel that the more qualified superintendent, the better the project is going to turn out for everyone involved.” Another subcontractor mentioned that superintendents do a poor job when they do not have things prepared for them when they get to the jobsite, “...a lot of the superintendents have us a week or two too early. They're not ready for us. We waste a lot of time and effort.”

Just under half (10/24) of the subcontractors consider the general contractor's superintendents capabilities when assigning personnel to a project. Those subcontractors typically evaluate the capability of the assigned general contractor's superintendent and then match their own superintendent to the general contractor's superintendent's strengths and weaknesses. Teamwork was mentioned by several subcontractors as being a very important superintendent quality. One subcontractor stated that he preferred when a superintendent understood “that we're there to work together to complete a project so everybody walks away proud and profitable.” Many subcontractors described their desire for the superintendent to be their advocate. One participant said that it was important for the

superintendent to be “actually looking out for their subs, to take care of their subs...working with them so they can make money on the job, not at all a one way street.”

Some subcontractors adjust their pricing based on the capability of the superintendent. One subcontractor said, “Yes, if I know it’s going to be someone I’ve worked with in the past...and it’ll go smooth, I will cut my bid”. A masonry contractor said, “If we know the site superintendent is somebody who’s got a reputation for being a hard ass or unreasonable that could definitely come into play.” Most subcontractors stated that they do not know who the superintendent is at the time of their bid submission to the general contractor. If they did know, nearly half (13/24) said they would alter their bid.

### ***Conclusions***

Many subcontractors indicated that they lower their pricing to general contractors based on the quality of their superintendents. The implications of these findings are that general contractors that make it a priority to recruit and retain capable superintendents could therefore enhance their competitive advantage. Superintendents that promote an environment of mutual respect and teamwork on the jobsite would also encourage good subcontractor relations.

## ***Timeliness of Payments***

### ***Results***

The average rating of the Timeliness of Payment factor was 6.96 on the ten point scale which indicated that this factor is very important as compared to other factors. This factor was the second most cited factor important enough to end the relationship with nearly two thirds (15/24) of interviewees stating that they had done so in the past.

Many subcontractors indicated a high level of loyalty toward the general contractors with whom they work and they have a high tolerance level for slow paying general contractors. Many subcontractors expressed the importance of building relationships with general contractors that have a strong financial track record so the risk of non-payment is reduced.

All subcontractors described that they have experienced being paid late by a general contractor and that timely payments are important to them. Surprisingly, only about 20% of subcontractors (5/24) stated that they would alter their bids to accommodate lateness of payment by raising their bids to slow paying general contractors and reducing bids for quick payers. One interviewee discussed his dissatisfaction with general contractors who make excuses not to pay their subcontractors, “When you know that they’ve been paid and they just wait around and make excuses, hiding behind when they cut checks, to me it’s a bunch of hobo; you know, blowing smoke; and it irritates me.” This sentiment was echoed by several subcontractors.

Almost two thirds of subcontractors (15/24) have ended a relationship with a general contractor based on this factor. This is the second highest ratio, next to bid shopping, which indicates the importance of this factor to the relationship. One interviewee described his willingness to end the relationship based on how he was treated by the general contractor, saying “I don’t know if it’s so much the payment issue as it’s how you’re treated when you talk to them about it.”

### ***Conclusions***

In the interviews, subcontractors described the importance of cash flow to their daily operations and that they align themselves with general contractors that have a good payment record. When a subcontractor depends on the financial condition of the general contractor, slow payments sometimes create a hardship for subcontractors - if a subcontractor is well established financially, this factor is not very important. Respondents stated that they avoid bidding to general contractors with poor payment records and they offer preferential pricing to those general contractors that have a good payment record. The implications of these findings are that general contractors should consider ways to expedite payments to subcontractors in order to enhance relations and gain favored pricing on bids if possible.

## ***Safety***

### ***Results***

All twenty four interviewees said they appreciated the general contractor’s safety efforts and emphasis. This factor was rated an average of 6.83 on the ten point scale. One roofing subcontractor said, “I appreciate it to the point



where they're being reasonable with it." Another subcontractor said, "It can bring us together and it can separate us...although safety is very, very important, somebody getting hurt is a huge issue."

Roofers jointly voiced concerns that sometimes the general contractors tend to be overly cautious which can hinder their work. One roofer said, "I appreciate it to the point where they're being reasonable with it...but you know, there have been occasions where ... it's a little unreasonable." Another roofer said, "There are times when it's a double edged sword ...it helps our L&I rates and workman's comp rates, but there are times when it is excessive."

In response to the question, "Is it important to you for the general contractor to have a good safety program?" a masonry subcontractor said, "...in our relationship, it's very important...safety isn't just necessarily in how our guys are hooked on, but the condition of the jobsite, and all the things that trickle down to what ultimately makes up a safe job site, making sure guys get home at night." Those that answered no to this question considered themselves to have a good safety program already.

### ***Conclusions***

This factor is rated more important with subcontractors that have the highest risk factors i.e. roofers, masons. Subcontractors with strong safety programs tended to rank this lower because it minimally affects their relationships with general contractors.

## ***Financial Capacity***

### ***Results***

The financial stability of general contractors was described as a very common concern for the majority of interviewees. All twenty four participants said they would consider this factor when establishing a relationship with a general contractor and they gave it an average rating of 6.13 on the ten point scale. One interviewee said, "it's pretty important...if they don't have any money then there's no point in working for them." A minority of subcontractors (5/24) have ended a relationship based on this factor.

Respondents indicated that this factor is generally considered to be less important to subcontractors when projects are publicly funded due to the fact that these projects are protected by a payment and performance bond. Three quarters of interviewees (18/24) stated that the bonded projects were less risky. They rated this factor lower when considering public bids and higher when tendering private-money bids.

Less than half (10/24) of subcontractors have experienced not being paid because a general contractor was having financial trouble. Most subcontractors explained that they recognize the risk and try to work with general contractors that are financially sound. One subcontractor put it this way, "...obviously, we try to align ourselves with the right people. If they're not financially stable there's a good reason for it."

### ***Conclusions***

Subcontractors described that this factor is not usually considered to be important when the general contractor is involved in bonded public projects but it can become more important on private construction projects.

## ***Retainage Practices***

### ***Results***

Two thirds (16/24) of participants believe the practice of holding retainage to be unfair although they gave it an average rating of only 5.75 on the ten point scale. The common complaint described by subcontractors is that the retainage release is delayed due to the fault of other subcontractors and that compliant subcontractors are therefore penalized. One subcontractor described the problem this way, "It's the fault of other subs, so the owner was not paying on the project. It happens all the time." When asked if he thought the practice of holding retainage to be unfair, an electrician said, "Yes, it's unfair because why should one issue with one subcontractor hold the entire project up for retainage".

Some subcontractors believe that general contractors hold the retainage, even after they have been paid retainage by the owner, as a strategy to boost their cash flow and earn interest. One subcontractor stated, "I think sometimes they just make you come hunting for it if you're not in there asking for it...and they'll keep it if you're not asking for it". Another subcontractor said, "Sometimes you wonder if it's just sitting in a bank account helping somebody else's

bottom line.” All but two subcontractors (22/24) state that they have had their retainage payment withheld for an extended time period, typically over one year and some as long as two years.

Respondents expressed their frustration with the retainage release requirements on most projects. Nearly four fifths (20/24) of subcontractors said they would be more likely to work with a general contractor that had fewer retainage release requirements. One subcontractor said, “I would probably be more apt to go after that because it’s money in the bank.” Several subcontractors would add money to their bids to slow-paying general contractors, “if there’s somebody who is notoriously slow, I would charge them more on the bid to begin with.” Only two respondents stated that they would lower their price if a general contractor has relatively few retainage release requirements.

### ***Conclusions***

General Contractors could enhance their competitive advantage if they make it a priority to streamline their retainage release requirements when possible and to make efforts to expedite the final retainage payments to their subcontractors. This could include being more proactive in the pursuit of final documentation from all subcontractors on a particular project. Subcontractors would likely see this as a positive step toward advocacy on their behalf.

## **Remaining Factors**

The remaining nine factors have been condensed in the interest of brevity. Although important, these factors were rated the lowest of the 17 and are therefore comparatively less significant to the relationship between subcontractors and general contractors. These remaining factors are summarized in Table 3.

### ***Observations***

When considering their response to the importance of each factor, subcontractors sometimes rank certain factors low when in reality, they are very important to their relationship with a general contractor. They are so important that they align themselves with general contractors that comply with their standards of conduct in an attempt to avoid those general contractors that they dislike. So in their experience, subcontractors may not rank these very high, but only because they work only with general contractors that treat them well. If they could not find general contractors that would work the way that they like, they would rank this factor higher. Therefore the ranking of importance may be skewed to the low side based on this propensity of some of the respondents.

It’s important to emphasize the relationship of subcontractor pricing to their treatment by general contractors. The interviews revealed that a common method of dealing with a general contractor that engages in practices that they don’t like is for subcontractors to adjust their pricing on future bids. Respondents mentioned that they raise their bids to general contractors that they don’t like and some reduce their bids to general contractors that they do like. Essentially, this empowers subcontractors to favor certain general contractors, rewarding good behavior and treatment that they prefer and vice versa. General contractors that want to increase their competitive advantage would benefit by focusing on enhancing their subcontractor relations.

Table 3  
*Remaining Factors*

<b><i>Future Work – 5.63</i></b>	Subcontractors indicated that they tend to align themselves with general contractors based on this factor. Respondents confirmed that profitability is a driving force in their business so future work is always a consideration.
<b><i>Previous Claims or Disputes – 5.33</i></b>	Subcontractors that had a major unresolved claim with a general contractor tend to end their relationship. If a general contractor was cooperative in settling a claim or dispute, the relationship was maintained. Subcontractors tended to overlook minor claims in order to secure new projects with the same general contractor.
<b><i>Pay-when-Paid -5.29</i></b>	Since virtually all general contractors utilize this contract provision, the majority of subcontractors explained that they consider this to be part of the business and therefore have accepted it as unavoidable.
<b><i>Indemnity Clauses –</i></b>	These contract clauses are commonly used to push risk from the general contractor to the