

Buying Smart: Blueprint for Action

A report outlining innovative procurement strategies employed by state governments in the acquisition of information technology commodities.

Best Value

Partnerships

Problem-Oriented Solicitations

Produced by a joint task force of:

National Association of State Purchasing Officials National Association of State Information Resource Executives National Association of State Directors of Administration General Services The National Association of State Purchasing Officials (NASPO), the National Association of State Information Resource Executives (NASIRE), and the National Association of State Directors of Administration and General Services (NASDAGS) present this report as the next steps in implementing information-technology procurement reform. Buying Smart: Blueprint for Action is the follow-up report to Buying Smart: State Procurement Reform Saves Millions

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The second report examines innovative procurement practices including best value, partnerships and problem solicitations, used by states with increasing frequency. Driven by the demand to simplify the acquisition of commodity products, states are seeking new ways to keep pace with advancements in technology to not only procure products but to distribute bids in an equally expedient fashion. The intended result is to provide procurement methods that assure customers of receiving leading-edge information-technology products and services in a timely and cost-effective manner.

The report is a testament to the value of procurement reform and the direct benefits states across the nation have seen after employing these innovative strategies. A key to each state's procurement reform success is support from governors, agency heads, legislators and other decision-makers. This second report again speaks directly to this audience in an attempt to clearly define the issues and to provide the tools to take the process from blueprint to action.

Since the production of an initial report in 1995 with Harvard University's Kennedy School of Government Strategic Computing and Telecommunications in the Public Sector and *Buying Smart: Procurement Reform Saves Millions*, the committee has added a very important ally in NASDAGS, who themselves play a vital role in the procurement reform effort by lending their statewide authority and leadership.

The associations represent the senior procurement, information-technology and chief administrative officials in the 50 states, the District of Columbia and the U.S. territories. This most recent report is a continuation of the associations' commitment to actively pursuing reform. These efforts have resulted in two previous studies on procurement reform including the Kennedy School report entitled *Information Technology and Government Procurement: Priorities for Reform* and the first of two *Buying Smart* reports. The findings and recommendations in this report benefited from the involvement of the Information Technology Association of America.

A task force of NASPO, NASIRE, and NASDAGS representatives provided oversight for the project. Bob Mayer, chief information officer, state of Maine; Gary Lambert, deputy purchasing agent for the Massachusetts Operational Services Division; and Don Speer, commissioner of the Kentucky Department of Administration served as co-chairpersons for the study. Other task force members included: Dugan Petty, director, Alaska Division of General Services; David Gragan, director, Texas Office of Central Procurement; Janet Phipps, director, Michigan Department of Management and Budget; Gene Lynch, secretary, Maryland Department of General Services; P.K. Agarwal, chief information officer, California Franchise Tax Board; and, Mike Benzen, chief information officer, Missouri Office of Technology.

Buying Smart: Blueprint for Action

In 1998 states and localities will spend more on information technology - nearly \$42 billion - than any time in the past. As government spending spirals upwards, states have made great strides in improving how they procure computer systems and services. Many states have taken steps to re-engineer the procurement process, reducing the time it takes to procure information technology, streamlining the layers of review and oversight and allowing managers more discretion for small purchases.

THERE HAS BEEN A LOT OF PROGRESS IN LAST 3-4 YEARS

Still, it has become increasingly clear that more must be done. In 1996, the National Association of State Information Resource Executives and the National Association of State Purchasing Officials issued a report, *Buying Smart: State Procurement Reform Saves Millions*, a report outlining recommendations to reform the government procurement process for information technology.

The report pointed out that existing procurement systems exact a high cost when it comes to purchasing information technology. States not only waste taxpayer dollars, but they can dampen economic vitality and diminish the delivery of services to individuals and businesses. To change the situation, Buying Smart offered five ways for states to cash in on procurement reform:

1. Simplify the procurement of commodity items and services
2. Build an infrastructure for electronic commerce
3. Procure information technology based on best value
4. Develop beneficial partnerships with vendors
5. Solve problems with solicitations.

Today, states have moved boldly on a number of fronts to reform procurement systems, but none more so than in the field of commodity purchases and electronic procurement.

States have learned to distinguish commodity products from non-commodity products in the information technology field and have simplified the acquisition of commodity items. Some states have raised the limits on transactions that can go forward without the traditional bid process, saving time and speeding the acquisition of time-sensitive technology. Others are exploring the idea of expanding commodity purchases to include standard technology services, such as consulting, maintenance and training.

Electronic procurement systems have exploded in use, thanks to the rapidly growing Internet and electronic commerce projects. Many states have turned to the World Wide Web to electronically distribute solicitations and bid results. States with electronic procurement systems have benefited from increased competition for their solicitations and from a more open bidding system that reduces the likelihood of vendor protests.

Now, states are hoping to increase their success with procurement practices that involve [best value](#), [partnerships](#) and [problem solicitations](#). To help procurement, technology and agency executives better understand the characteristics of these practices, NASPO and NASIRE have teamed up with the National Association of State Directors of Administration and General Services to produce this report. Outlined here are the definitions of best value, partnerships, and problem solicitations, their characteristics, barriers to their deployment and some best practices. With this overview, states can deepen their discussion about these more innovative forms of procurement, learn from what others are doing and begin developing their own procurement processes based on these principles.



Best value is a process for selecting the most advantageous offer by evaluating and comparing all relevant factors in addition to cost or price so that the overall combination that best serves the interest of the state is selected.

Awarding bids based on best value shifts technology procurements away from broad objectivity, where lowest price is given extraordinary weight in the selection process, to a knowledge-based procurement process where less tangible values are important factors.

There is broad consensus among purchasing officials that the factors agencies should consider when pursuing a best value procurement include:

Total cost of ownership (this includes operational and replacement costs)

Performance history of vendor

Quality of goods or services

Delivery

Proposed technical performance

Other relevant factors for consideration include:

Financial stability of vendor

Timeliness

Cost of necessary training

Qualifications of individuals proposed for a project

Realistic risk assessment of the proposed solution

Availability and cost of technical support

Testing and quality assurance program

For best value to work, an agency must understand what value is when it comes to procuring technology. For example, is it the quality of the software or the comprehensive support of the vendor? In addition, an agency must decide what to measure to ensure they are evaluating properly the product or service offered by the vendor. By broadening the

definition of value beyond cost, an agency increases its ability to procure sound technology. At the same time, however, evaluating best value bids is more complicated than evaluating low-cost bids.

Because best value is a more complex form of bidding, it's not well understood and has been overlooked by agencies as a form of procurement. Part of the problem is that the term "best value" is relative whereas "low price" is an absolute. For example, when purchasing desktop software, customers already understand the quality of a software product designed to run on a PC with Microsoft Windows, so delivery time for that product may be a more important value factor. However, when evaluating a contract for a custom software development project, quality of the end product is paramount, while delivery time is somewhat less so.

Best value procurements are more subjective than traditional procurements. Without proper preparation, it's easier to make mistakes during evaluation, raising the risk of protests or even litigation. Subjectivity also raises the issue of fairness. How does an agency ensure that all bids are treated fairly? To reduce these problems, agencies must spend more time on the front end of a best value procurement than with traditional contracts.

To improve the success of best value procurements, purchasing offices and state agencies have to establish and adhere to new responsibilities. They include:

Training agency personnel on the philosophy and methodologies of best value.

Educating vendors on how best value works and how evaluation criteria is established.

Identifying sources of reliable data for evaluating best value contracts. This should include past performance history files on vendors.

Educating agency staff about the total cost of acquiring and owning a system beyond the capital cost.

Maintaining benchmark reports so that the data used to evaluate the criteria for best value is well documented. Documentation will help an agency explain its decision-making should a problem arise or if a bid is protested.

Designing systems to evaluate vendors. This can include vendor histories that cover the type of project involved. States may want to share these vendor experiences with other state procurement offices, allowing states to better evaluate the past performance of vendors.

Setting up evaluation committees made up of technical, support and end-user representatives.

Even when agencies establish responsibilities and educate personnel on the right way to conduct a best value procurement, things can go wrong. Some of the issues to watch out for include:

Lack of fairness. Despite best intentions, the best value methodology still involves many subjective judgments.

Communication. The relevant factors that make up the evaluation criteria for a best value bid, must be properly and clearly communicated to the vendor.

Consistency. Inconsistent use of rating factors can end up with poor procurements.

Reliability. Make sure the data used to evaluate factors are reliable.

Documentation. Document your decision to avoid protests and litigation.

Overkill. Too many factors can dilute the evaluation process. Choose to evaluate only those factors that are directly relevant to the product or service you are selecting.

Who's Doing Best Value:

The state of **Texas** has been applying best value to its information technology procurements since 1993. The evaluation criteria include life-cycle costs, employee productivity improvements and vendor performance.

The Commonwealth of **Massachusetts** recently reformed its procurement policies and procedures. The changes empower departments to procure goods and services at best value. Their handbook states: "...higher quality may be more cost effective over time when compared to a lower quality, less costly procurement. Long-term investments, as appropriate and necessary, and long-term value are also important considerations beyond cost...."

The state of **New York's** procurement statute was amended in 1995 providing agencies the statutory authority to contract for services and technology on the basis of "best value" or "low price." Even "low price" in the new statute, includes far more than just the cost of an item or service, for example: the administrative, training, storage, maintenance, delivery, life span and life-cycle cost factors.

Missouri has applied best value consideration for years in its procurements in accordance with the statutory authority to award to the "lowest and best" bid/proposal. In applying best value consideration, the state considers various criteria such as technical capabilities and contractor support, method of performance, experience and reliability of a company, qualifications of individuals proposed for a project, life-cycle costs, and other information learned while evaluating proposals.

Value-based procurement was implemented in [New Mexico](#) as a standard for Information System Technologies in the mid 1980's. An electronic library has been established with both procurement documents and contracts. Quality assurance improvements have been added with document preparation assistance and document review prior to issuance, enhancing the quality assurance review process. Real time procurement consultation is provided throughout the procurement process. These improvements are accompanied by procurement manager and evaluation committee member training for every procurement as an integrated step in the procurement process.



Procurement partnerships are aimed at creating an agency-vendor relationship that promotes achievement of mutually beneficial goals. Its most important characteristic is the principle of sharing risk to complete a project.

In the past, states have avoided contract partnering to discourage favoritism. But these efforts at neutrality and objectivity can prove problematic in certain kinds of procurements, such as construction and information technology. States believe that partnerships not only help with risk sharing, but they promote a better understanding of government needs and promote a continual improvement of services through long-term relationships with the vendor.

States also believe partnering can expand their knowledge base. With today's shorter cycle times for new technologies, states are finding it too hard to figure things out on their own. Partnering can ease that knowledge gap.

Perhaps more than any other government agency, the U.S. Corps of Engineers has adopted partnering as a means to improve the value of their construction contracts and to ensure success at meeting targeted goals. After a number of years and numerous partnership projects, the Corps has learned a number of lessons about partnering:

[An enduring commitment with real involvement of management is essential.](#)

[The partnership must have constant reinforcement to avoid "traditional" behavior.](#)

[Care must be exercised to assure realistic expectations, goals, and objectives early in the partnership. Set sights high, but make the targets achievable so they can endure throughout the project.](#)

[Partnering can be applied successfully on single projects of fixed or limited duration.](#)

States that have studied and participated in partnerships have also learned their own lessons. States have found that for partnerships to succeed:

They have to be real. Vendors must have a stake in the project. Partnerships must include shared risks and shared benefits. Benefits might include a sharing of new revenue generated by the information system or a new product developed during the course of the project that the vendor can market and sell.

They have to produce measurable results in an environment of integrity, ethics, and trust.

They should be long-term relationships. States should ask whether the vendor will take over the servicing of the contract at some point. States also need to find out whether the project requires a highly specialized skill that the vendor can handle.

They should support the strategic goals of each partner while planning and implementing continuous improvements in products, services, processes and employee involvement.

Partners should openly communicate requirements, make special efforts to understand them, consider the capabilities of the other partner and strive to meet requirements all the time. In addition, the partners should specify requirements in phases, ensuring the ability to keep long-term projects on track.

States require more financial knowledge about vendors. States must make a strong effort to evaluate the financial health of vendors. Financial departments should be involved along with IT departments in this evaluation.

States require a knowledge about the technology market. States need to measure the volatility of the market in which a vendor is competing. Questions to be asked include: Is the technology undergoing a period of change or is it considered mature? Is the vendor a candidate for a takeover or attempting to merge with another firm (which can lead to instability)?

States need to develop better skills at writing and managing contracts. They can't let the vendor assume the lead in contract writing. Partnerships may be about teamwork and mutually beneficial goals, but there still has to be an underlying contract that protects the interests of states and vendors. Vendors develop numerous kinds of contracts all the time. States don't have nearly the experience that vendors have. To strengthen states' role in this crucial phase of partnering, they should escalate the sharing of information, such as contracts and reports, between states that concern the right and wrong way of drafting a contract.

States must know how to assess the real value of a partnership project. Is a project a success if the revenue stream is only \$50,000 and not the \$500,000 as originally targeted? Is the partnership a success if the vendor produces software that only works within the agency's project and not elsewhere as proposed?

States and their vendor partners should always promote a cooperative relationship in which conflicts are resolved through negotiation instead of legal remedies.

States and vendors must have a mutual understanding and agreement of the contract deliverables, outcomes and how to identify measures of progress and success.

States and vendors agree that partnerships must be established as the result of an open, equitable, interactive procurement process, which allows the buyer to communicate vital needs and expectations and potential contractors to present recommendations on contracting approaches, design, technical requirements and implementation prior to the invitation to partner. Finally, it's important not to underestimate the amount of work that follows once a bid has been awarded and a partnership begins.

According to the U.S. Corps of Engineers, partnerships can succeed if both parties can answer the following general questions in the affirmative:

1. Are the partners sharing a common goal?
2. Are each partners' expectations clearly stated upfront?
3. Are the partners actions consistent and reliable?
4. Is there a real willingness from each partner to make the necessary commitment to the partnership in terms of time and energy?
5. Are the partners accountable to each other for their actions?
6. Do the partners understand and respect each other's responsibilities as well as honest differences between them?
7. Is the partnership achieving synergy? In other words, is it more than the sum of the individual partners?
8. Does each partner expect excellence from the other and give it in return?

Who's Forming Partnerships?

The state of Florida has established 15 information Technology Consulting Service Contracts in the past 18 months. Under these contracts, vendors will provide year 2000 compliance services, which can be used by all state agencies, local governments and educational institutions. Florida anticipates contracting with a number of additional firms to provide the state with extensive capacity for solutions to the year 2000 compliance problem. For small firms with limited capacity, the SNAPS (State Negotiated Agreement Price Schedule) program is an alternative which makes available to the state of Florida, year 2000 compliance services from vendors who cannot compete for the large jobs many agencies will have. SNAPS agreements have an annual ceiling of \$150,000.

The [California](#) Franchise Tax Board formed a strategic partnership with two qualified vendors in order to upgrade and replace their tax collection system. Rather than draw up detailed bid specifications, the Tax Board presented pre-screened vendors with a statement of their problem and asked for responses in the form of workable solutions. Once a vendor was selected, the contract was then negotiated. The Tax Board financed the project from the savings and new revenue generated by the benefits of automation.

For one of the three systems installed under the partnership, the payback was five times higher than what was originally estimated. As a result, the vendor was paid back for its investment in five months rather than two years. The project took only four months to complete compared to the average 18 to 24 months for a project of this size.

The state of [New York's](#) procurement statute provides the opportunity for agencies to enter into strategic partnerships for the enhancement of the business interests of the state. These partnerships are formed by amendment to existing contracts, enabling the state and the vendor to jointly develop new commodities and services not otherwise available. Partnerships may also include the sharing of expertise, efforts and resources.

[New Mexico's](#) typical information system procurement has a fixed minimum term with a series of optional one-year renewals up to the statutory limit. The contract terms and renewal options are established in the RFP used for the original solicitation, which eliminates the need for any extraordinary procurement measures. If the relationship between the state agency and the vendor is satisfactory, the agency may exercise one or more renewal options. Where it makes sense to do so, multiple agencies may collaborate on a procurement and share the services of a common contractor. Multiple agency price agreements are also an effective procurement vehicle for some situations.

Until recently, the mechanism for the purchase of PC hardware and software in [Missouri](#) state government consisted of the bidding and issuance of a statewide contract for a specific technology for a fixed price for a fixed period of time. More than 70 PC-related contracts and dramatic and rapid changes in the computer market created a very expensive and time-consuming problem for the state.

A project team was formed to identify and solve the problems surrounding the purchase of PC hardware, software, support, maintenance and training. The team ended up conceptually changing the way Missouri state government purchases technology and saved the state approximately \$10,000,000 over five years.

The team developed objectives and measurable outcomes to guide the development of a new PC contracting vehicle. Objectives include:

[Insure service goals and customer satisfaction are monitored and improved.](#)

[Leverage the state's buying power to obtain the best possible pricing.](#)

[Ease the effort required to purchase products, obtain support and acquire training.](#)

Some of the outcomes the team identified are:

A single vendor serving as the "single point of contact" for all PC and PC- related hardware, software, maintenance, support and training.

Prices and product offerings automatically change with the market.

A product and services catalog with current products and prices on the Web.

A long-term service partnership between the state and the vendor. Contract performance in priority service functions and customer satisfaction monitored and measured against mutually agreeable goals.

Performance documented through vendor-prepared reports, particularly in the areas of hardware and software sales, maintenance and help desk calls and response times.

An oversight committee, consisting of state and vendor personnel, meets regularly to monitor performance issues which are directly related to the original objectives and goals the team outlined.



PROBLEM-ORIENTED BIDS



When an agency writes a technology bid that briefly states the problem, leaving out detailed specifications, it allows vendors, who are subject matter experts, to use their discretion and creativity to offer an innovative solution. Vendors are more willing to share in the project's risk when they offer a solution of their own design that they believe will work. That's the central idea behind problem solicitations.

Before stating their problem, however, an agency must understand what it needs. While this sounds contradictory, an agency must have relevant information about its situation in order to decide what is the best solution offered by the vendors. An agency can learn about its needs through business process reengineering (BPR). With BPR, an agency will better understand what it wants to accomplish, and then can set benchmarks for the vendor to ensure that the problem is solved correctly.

Another issue concerns accountability. By allowing vendors to define the scope of the project - the outcome, etc. - an agency may not be in a position to define deliverables that ensure the project accomplishes what it is supposed to. One solution is to create a multi-step process, where vendor and agency agree on certain deliverables that must be met by certain deadlines. That way, an agency can gauge the project's progress at predetermined stages.

A third issue has to do with cost containment. One state's experience with problem bids found that while the procurement method indeed led to better products, training and services from vendors, costs tended to rise, as result. In the long run, however, the increase in quality raised the bar for other vendors and, eventually, prices started to come down as competition at the new level increased.

To get started with problem-oriented bids, some states use a simple method of problem-oriented bids by issuing a Request For Information (RFI), which gives the vendor community the opportunity to use its discretion and creativity to offer innovative solutions prior to the actual procurement. This also has the effect of putting the procurement on the radar screen of potential vendors early in the procurement cycle, thereby improving the likelihood of more bids. Other states, such as Indiana, use hybrid RFPs that will state a portion of the bid in the form of a problem. Many agencies know what they want to do, but don't understand one particular aspect of the project. The hybrid problem RFP can address those specific uncertainties.

Who's Writing Problem-Oriented Bids?

Indiana uses a hybrid form of problem RFPs. An agency may have a question concerning only part of the procurement while the rest is understood. For the part in question, the agency will write its request in the form of a problem for the vendor to solve. These hybrid RFPs have become more common as agencies increasingly invest in technology.

Michigan has reduced the development time of its bids by using a "solutions-based" solicitation, which requires the bidders to propose a solution to a specific problem or objective. Solutions must be based on proven technologies and/or systems that are currently being used in public and private sector. The California Franchise Tax Board also stated its bid in the form of a problem rather than specifying the details of the bid. The Board reported significant benefits from the new approach (see "Who's Forming Partnerships").

In at least some major procurements, **California** uses a multi-staged process, in which they first request a high-level concept paper from vendors. They then engage in discussions with responsive vendors, and then request a more detailed proposal from each based on a more detailed set of requirements. This may continue through several iterations of detail. Through this process and until the final submission, vendors do not provide actual pricing and are free to disengage from the process. Although this process is more time-consuming and more costly than a single-phase procurement, it allows the state to refine its requirements based on vendor input, and it allows vendors to fully understand exactly what the state is looking for.

The result may be a greater likelihood of responsive proposals from qualified bidders. The state then can make a selection. It is quite possible that the state also gets more innovative ideas at an early stage. Vendors are reluctant to incorporate innovative, but unsolicited, features in a bid, if those features will increase price and make the bid non-competitive. The California approach allows the state to weigh the cost-benefit of

innovative ideas presented in early stages, refine their requirements and provide that information so all vendors can respond.

In an effort to streamline the bidding process, the state of [New York](#) has established backdrop contracts in the computer consulting and training areas which function essentially as a prequalified bidder list. New vendors are continuously recruited based on their responses to an open bid. Agencies and localities conduct a mini-bid process to prequalified vendors based on individual project definitions in order to determine best value/lowest price. This reduces the bidding process to six weeks. New York plans on expanding this concept to integration services in the near future. Vendors who can provide a total solution including hardware, software, and services will be able to offer proposal through the mini-bid process.

Resources

This report has been developed by the National Association of State Purchasing Officials National Association of State Information Resource Executives and the National Association of State Directors of Administration and General Services as part of a Joint Information Technology Procurement Project.

For more information on how you can put these practices into place, please contact:

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The report may also be found at the NASPO, NASIRE and NASDAGS homepages: www.naspo.org www.nascio.org www.nasdags.org

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