# An Analysis of Qualifications-Based Selection in Washington State

## Procurement of Design Services by Public Agencies

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*"There are no secrets to success. It is the result of preparation, hard work, learning from failure."*
*– Colin Powell*

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## Statement of Problem

Public agencies and/or local governments often contract with consultants or other external firms for professional services to provide public goods and/or services. When this happens, the agency or government office is responsible for determining that work meets performance standards and yet is cost-effective. The public entity may be liable for work that is not up to standard and assumes responsibility for the funds spent on this work. The dual obligations of project performance and cost-effectiveness may involve trade-offs when selecting a consultant. For many years, professional services were contracted in similar fashion as construction services – through a competitive bid process. However, since federal law was passed in 1972 subsequent similar laws have been passed in most states, mandating that professional services (including design, surveying, architectural, and engineering) are procured through a qualifications-based selection (QBS) process.

This project begins with a review of literature that includes discussions of the challenges of efficient provision of public goods, the responsibilities for ensuring quality performance, the tradeoffs between qualifications and cost of services, the existing and alternative bid/proposal processes, and rent-seeking through barriers to contracting. A literature review of these topics serves as the backdrop for an analysis of information requested by public managers via solicitations for public projects. The information that public managers request and use to evaluate consultants gives us an idea of how public managers are implementing QBS in Washington State.

## Background Information

Public entities in Washington State are responsible for meeting their internal (project and financial) goals while being prudent stewards of public funds. These goals are alternatively met by tackling projects with internal staff, and sometimes by contracting with an outside source – a public or private firm, a non-profit organization, or another public (governmental) office or agency. The procurement of professional services by federal government or agencies is governed by the Brooks Act of 1972, which instructs:

> *"Sec.902. The Congress hereby declares it to be the policy of the Federal Government to publicly announce all requirements for architectural and engineering services, and to negotiate contracts for architectural and engineering services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices."*[1]

Passage of the Brooks Act established federal policy regarding the procurement of design, engineering, architectural, and other professional service contracts through a QBS process. The policy stipulates that the federal agency will publically advertise the project opportunity and accept written statements (proposal packages) of an individual's or firm's expertise and qualifications. After scoring the written packages, the agency will then "short-list" the top three or more scoring firms and schedule interviews for each team. Once interviews are conducted, the top scoring team will begin a negotiation process that involves a schedule and budget. Through the QBS process, the firm or team will be chosen based upon its qualifications to perform the work, and price or project cost would be discussed and negotiated after selection. The policy is not specific about this process, leaving public entities much latitude in choosing methods in its implementation. Since the Brooks

[1] Public Law 92-582 92nd Congress, H.R. 12807 October 27, 1972

Act was signed into federal law on October 27, 1972[2], nearly all states, including Washington, have adopted "mini-Brooks" laws that mimic the federal standard (Fleenor & Hall, 2002). QBS policy - whether at the state or federal level - is intended to provide stakeholders "maximum value for its expenditure, it entails a fair and equitable step-by-step process that will facilitate the agency's selection of a consulting firm based upon qualifications and competence in relation to the type and scope of the project."[3]

A common question regarding the use of QBS is simply: "Why not select a consultant based on lowest bid?" The answer is that design services are different in nature than construction services because project design informs construction tasks and subsequently overall project cost.[4] For example, design can take into consideration life-cycle and maintenance costs. Design based on low bid could mean that lower costing (and likely less experienced) personnel are doing the work, or that innovative or creative alternatives are not considered.[5] In the long-run, a cheaper design could mean the overall project costs more (including life-cycle and maintenance costs) or will not last as long as a project carefully designed. To put this in perspective, according to guidance published from the Washington State Office of Financial Management, approximately one-third of public works project costs should be for design. If project design costs less, for instance, because particular products or methods were not utilized, the constructed project could have higher maintenance costs attributed to the use of inferior products or methods, thus increasing the overall cost over time.

[2] Presentation for the 30th Annual State Construction Conference McKimmon Conference & Training Center, Raleigh, North Carolina, March 24, 2011
[3] From "Guidelines for Contracting for Architectural, Engineering, Land Surveying & Landscape Architect Services in Washington State", Accessed 10.8.11: http://www.yvl.org/AELC%20QBS%20Guidelines-Smaller.pdf
[4] From "Guidelines for Contracting in Washington State," 2005
[5] From "Qualifications Based Selection of Professional Services Consultants," posted on the American Public Works Association's (APWA's) website, included in the organization's QBS advocacy statement.

The pitfalls of hiring consultants for design projects via low-bid instead of QBS has been supported and documented by organizations such as the American Council of Engineering Companies (ACEC), the American Public Works Association (APWA), the Municipal Research and Services Center (MRSC), and the American Institute of Architects (AIA). All consulting firms, regardless of the type of services offered, earn their money by billing out "hours." Because professional consulting firms are not selling an actual commodity, the only way to lower the cost charged to complete a project is to either cut the number of hours spent on the project, use less experienced personnel that cost less per hour, or implement some combination of both methods. For design firms to win project work via a low bid, they would have to use less experienced personnel, evaluate fewer alternatives, develop plans and specifications that include less detail (which in turn can add to construction costs through additional Requests for Information [RFIs] or submittals) and provide minimal review of final drawings, plans, and specifications. All of those tactics add up to less attention to detail and perhaps lower quality of the final product.

Every solicitation for professional design services in Washington State - regardless of what entity issues it - falls under the state's QBS requirements, and yet the solicitations are all somewhat different. For example, some public entities such as King County's Water and Land Resources Division will issue 40-70 page solicitations which can include sample contracts, requests to write an approach to a fictitious project scenario, and specific forms that must be returned with responses. Some jurisdictions, such as the City of Port Angeles or Pend Oreille County, will issue simple two or three page solicitations which include very little direction or guidance on how to structure the consultant's response. Still other entities will issue solicitations that are replicas of forms and/or scopes of work found on state websites. Some entities, such as the Washington Department of

Transportation, will issue solicitations that have specific page limits, request project schedules, and also include unique forms.

As QBS has become more widespread, public entities have had to assume the responsibility of utilizing this procurement process. In Washington State, each public entity has the leeway to determine what type of information constitutes "qualifications" when its representatives draft a solicitation for a particular project. This project analyzes the types of information requested by public entities that must be included in responses to solicitations to determine how public managers in Washington State seem to be interpreting QBS, and also serves to indicate if the information requested is consistent both with Washington's "mini-brooks" act and with responses that public managers gave to survey responses regarding the use of QBS.

# Literature Review

## Challenges of Efficient Provision of Public Goods

A challenge of providing public goods, no matter who pays for them or how they are financed, is that everyone (i.e. the general population) receives the benefit(s), regardless if they have contributed to paying for them or not. Public goods are non-excludable, meaning their consumption is not exclusive to those paying for them, and they are also non-rivalrous, meaning that consumption of the good and/or service by one individual or group in the population does not reduce the availability of the same good for others in the population. The non-excludability and non-rivalrous characteristics of public goods create challenges for public managers when considering how to efficiently provide them in the first place.[6]

The provision and consumption of private goods is based upon economic principles of supply and demand, and price and availability of these goods is regulated by competition among providers and consumers. Public goods such as transportation (roads, sidewalks, or bus services) sewage treatment (including infrastructure to public buildings and venues, businesses, and residences), or water resources (clean water available at drinking fountains, public places, businesses, and residences) are expected to be provided by local government. Often, public officials must procure outside contractors or vendors to design, construct, manage, and/or monitor the resulting public products or services. The challenge for public managers when providing such services involves not only a balance of costs and benefits, but understanding what the general population of a community desires and/or needs. The provider of public goods (such as local government or public agencies) may invest in providing a good such as improved air quality or

[6] Tebout,1954.

cleaner water that will benefit all in the community, whether all citizens are involved in helping to pay for them or not.

Public managers are challenged with how to procure outside vendors to provide goods or services. Much literature found centers on the bid process for construction contracts. In 1991, Steven M. Goldblatt, chair of the University of Washington's Department of Building Construction, published a study of various contract delivery methods per existing statues. He concluded, "Washington's fragmented and outdated statutory framework for public works' procurement does not contemplate modern practices."[7] Professors Terry Brown and Matthew Potoski have extensively studied public construction contracts, specifically analyzing what types of contracts are effective.[8] They collaborated with David M. Van Slyke to investigate if intangible "deliverables" such as "trust" among entities and contractors also affects the contracting process. Their research indicated that a conflict for public managers is determining how much to trust contractors or consultants when negotiating contracts. They concluded that when government managers contract with trusted vendors the transaction costs of "managing, monitoring, and enforcing the contract" decline as trust deepens.

The implications of existing or non-existing trust relationships on QBS selection can be significant. If public managers most efficiently manage contracts when they work with trusted vendors, how can they objectively evaluate proposals and interviews based on qualifications when they are evaluating submitters whom they have both worked with in the past or not worked with at all? Questions of information asymmetry abound when discussing qualifications and costs of services. By definition, information asymmetry means that individuals or organizations engaging in

[7] Goldblatt, 1991
[8] Brown & Potoski, 2006

a transaction have an unbalanced or unequal amount of information available on which to make decisions; this inequality of information also means there is an unequal amount of transaction bargaining power that can affect the transaction outcome. Nayyar notes that information asymmetries provide competitive advantage to sellers only if "reputation can legitimately be transferred."[9] Information asymmetry is a reality of the QBS process when a proposing consultant has previously worked for a public agency and other proposers have not; does the information the "incumbent" consultant have mean it is more qualified to perform the requested services, or that it could perform more cost effectively? A look at proposal solicitation requirements helps us determine what information public managers use to assess the needed expertise for a given project, and might shed some light on the information asymmetries that may influence the procurement process.

## Responsibilities for Ensuring Quality Performance

For public managers, measuring quality performance involves determining how to be responsive to the needs of the community. Quality performance could include measurements of effectiveness, efficiency, deliverables, and outcomes. Public managers are accountable to their constituents for the use of resources such as tax or grant funds, and determination and use of performance measures enhances accountability. In contrast, within private markets quality performance and effectiveness depends a lot upon competition; in the absence of information asymmetries, profit and loss suffice. Whether private markets assess design expertise differently than public agencies is beyond the scope of this paper. But those in the general public are

[9] Nayyar, 1990

"customers" of government services[10] and cannot ignore or choose not to utilize the services in the same way they could abstain from purchasing products in the private market. In the absence of competition, public managers need to determine measures of quality and success and subsequently set goals and objectives to use as benchmarks.[11]

In an economic recession, public managers are faced with increasingly smaller budgets while at the same time they have a great demand for services and programs; the general public demands that public resources be used prudently and thus demand accountability for quality performance. Public managers must measure the costs and benefits of providing public goods and services and also measure the ability to carry out efficient decisions, including the procurement of professional services and performance management of the subsequent contracted services.

The professional organization ACEC is a well known, politically active, nationwide engineering organization that has supported passage of mini-Brooks laws in many states and continues to support use of this process through its publications and seminars. Design project case studies published by ACEC address quality performance problems that could have potentially been avoided had the consultant been chosen via a QBS process rather than a bid system.[12] One of the highlighted projects describes how two elevated walkways at a Kansas City hotel collapsed during an event, resulting in the death of 111 people while injuring over 100 more. The design engineer had been chosen via a bid system, and subsequently, the walkway "rod assemblies" were not actually designed by the engineer, but by the fabricator, as a method of keeping the bid low. If winning the work via a low bid was not important, then the design firm may have properly

[10] deVries, 2001
[11] Ibid.
[12] See "Bidding is not the Solution: Case Studies in Bidding", available at www.acec.org.

designed the rod assemblies. Another example from this same article describes the collapse of a grocery store rooftop parking structure in British Columbia. When the collapsed roof was investigated by the Canadian government, it was determined that the disaster could have been avoided if the structural engineer had been chosen based upon qualifications and experience instead of a low bid.

Such anecdotal examples do not demonstrate that we would never find instances of quality performance issues if a QBS process is used, but they do highlight the differences that are at the heart of the selection process discussion when using QBS versus a bid system. Choosing a consultant based on qualifications (QBS) versus choosing by cost (bid system) raises quality performance questions such as: Who is qualified to perform contracts? What should the measurement of qualifications be? How can qualifications be evaluated when choosing a consultant to complete a public project? Does the measure of quality performance include the ability to estimate the cost of a project?

## Tradeoffs Between Qualifications & Cost of Services

Some argue that "lean government" is best and that contracting services is "more cost-efficient and better stimulates innovation than direct service delivery" (Brown, Potoski, Van Slyke, 2006). Brown and Potoski also argue that the pros and cons of internal project delivery compared to contracted services vary "across circumstances", and that there is not one set of rules to determine whether a public entity should contract out or not. When a public good is actually a service that is contracted out, the difficulties of valuation and allocation enter the picture. Placing a value on services is different than assigning value to a product, mainly because attributes assigned to services are not as defined or concrete as those assigned to a physical product.

While researchers such as Brown and Potoski and organizations such as the Washington Roundtable advocate contracting out as an efficient way to get the best bang for the buck, Young Woon Kim (2009) advocates studying if the design of outsourced contracts affects the performance of contract execution. Kim investigates potential links between contract design and performance. He advocates looking at "bargaining power constraints by contracting with vendors with less bargaining power, such as small firms and emerging firms. Future studies could explore how governments can choose the entire spectrum of contract designs to improve service quality at lower costs."[13] Kim points out that public managers could influence quality performance through contract design by including ways to motivate the contracted firm to provide quality performance and also allow public managers to effectively manage the contract.[14]

Paul Sommers of Seattle University (2004) questioned the efficiency of contracting out needed services by Washington State government and he compiled figures extracted from the Washington State Auditor and the Office of Financial Management (OFM) in 2004. However, in the data he compiled the categories for contracted "service" expenditures are blended with "goods" so it is not possible to ascertain exactly what the state spent on contracted services alone. In this information, the category of "goods and services" totaled 9% of the state budget in 2004. Sommers included a quote in his write-up from an OFM representative who stated that contracting information "is not captured in that way nor are all types of State contract data available in a central location."[15] Sommers agrees with this statement, indicating that financial information related to contracted services is not readily available and even if it was, obstacles such as

[13] Kim, 2009
[14] Ibid.
[15] Ibid.

classifying contract types and distinguishing between budgeted amounts and actual contracts would have to be tackled. He questions whether a financial impact analysis should include an alternative to contracting in order to make sense of the resulting numbers by obtaining a "net impact."

Klein and Leffler (1980) discuss how quality (performance) can be influenced by the way in which market transactions (i.e. contracts) are organized. They determined that "some elements of performance" can be determined and enforced thru a contract's obligations while other performance elements could be enforced via "the threat of termination of the transactional relationship."

In his classic text, *Capitalism and Freedom,* Milton Friedman (1962) devotes an entire chapter on "occupational licensure" and raises this question: "Does licensure have the good effects it is said to have?"[16] Friedman discusses licensure, registration, and certification and how these are used to "ensure minimum quality" for the user of services by "professionals" carrying these labels. Friedman also argues that in the medical profession he is convinced that the quality of services provided is of lesser quality because of licensure. Friedman says this:

> *"When these effects are taken in account, I am myself persuaded that licensure has reduced both the quantity and quality of medical practice; that is has reduced the opportunities available to people who would like to be physicians, forcing them to pursue occupations they regard as less attractive; that is has forced the public to pay more for less satisfactory medical service, and that it has retarded technological development both in medicine itself and in the organization of medical practice."*[17]

More than forty years after Friedman's book, the question of licensure and its relevance to performance quality is relevant to QBS. When surveying the information that is requested in

[16] Friedman, 1962, p.155
[17] Ibid, p. 158.

solicitations, licensure of proposed personnel is sometimes used as a measure of qualifications, even though we do not know how successful qualifications are in predicting quality performance. Public managers in Washington State, through use of the mandated QBS process, are trying to define an efficient process to determine qualified consultants. Ultimately agency officials rely upon the information they request and evaluate in responses to their solicitations.

## Research on Existing & Alternative Bid/Proposal Processes

Washington state procurement policy allows "alternative contracting procedures" to choose contractors (though not consultants).[18] It is recognized that some public interests could be served by contracting through means other than a traditional bid method that awards contracts to the firm that submits the lowest project cost. Under RCW 81.112.070, a "best value procurement" process can be used to select a contractor based upon "objective and equitable criteria."[19] This is similar to the QBS process for choosing consultants. For "best value procurements," some public managers have chosen to institute a pre-qualification process prior to issuing a solicitation, where they request qualifications packages from prospective contractors. After reviewing the qualifications packages, they will then only invite specific firms to submit cost proposals (bids).[20] A pre-qualification process such as the one outlined touches on the information asymmetry challenges discussed earlier; a public manager in essence has a sneak peek of a firm's qualifications and can form a judgment concerning them. There also exists an opportunity to affect the review and award process by inviting specific firms to propose based upon a preference for working with one or another, regardless of qualifications.

[18] Accessed 12.8.11: http://apps.leg.wa.gov/rcw/default.aspx?cite=39.10.200
[19] Ibid.
[20] Dippold, Mercalde, and Nourse, 2004

The first national study analyzing QBS was jointly conducted by Chinowsky and Kinglsey in 2009.[21] They surveyed procurement specialists at agencies and consulting firms across the nation, seeking to analyze the use of QBS on project outcomes. The majority of their responses indicated that agencies and consultants support or are in favor of using QBS as opposed to a bid system to choose consultants.

A year later in 2010, another investigation into the use of QBS was conducted by a panel of members with MRSC in conjunction with the Washington State Chapter of APWA. In preparation for the Fall, 2010, Workshop, "Help Build Your Extraordinary Future Projects by Selecting Extraordinary Consultants Now", the organizations joined forces and sent surveys via an electronic polling tool, Survey Monkey, to city and county engineers and public works directors across Washington State. The questions were designed to solicit responses that indicated whether public managers supported or opposed the use of a QBS process; the majority of agencies surveyed indicated they support QBS for contracting professional services. And yet, the question remains, even though public managers indicate they support QBS, what information do they request and how do they evaluate that information to determine if a consultant is qualified to complete the project at hand?

## Rent-Seeking Through Barriers to Contracting

Some research has been conducted about the size and types of firms that are awarded public contracts, and there is evidence that suggests that minority or women owned business enterprises (M/WBEs) receive significantly smaller amounts of prime government contracts than

[21] Chinowsky & Kinglsey, 2009

other firms.[22] Minority "set-asides" began in the 1970's with the passage of the "Atlanta Plan" of 1974. A set-aside is just what it sounds like – a particular contract for services is advertised and can only be submitted upon by the type of firm that meets the set-aside criteria. Sometimes set-asides are designated for firms that fall within an annual revenue category and thus are considered "small." Some set-asides are specifically for firms that are women or minority owned (M/WBE). The idea of creating set asides, especially in smaller towns or rural areas, is that M/WBEs would be able to compete based upon qualifications against other similar small businesses. The idea is that if there were no set-asides, then larger incorporated firms would submit and win contracts even in rural areas because they would most likely have the resources (both in expertise and manpower) to win those contracts than smaller firms, who could be as capable, might be located locally, and perhaps might end up even cheaper because of their lower overhead and close proximity to the project. The Atlanta Plan was the first program to require that a specific percentage of public contract be awarded to an M/WBE firm.[23] Since then, public contract "set-asides" for M/WBEs have become commonplace for many jurisdictions or public agencies. Even so, this does not seem to have resulted in more work being awarded to these types of firms.

Some research indicates that M/WBE firms do not submit as often on public contracts as non-M/WBE firms, and this may be part of the reason why there is a lower percentage of work awarded to these types of firms. La Noue has made the case that M/WBEs simply lack expertise (i.e. qualifications) and capacity to take on the same types of contracts as non- M/WBE firms.[24]

[22] Bangs, Murrell, and Constance-Higgins, 2007
[23] Ibid.
[24] La Noue, 2004

Enchautegui et al. (1997) concluded that M/WBE firms by nature have fewer financial and human resources (i.e. in-house expertise or talent) to pursue many of the same projects as non-M/WBE firms. They also noted that firms in the M/WBE category usually have less access to borrowing funds as well as less access to the same competitive markets as non-M/WBE businesses, which in turn could affect the types and size of projects they successfully pursue.

Sullivan and La Noue predicted in 2004 that "set-asides may die soon, now that officials are being held liable." The authors point out several specific instances that occurred in the late 1990's and early 2000's that were challenged in court. Contracts were advertised as small business set-asides, and yet no small firms submitted responses to solicitations to perform the work. When a firm that was not a small business proposed to do the work, the jurisdiction did not award the contract, but rather re-advertised the project in an attempt to ensure it would be awarded to a small business. The firm sued, and subsequently won, stating that the "small business set-aside" was not "legally defensible."[25] The authors describe another instance in Florida that involved a minority set-aside. When no minority owned firm proposed, the contract was not awarded to a qualified small business that was owned by a white male. These are instances where set-asides did not necessarily benefit the small or minority-owned firms they were intended to help, and in fact were ruled in court as prejudicial towards qualified firms who were not owned and operated by women or minorities. This brings us back to the central questions of this project: What information do public managers request in consultant responses to solicitations for public projects, how is that information evaluated to determine who is qualified to perform the work, and is the information requested and evaluated consistent with Washington's "mini-brooks" act?

[25] Sullivan & La Noue, 2004

# Methodology

The research presented here addresses three main questions concerning the QBS process in Washington State:

1. What types of information are requested by public managers and used to determine consultant selection?
2. Is the requested information consistent with Washington State's "Mini-Brooks" Act?
3. How does the information requested in a sample of solicitations compare to responses that public managers gave to surveys conducted by MRSC/APWA in 2010?

In an attempt to answer these three questions, I plotted the information that was requested of consultants from 147 solicitations issued for public projects in Washington during 2011 and the early months of 2012 into a spreadsheet "scorecard." Then I compared the survey responses and ranking criteria obtained by MRSC/APWA regarding the QBS process through their 2010 joint survey of public managers in Washington State[26] with the information requested of consultants in the 147 solicitations. Initially I gathered 180 solicitations; of these, 30 were eliminated as irrelevant because they were issued by private developers, non-profit organizations, or tribes, and hence they were not required by law to use the QBS process. Three solicitations were eliminated when I discovered they were duplicates of others already included. All of the solicitations used for this project were published in the Daily Journal of Commerce (DJC, an accepted industry standard). The solicitations advertised engineering, architectural, landscape design, surveying, or other professional services (such as natural resource assessment or environmental compliance) needed to complete public projects. The timeframe when the sample

[26] Survey questions and responses, including analyses of responses, are attached to this project. They are also posted online: http://www.mrsc.org/subjects/pubworks/sourcebook/documents/app%20j7b%20-%20mrsc_apwa_pss.pdf

of solicitations were advertised (2011 and the early months of 2012) was chosen because these projects were scheduled after the MRSC/APWA survey of public managers was conducted in 2010. To evaluate the solicitations, I created a spreadsheet "scorecard" to plot the information requested (by public agencies) which was used to evaluate consultants who proposed to complete the advertised projects.

While professional, industry-related organizations such as ACEC or APWA provide information via manuals and their webpages on the steps that should be taken to implement a QBS process, there is not a set of guidelines or a published list of information that public managers should request when seeking responses to solicitations. The variables plotted in my Excel "scorecard" were derived directly from the 147 solicitations.

There are also no published guidelines for how to score requested information. As the different requested criteria were plotted into the scorecard, two main groups of solicitations emerged: those that revealed the scoring method used for responses and those that did not disclose the scoring method (revealed and undisclosed). Some of them indicated that staff resumes (for instance) were worth a stated number of points, while others asked for staff resumes but did not reveal the evaluation points assigned to this criteria. This adds significant confusion to the QBS process because it is unclear to consultants when preparing to submit on a project if they should put more emphasis in their written submittal on staff resumes or on a different category of information; it is also unclear if all requested information is scored with equal weight or value. More importantly, scoring of each component of information is an indication of how the public manager for that project defines who is a qualified consultant for that particular project.

There were 79 solicitation responses in which points were assigned to evaluate specific sections of the proposal; the number of points assigned to each of these proposal sections were recorded in the scorecard. For the other 68 agency solicitations without explicit scoring, I used a "Y" or "N" ("yes" or "no") to record whether a specific item was requested for inclusion in solicitation responses. After plotting the variable information in the scorecard, pivot tables and filters in Excel were used to compare the frequency and total percentages that various variables were requested. Finally, I created a master list of all 147 solicitations, and indicated all criteria with either a "Y" or "N" to simply note whether the information was requested or not, regardless of the score assigned to each.

A definition of all of the variables follows in Table 1.

**Table 1. Definition of Variables**

| Variable Name | Variable Definition |
|---|---|
| Owner | Name of the project owner. |
| Owner Type | Description of the type of Washington public agency or jurisdiction that owns the project advertised in the solicitation. Noted as:<br>• City,<br>• County,<br>• Special Agency ( water or wastewater districts, transportation agencies, etc.),<br>• State (State of Washington department such as ecology or transportation),<br>• Port, (port authority), or<br>• School District. |
| Population of Owner Area | Taken from the U.S. Census Bureau webpage, 2010 figures, for the city, county, or state population. Population for Ports and School Districts was unattainable because these both cross jurisdictional lines. |
| Announcement Date | The date the solicitation was publically advertised. |
| Due Date | The date a proposal for the project advertised was due to the client in response to the advertised solicitation. |
| No. Days Between | The number of days between the project advertisement and proposal due date. (Or, the number of days a prospective consultant had to prepare a proposal in response to the solicitation.) |
| Potential Contract Length | The amount of time in months allotted or needed to complete the proposed project work. |
| Potential Contract Amount | The owner's stated budget of funds allotted for the proposed project work. |

| | |
|---|---|
| Type of Solicitation | The title given to the type of solicitation as stated in the document by the owner:<br>• Request for Proposal (RFP),<br>• Request for Qualifications (RFQ),<br>• Roster,<br>• Prequalification. |
| Open or Select Competition | Open solicitations were open to any consultant to submit upon; select competition means that only consultants who have previously complied with a prequalification process have been invited to submit on this particular solicitation. |
| Type of Evaluation Process | The evaluation process involved a pre-qualification plus a submittal; a submittal plus an interview; a submittal alone; a submittal plus an interview; or just an interview. |
| Pre-Bid Meeting | Stated in the solicitation, either attendance at a meeting prior to submitting a proposal was required or not. |
| Scoring Criteria Outlined in Solicitation | The points allotted to particular categories of requested information was outlined in the solicitation; or particular categories of information were requested be included in a consultant's submittal and the scoring of each category of information was not divulged in the solicitation. |
| Letter | A cover letter to the solicitation response. |
| TOC | A table of contents for the solicitation response. |
| Firm Profile | A written, narrative description of the services typically provided by the consulting firm proposing on the advertised project. |
| Year Firm Established | The year the proposing firm began providing the services described in the firm profile. |
| Contact Person is Authorized | The person proposed as the main point of contact representing the proposing consulting firm to the public manager regarding all project communication is authorized to sign a legal contract to do the work proposed. |
| Firm Org Chart | An organization chart of the entire firm that is proposing on the advertised project. |
| Project Org Chart | An organization chart depicting only those employees of the proposing firm that are targeted to complete the proposed project. |
| Specific Key Team Roles | The project owner requested that individuals from the proposing firms fulfill specific roles on the project. (As opposed to the proposing firm deciding how to structure their team.) |
| Project Examples | Written narratives of previous work completed by the proposing firm. |
| Limits on Project Examples Allowed | The owner stipulated that only a certain number of project examples were allowed in the written solicitation responses. |
| Subcontractor Info | The owner requested that information be included in the solicitation response regarding any firms or individuals hired as subconsultants by the proposing firm. |
| Project Understanding | A written narrative of the proposing firm's understanding of the potential project's location, issues, and/or parameters. |
| Resumes | Resumes for each individual on the proposed project team that include a brief biography, education, certifications, licenses, and previous work examples similar to the potential project. |
| References | Individuals which the owner can contact who can attest to the work performance of the proposing firm and its employees on previous, similar projects. |
| Project Approach | A written narrative describing how the proposing firm plans to accomplish the advertised project. |
| Management Writeup/Plan | A written description of how the proposing firm will manage communication and project progress between the owner and the consultant, including schedule, budget, conflict resolution, and project kickoff/closeout. |
| QA/QC | A written description of the proposing firm's quality assurance and quality control process for ensuring that project deliverables meet the owner's standards. |
| Returned Addenda | The owner requested that copies of signed proposal addenda be included in the solicitation response. |
| Specific "unique" Forms | The owner requested that specific forms included in the solicitation must be signed and returned by the consultant with their response. |

| | |
|---|---|
| Work Product Examples | Copies of work product reports from previous projects completed by the proposing firm must be included in the solicitation response. |
| Page Limit | The submitting firm must include all of the requested information within a certain page limit. |
| Font Limit | The submitting firm must conform to specific font size requirements within their solicitation response. |
| Schedule | A graphic depicting a timeline for completing the project work described in the project approach, including specific milestones and deliverables. |
| Proposed Cost | A budget to complete the project broken down by number of hours to complete each task, the employee proposed to complete each task, hourly rate per employee, and a total cost. |
| Rate Sheet | A table listing each proposed employee with their corresponding billing hourly rate. |
| Insurance Certs | Proof that the proposing firm is insured to complete the type of work required for the potential project. |
| Small Biz Participation Plan | The owner requires the proposing firm to hire certified small, emerging, woman, or minority owned firms as subconsultants to conduct a percentage of the project work. |
| Marketing Materials | The owner requests that additional information about the firm be included with the solicitation response as attachments. |
| Responsiveness to Request | Scoring points are subjectively assigned based on how well the public manager perceives the proposing firm met the criteria requested in the solicitation. |
| Total Score | All solicitations that included scoring criteria were adjusted if necessary to be equal to 100%. |

# Data Analysis & Results

Table 2 describes the sources of the 147 solicitations used, and depicts the two main categories that emerged: those that revealed the scoring method used for responses and those that did not disclose the scoring method (revealed and undisclosed). As discussed in the Methodology, different methods of scoring solicitation responses suggests that some public managers place a higher value on certain information over other information, and thus scoring of each component of information is an indication of how the public manager for that project defines who is qualified to perform the work.

The following pages provide discussion of the three main questions posed in the Methodology in relation to the information plotted in my Excel scorecard and compared to the MRSC/APWA survey responses.

**Table 2. Source of Solicitations**

| Solicitation Issuer | Total Solicitations Issued | Revealed Scoring Method | Undisclosed Scoring Method |
|---|---|---|---|
| City | 64 | 34 | 30 |
| County | 32 | 16 | 16 |
| Special Agency | 23 | 10 | 13 |
| Washington State Department | 13 | 12 | 1 |
| Port Authority | 11 | 6 | 5 |
| School District | 2 | 1 | 1 |
| Combined Agencies | 1 | 0 | 1 |
| Town | 1 | 0 | 1 |
| Total | 147 | 79 | 68 |

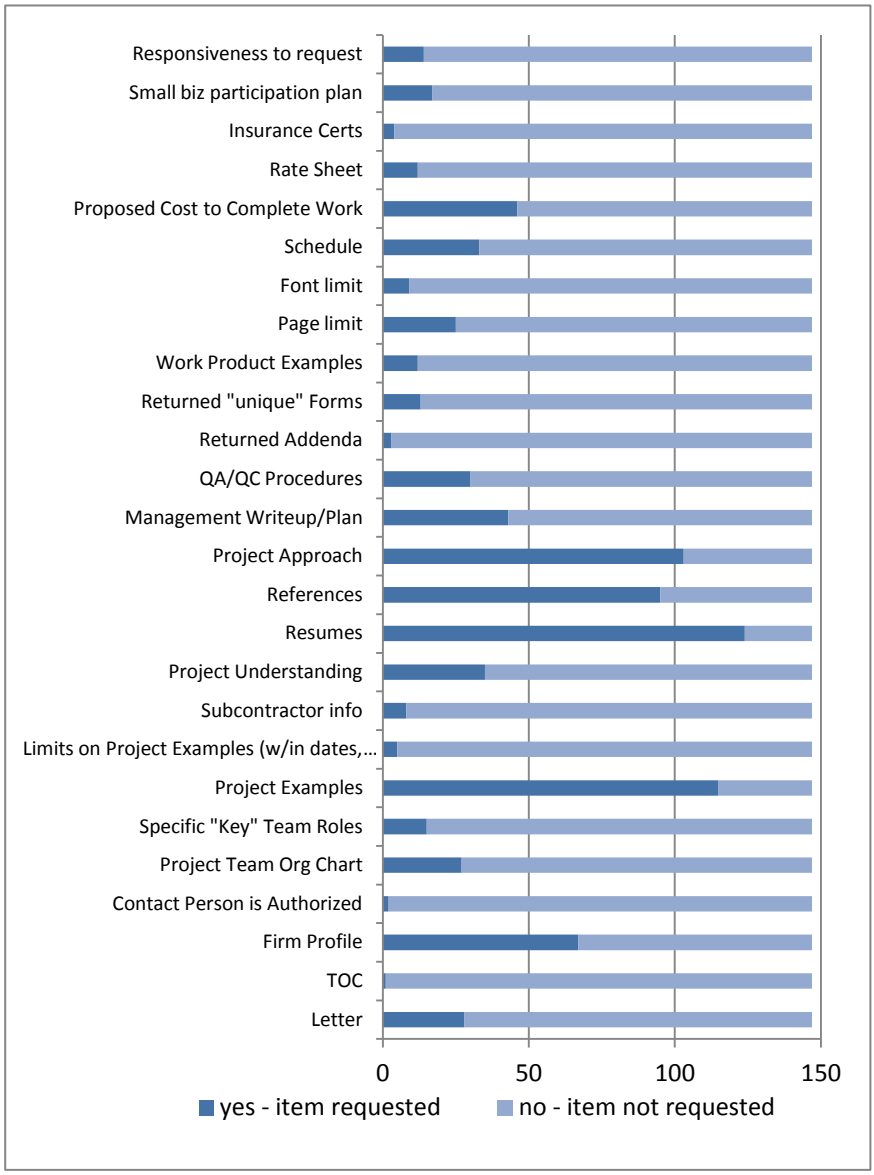
## Question 1: What types of information are requested by public managers and used to determine consultant selection?

As anticipated, many of the items requested are relevant to whether a firm is qualified to perform the project. For instance, examples of previous work, employee credentials, or references would provide some measure (although subjective) of qualifications. Other requested information, though, seems at best merely an indication whether the proposing consultant can follow directions. Many solicitations had page or font limits indicated for responses, or required proposing consultants to include or attach specific forms. And some solicitations requested cost, rates, or project schedules; those variables seemed contrary to the intent of the QBS process.

Similar items were requested across all solicitations, i.e., both those that contained scoring methods and those that did not. It does not appear that the type of entity that issued the solicitation makes any difference in the type of information requested. For the 79 solicitations that revealed their scoring method, project approach, resumes, project examples, references, firm profile, and proposed cost were the six criteria allotted the most evaluation points. For the 68 solicitations with an undisclosed scoring method, the most frequently requested items were project examples, resumes, references, firm profile, project approach, and proposed cost, in descending order of frequency.

Even though in the QBS process cost is not supposed to be scored or requested, proposed cost to complete the work was the sixth highest scored item in the group that revealed the scoring method and the six most frequently requested item in the group with undisclosed scoring methods. These ranked items do not change if all 147 solicitations are looked at in one group, with all items noted as either requested or not with a "Y" for yes or "N" for no. Looking at the entire group (see Chart 1), the six most requested items remain essentially the same, although in a bit different descending order: resumes, project examples, project approach, references, and firm profile, with proposed cost to complete the work still being the sixth most requested item. The remaining criterion in my scorecard (see definitions noted previously in Table 1) were requested in solicitations in both groups, but were assigned less points and were requested less frequently.

**Chart 1. Requested Information Within Sample of 147 Solicitations**



## Question 2: Is the requested information consistent with Washington State's "Mini-Brooks" Act?

The top five categories of information most requested (resumes, approach, references, firm profile, project examples) seem to support the idea that they are measures of a firm's qualifications. Requests for project cost are a contentious measure of designer qualifications because the policy stipulates that cost should be negotiated after the firm has been deemed qualified to perform the work, and yet cost was the sixth most frequently requested item within the 147 solicitations used in my sample. However, several public managers that responded to the MRSC/APWA surveys commented they believed cost should be used as a measure of qualifications because a detailed cost proposal could indicate the consultant's knowledge of project scope.

As discussed in the background information in reference to the text of the Brooks Act and Washington State's "Mini-Brooks" Act, the request to include a cost proposal seems contrary to the intent of the policy. The main concept of the policy is that design consultants will be chosen on qualifications, not low cost. If cost if used as the qualifier, then consulting firms may "cut corners" to keep the cost low; they might propose less experienced personnel complete the work, or might include inferior products in the design specifications. And yet, proposed cost to complete the work made up 6% of all of the points awarded in the 79 solicitations that revealed the scoring method. Within these 79 solicitations, points assigned to the cost section of a solicitation response ranged between 10 and 35 of 100 total points for the proposal. Proposed cost to complete the work was asked for in 32% of the solicitations that did not reveal the scoring method used.

## Question 3: How does the information requested in these 147 solicitations compare to survey responses of public managers conducted by MRSC/APWA in 2010?

The types of information requested by public managers in my sample of 147 solicitations for public projects was similar to the information that surveyed managers said they believed was important to evaluate, even though different scoring methods to evaluate the information was used. A majority (74%) of the public managers surveyed by MRSC/APWA indicated they agreed that professional service contracts should be awarded based upon qualifications first, with no initial consideration of price. According to the survey responses, public managers indicated they thought the top six most important types of information to use to evaluate qualifications are: production capabilities, project examples, references, firm location, project understanding, and key personnel resumes. Two items in the top six, "production capabilities" as well as "firm location," were not requested in any of the solicitations included in my sample. Also in the MRSC/APWA surveys, "project understanding", rather than "project approach" was indicated as important to evaluate when qualifying consultants. Even though public managers indicated via surveys they support the QBS process, the information gathered via the 147 solicitations indicates that cost is also being used to evaluate consultant qualifications for design projects.

Additional information revealed in the MRSC/APWA survey responses is that 70% of agencies said they have written procedures for consultant selection and 78% said they use different processes for different level of complexity projects, although descriptive answers that used cost as a measurement of complexity ranged anywhere from $15,000 to greater than $250,000.

One public manager polled commented that cost should be part of weighted criteria. Several public managers commented they believed that cost was a good indication of whether the

consultant is indeed qualified because it demonstrates that the consultant understands the scope or magnitude of the project work. One public manager commented that all of the firms who submit on a particular project are qualified, and they often must justify to the losers why the winning firm was selected. Public managers expressed frustration that the QBS process takes a lot of time, and then after selecting a consultant they are unable to negotiate a contract because the budget expectations between the public manager and the consultant are too far apart.

# Policy Conclusions

The information requested and scored by public managers when evaluating consultants gives us an idea of how public managers are interpreting and implementing QBS in Washington State. In the absence of standardized guidelines for public managers to use when issuing solicitations and scoring responses, they seem to be broadly interpreting the policy by requesting a large variety of information. The answer to my central question posed at the beginning of this study – how are public managers interpreting QBS – is indicated by the data collected. The public managers who authored the 147 solicitations in this study centered their evaluations (regardless of their scoring methods) primarily on a proposer's firm history, previously completed projects, references, resumes, and project approach. However, in addition to these primary categories of requested information, some managers also requested proposed cost as a "qualifier." The reasons for requesting cost are unknown except for several survey responses which indicated cost was perceived as a way to evaluate a consultant's knowledge of project scope. A clear definition of "most qualified" did not emerge from this study. Rather, the types of information requested and the variety of scoring methods applied to solicitation responses was learned.

# Recommendations for Future Research

Even though I understand the primary types of information public managers deem important to evaluate, related questions have arisen concerning the use of cost as a "qualifier" for projects governed by the QBS policy. New questions raised include:

- Considering the variety of requested information and scoring methods utilized, can use of the QBS process be enforced?
- Is it possible for the QBS process to be implemented in a standard fashion across public agencies; is standardization of the process desirable?
- Does proposed cost indicate qualifications, as some polled public managers indicated in their comments?
- How can we be assured that design contracts are awarded to the "most qualified" firms?

A simple next study would be to survey subsequent solicitations issued by the same agency over a period of time to see if that particular agency is using consistent information request and scoring methods across projects. Another subsequent study would be to replicate this one over a longer period of time and include a larger number of solicitations, and then analyze the information requested by each of the groups of owner types issuing the solicitations (city, county, etc.) to see if these findings change. More detailed statistical analysis could be done to see if there is a correlation between owner type or project type and the variables of information requested.

# Bibliography

Bangs, R.L., Murrell, A., and Constance-Higgins, M. (2007) Minority Business Bidding for Local Government Contracts: The Complexity of Availability. Social Work in Public Health, 23:2, 247-262. DOI: 10.1080/19371910802152109

Bates, T. (2001) Minority business access to mainstream markets. *Journal of Urban Affairs, 23* (1), 41-56.

Baxandall, P. & Wohlschlegel, K. (2010) Following the Money: How the 50 States Rate in Providing Online Access to Government Spending Data. Retrieved on 4.16.11: http://www.uspirg.org/home/reports/report-archives/tax--budget-policy/tax--budget-policy--reports/following-the-money-how-the-50-states-rate-in-providing-online-access-to-government-spending-data

Beckwith, H. (1997) Selling the Invisible: A Field Guide to Modern Marketing. Business Plus: New York.

Brown, T. L., Potoski, M. and Van Slyke, D. M. (2006), Managing Public Service Contracts: Aligning Values, Institutions, and Markets. Public Administration Review, 66: 323–331. DOI: 10.1111/j.1540-6210.2006.00590.x

Brown, T. L., Potoski, M., & Van Slyke, D. M. (2007) Trust and contract completeness in the public sector. Local Government Studies, 33:4, 607 – 623 DOI: 10.1080/03003930701417650

Chess, C., & Purcell, K. (1999) Public Participation and the Environment: Do We Know What Works? *Environmental Science Technology, 33,* 2685-2692. **DOI:** 10.1021/es980500g

Chinoswky, P.A., & Kingsley, G.A. (2009) An Analysis of Issues Pertaining to Qualifications-Based Selection. Kansas City, MO: ACEC

Contracting for Professional Services in Washington State A Survey of Local Agencies and Consultants June- July 2010, Retrieved 8.15.11 from: http://www.mrsc.org/subjects/pubworks/sourcebook/documents/app%20j7b%20-%20mrsc_apwa_pss.pdf

De Vries, W. (2001) Performance, Quality, Management: How Statistical Offices Try to do Better. Paper for *Kuala Lumpur seminar, New York.* Retrieved on 12.3.11 from: http://unstats.un.org/unsd/methods/statorg/Workshops/KualaLumpur/01_Perfomance_Indicators_Paper.PDF

Dippold, J., Mercalde, S., & Nourse, S. (2004) Government Takes a Shine to Alternative Bids. Retrieved on 12.8.11 from: http://www.djc.com/news/co/11155167.html

Duggan, M. (2002) Does Contracting Out Increase the Efficiency of Government Programs? Evidence from Medicaid HMOs. Retrieved on 7.17.11 from: http://econweb.umd.edu/~duggan/mcd_hmo.pdf and http://www.nber.org/papers/w9091

Earl-Hubbard, M. & Norman, D.M. (2010) Open Government Laws and Public Contracts: Overview of Washington Laws and Practice Tips for Obtaining Records. Retrieved on 7.10.11 from: http://www.washingtoncog.org/pdfs/2010-04-02%20Allied%20Law%20Group%20ABA%20CLE%20Public%20Contracting.pdf

Enchautegui, M., Fix, M., Loprest, P., von der Lippe, S., & Wissoker, D. (1997) *Do minority-owned businesses get a fair share of government contracts?* Washington, DC: Urban Institute.

First accessed 8.16.11 (and then referenced on subsequent dates while obtaining info for the scorecard): http://www.djc.com/ae/wanted.html?action=search&query=&all=1&section=ae&sort=d&pc=br&date=2011-08-13&bd1=4%2F1%2F2010&bd2=6%2F30%2F2010

Fleenor, C. & Hall, S. (2002) The State of QBS: Battles at the Local and National Level are Challenging How Firms do Business. *Engineering Inc.*

Friedman, M. (1962) Capitalism and Freedom. Chicago & London: University of Chicago Press.

Goldblatt, S. (1991) Washington State Public Works' Procedures: Existing Statues Versus Modern Practices. Retrieved on 3.27.11 from http://www.wsipp.wa.gov/rptfiles/91-02-4101.pdf

"Guidelines for Contracting for Architectural, Engineering, Land Surveying & Landscape Architect Services in Washington State", Architects and Engineers Legislative Council, Accessed 10.8.11: http://www.yvl.org/AELC%20QBS%20Guidelines-Smaller.pdf

Kim, Y.W. (2009) The Influence of Transaction Costs and Power on Contract Design. Retrieved on 7.17.11 from: http://www.pmranet.org/conferences/OSU2009/papers/Kim,%20Young%20Woon.%20%20The%20Influence%20of%20Transaction%20Costs%20and%20Power%20on%20Contract%20Design%20Decisions.pdf

Klein, B. & Leffler, K. (1980) Non-Governmental Enforcement of Contracts: The Role of Market Forces in Assuring Quality. UCLA Department of Economics: Los Angeles. Retrieved on 11.5.11 from: http://www.econ.ucla.edu/workingpapers/wp177.pdf

Kleiner, M. (2006) Regulating Occupations: Quality or Monopoly? Employment Research, Vol. 13, No. 1. Retrieved on 12.4.11 from: http://research.upjohn.org/cgi/viewcontent.cgi?article=1110&context=empl_research&sei-redir=1&referer=http%3A%2F%2Fwww.google.com%2Furl%3Fsa%3Dt%26rct%3Dj%26q%3Dprofessions%2520as%2520monopoly%2520and%2520as%2520quality%26source%3Dweb%26cd%3D1%26ved%3D0CB0QFjAA%26url%3Dhttp%253A%252F%252Fresearch.upjohn.org%252Fcgi%252Fviewcontent.cgi%253Farticle%253D1110%2526context%253Dempl_research%26ei%3DFUPcTozRAqHQiALenrjVCQ%26usg%3DAFQjCNFyO6gy4bm-Esz96JX_aJh4N5XKlg#search=%22professions%20as%20monopoly%20as%20quality%22

Madland, D., Walter, K., Sonn, P., & Gebreselassie, T. (2010) Contracting that Works: A Toolkit for State and Local Governments. Retrieved on 6.18.11 from: http://www.americanprogressaction.org/issues/2010/03/contracting_that_works.html

Mason Tillman Associates (2000) *City of Pittsburgh contracting and procurement study.* Oakland, CA: Authors.

Nayyar, P. (1990) Information Asymmetries: A Source of Competitive Advantage for Diversified Service Firms. Retrieved on 12.7.11 from: http://www.stern.nyu.edu/om/faculty/nayyar/infoassy.PDF

RCW 90.58.100 Programs as constituting use regulations – Duties when preparing programs and amendments thereto – Program contents. Retrieved on 7.17.11 from: http://apps.leg.wa.gov/rcw/default.aspx?cite=90.58.100

Sommers, P. (2007) Economic Impacts of State of Washington Contracting: Comments for the Joint Legislative Taskforce on State Contracts. Retrieved on 4.6.11 from: http://www.leg.wa.gov/JointCommittees/SCTF/Documents/11-16state-contracting.pdf

Sullivan, J. & La Noue, G. (2004, December 27) The price of discrimination: set-asides may die soon, now that officials are being held liable. The Weekly Standard. Retrieved 4.26.11 from: http://business.highbeam.com/2001/article-1G1-126937817/price-discrimination-setasides-may-die-soon-now-officials

Thrive Washington: The Case for Contracting Out. (2010) Retrieved on 12.3.11 from: http://www.waroundtable.com/documents/ThriveWATheCaseforContractingOut.pdf

Tiebout, Charles M. (1956) A pure theory of local expenditures. *Journal of Political Economy* 64, October, 416-24.

Accessed 3.26.11: http://www.ofm.wa.gov/contracts/resources/competitive_proc_overview.pdf

Accessed 10.30.11: http://www.ippa.ws/IPPC1/PROCEEDING%20PAPERS/Kashap.pdf

Accessed 11.11.11: http://www.acec.org/advocacy/committees/brooks.cfm

Accessed 12.8.11: http://apps.leg.wa.gov/rcw/default.aspx?cite=39.10.200

Accessed 4.16.11: http://www.governor.wa.gov/priorities/budget/consolidate_services.pdf

Accessed 5.22.12: http://www.ofm.wa.gov/budget/instructions/capinst/aeguidelines.pdf

Accessed 5.23.12: http://www.window.state.tx.us/procurement/prog/training-cert/training-resources/RFP_Process_Workbook.pdf

Accessed 8.15.11: http://access.wa.gov/Home.aspx

Accessed 8.15.11: http://www.ga.wa.gov/eas/consultant.htm

Accessed 8.15.11: http://www.lakecountyil.gov/Stormwater/Documents/Engineering/SOQ%20Manual_91505.pdf

Accessed 8.15.11: http://www.portofpa.com/projects/consultants-rfq-rfp.html

Accessed 8.15.11: http://www2.apwa.net//Documents/Qualifications_Based_Selec_Prof_Svs_Consult%281%29.pdf

Accessed 8.15.11: https://www.nysdot.gov/main/business-center/consultants/general-info/electronic-consultant-selection-(process-2)

Accessed 8.16.11: http://www.acec.org/advocacy/committees/qbs.cfm

Accessed 8.16.11: http://www.acec-ca.org/userdocuments/File/Florida_Study.pdf

Accessed 8.16.11: http://www.acec-ca.org/userdocuments/File/QBS_APWA_Reporter.pdf

Accessed 8.16.11: http://www.architectmagazine.com/business/reevaluating-qualifications-based-selection-syste.aspx

Accessed 8.16.11: http://www.mrsc.org/Subjects/PubWorks/Sourcebook/documents/App%20J7A%20-%20WorkshopFlier.pdf

Accessed 8.16.11: http://www.qbs-mi.org/

Accessed 8.20.11: http://www.agc.org/galleries/projectd/Qualifications%20Based%20Selection%20of%20Contractors%20FINAL.PDF

Accessed 8.8.11: http://publiccontracting.blogspot.com/search/label/Consultant%20Selection

Accessed 8.8.11: http://www.mrsc.org/cityprofiles/citylist.aspx