BUILDING QUALITY INTO NEW YORK CITY'S FUTURE

THE CASE FOR QUALITY-BASED SELECTION

QBS
Q. What is quality-based selection?
A. Quality-based selection is a method of procuring engineering and architectural services that makes superior qualifications and experience the paramount basis for selection. QBS is also known as qualifications-based selection.

Q. How does QBS work?
A. The specific details may vary slightly throughout the country, but the Brooks Architect-Engineering Act of 1972, which mandates QBS for all architectural and engineering services procured by the federal government, is the model for most QBS programs.

- The contracting agency asks for qualifications from a pool of appropriate firms, and selects three or more firms for the proposal or discussion stage.
- The contracting agency asks for proposals and/or conducts discussions with the three or more firms regarding experience and qualifications, design concepts, detailed work approach, key personnel and staffing estimates.
- The agency selects the firm it deems most highly qualified.
- The firm submits a cost proposal.
- The agency evaluates and negotiates the cost proposal based on its knowledge of fair market value.
- If a negotiated fee agreement cannot be reached, the agency moves on to discussions with the second most highly qualified firm.

Q. What are the most important benefits of QBS?
A. It all comes down to technical quality—i.e., safety, functionality, maintainability and life-cycle costs—and long-term savings. Quality-based selection benefits everyone:

The community: Results in projects with the best design solutions to meet the needs of the project, emphasizing public health, safety and quality of life.
The agency: Allows for selection of the most highly qualified firm with the best experience, capabilities, technical approach and quality of personnel, matched to the needs of the project and the agency.
The contractor: Results in better plans and specifications, which generate higher quality contract documents that make it easier to bid on and carry out construction.
The taxpayer: Fosters the development of innovative, cost-effective design solutions at a fair market value, resulting in lower overall project costs, minimizing delays, cost overruns and litigation, and lowering operating and ownership costs.

Q. How widespread is the use of QBS?
A. QBS is the preferred procurement process throughout the U.S., used successfully by the federal government, 42 states—including New York State—and hundreds of municipalities.

Q. How long has QBS been in use?
A. Legislation mandating QBS has been in place for 30 years on the federal level, and for over 20 years in New York State. Traditionally and historically, quality-based selection has been used to select engineers and architects for design of the nation’s public works—including monumental New York projects such as the Verrazano Narrows Bridge, the New York City water supply system, the New York City public library system, the New York State highway system, the Foley Square Court House, and the JFK Airtrain. In 1972, QBS was officially mandated for federal projects through the passage of the Brooks Act. Similarly, in 1980, New York State passed Section 136-a of the State Finance Law to codify a QBS process that had been used in the state for many years.

Q. Is QBS more costly than cost-based procurement?
A. No. In fact, in the long run, it saves money. Cost-based procurement may sometimes result in a lower initial design cost, but quality-based selection generates a better project with lower overall costs—from
design through construction to ongoing operation and maintenance. Moreover, the fee for the design professional amounts to only a small percentage—according to Dunns, a leading construction industry publication, less than 1%—of total life-cycle project costs.

Q. Does QBS eliminate price competition?
A. Not at all. Price is a factor. The difference is that price comes into play later in the selection process, after the highest technically ranked firm is selected and the project scope is fully defined. QBS generates a realistic fee based on a fee proposal by the consultant and negotiations with the agency. If the agency cannot negotiate a fair price with the first choice of consultant, it has the option to open negotiations with another highly qualified consultant.

Q. Isn’t there the risk of favoritism or impropriety with QBS?
A. Nationwide, there is no existing literature documenting cases of impropriety due to QBS. For many years in New York City, when the Department of Environmental Protection awarded all projects by QBS, there were no allegations or instances of impropriety in the selection process. In contrast, in the years when Maryland used a cost-based system similar to New York City’s, scores of legal actions were brought against the state based on imprecise scope of work and bid rigging.

Q. What is New York City’s current policy on QBS?
A. In its procurement methods for public infrastructure projects, New York City is clearly out of step with the rest of the country. Currently, New York City uses a method in which cost is a prominent factor in the selection of engineering and architectural services. This cost-based approach (also known as competitive-bid or low-bid selection) often fosters an adversarial relationship between agency and consultant and not the collaborative partnering that can lead to better projects. Because cost is a determining factor, this cost-based approach can lead to:

- a tendency to discourage the best firms from bidding because they know that cost-based competition will prevent them from delivering a quality project
- selection of firms that are not the highest ranked in technical qualifications for the project
- a tendency to discourage innovative approaches that may cost more in design but save money in the overall project life
- shortcuts in design
- use of less skilled, lower-cost personnel and subconsultants on a project
- low-ball bidding in which fees are later increased through change orders and add-ons
- incomplete bidding documents, leading to claims, change orders and litigation during construction

Polytechnic University Study Strongly Supports Case for Qualifications-Based Selection

"Qualifications-Based Selection (QBS) for the Procurement of Professional Architectural-Engineering (A/E) Services" is an independent academic study conducted in 2002 at Polytechnic University and sponsored by the New York Building Foundation. The study analyzes a 1999 report by the New York City Mayor’s Office of Contracts claiming cost savings achieved with cost-based procurement. The study shows that the Office of Contracts report is flawed and is based on incorrect assumptions. The study also surveys practices throughout the U.S. and assesses the benefits and disadvantages of both cost-based and quality-based selection.

Key study conclusions:
- QBS results in better projects with lower overall costs.
- QBS offers significant advantages over cost-based selection.
- The use of cost as the key selection factor may result in inferior projects even if the highest qualified firm is selected, since many of the disadvantages of bidding prevail.
Q. Does New York City use QBS on any projects?
A. Yes, if the community demands it, New York City does use quality-based selection of architects and engineers. For prominent projects such as the Bellevue Children’s Center, the community board insisted on using QBS for procuring design services because it wanted the best for its community. The City acquiesced. If some communities demand and get the benefits of quality-based selection, shouldn’t all New York City communities receive the same high level of quality?

Q. What method of procurement is best for New York City?
A. The answer is quality-based selection.
- QBS provides the best project at the lowest overall cost for the community.
- QBS is the preferred procurement method throughout the U.S., used successfully by hundreds of federal, state and municipal agencies.

Maryland/Florida Study Shows QBS Saves Time and Money

A study compared cost-based procurement in Maryland with quality-based selection in Florida between 1975-83. The study clearly demonstrates the superiority of QBS in advancing projects and making the best use of state resources in the procurement process.

- **Maryland** - 174 contracts awarded, totaling $518 million in estimated construction cost
- **Florida** - 1,166 contracts awarded, totaling $875 million in estimated construction cost

Data:
A/E selection and design costs as a percentage of estimated construction costs

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<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Maryland</td>
<td>13%</td>
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<tr>
<td>Florida</td>
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Average project cycle from A/E selection through construction

<table>
<thead>
<tr>
<th></th>
<th>Months</th>
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<tbody>
<tr>
<td>Maryland</td>
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<tr>
<td>Florida</td>
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Capital construction dollars spent in 1983

- **Maryland** - With a budget of $2.5 million, 96 personnel administered about $65 million in capital construction.
- **Florida** - With a budget of $1.6 million, 51 personnel administered $100 million in capital construction.

Conclusions:

- The cost of Florida’s QBS procurement process was less than half the cost of Maryland’s cost-based process.
- For every dollar spent on contracts in 1983, Maryland’s procurement process cost 3.8 cents, compared to Florida’s 1.6 cents.

In 1986, Maryland abandoned its cost-based procurement practices and reinstated quality-based selection for architects and engineers.

The world’s great projects are based on quality design, not low-cost design.
New York City’s communities demand and deserve the highest quality public facilities.

The City of New York relies on engineers and architects to design the bridges, tunnels, highways, transportation systems, water supply systems, wastewater systems, public buildings and other facilities that millions of New Yorkers depend on—day after day. Therefore, it is in the best interests of the City to choose the most highly qualified professionals for each project—professionals whose training, judgment and experience profoundly impact the health, safety, reliability and durability of the City’s infrastructure.

The best method for choosing these professionals is quality-based selection (QBS), a procurement process widely used throughout the country. QBS has consistently resulted in superior design and construction and, in the long run, has saved taxpayers millions of dollars. The federal government, nearly every state and hundreds of municipalities have discovered that quality pays off.

Everyone benefits from QBS—the community, the agency, the contractor, the taxpayer.
New York City awards most public contracts for architectural and engineering services through competitive, sealed proposals that often focus on cost as the basis for selection. This process does not serve the best interests of the City and its residents. Qualifications-based selection assures that the City acquires the most capable professionals, at a fair and reasonable price.

This brochure is based in part on information obtained from the Polytechnic University study, “Qualifications-Based Selection (QBS) for the Procurement of Professional Architectural-Engineering (A/E) Services.” The study is available from the New York Building Foundation, 212-481-9230.

New York Association of Consulting Engineers, Inc.

American Institute of Architects – New York Chapter

New York Building Congress

The General Contractors Association of New York, Inc.

American Council of Engineering Companies

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