PRELIMINARY PERFORMANCE REVIEW OF TWO BUREAUS IN THE ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES

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Summary of Recommendations

Bureau of Strategic Sourcing (BOSS)		
	Estimated Savings	
Recommendation	**Year 1**	**5-Year**
Revise BOSS Staffing and Review Procedures	**TBD**	**TBD**
Consider reorganizing staffing to meet new BOSS priorities Streamline the internal BOSS review process Establish meaningful performance measures and track progress and/or identify issues Increase contract monitoring and compliance Devote resources to identifying new products or other opportunities to save through purchasing Standardize bid review processes where possible Prioritize the launch of the planned Customer Satisfaction initiative Develop a system to issue regular communications to customer agencies describing key decisions and potential impacts Renegotiate with EEC to bring them back to using the Remedy system		
Develop Strategies to Expand the State's Bidder Pool	**$0**	**$10.5 M**
Evaluate need for multiple vendor certifications and disclosures. Create a state vendor database with basic vendor information and verification of required representations, certifications, and disclosures. Consider instituting a grace period for bidders to cure non-substantive omissions in solicitation responses. Institute a formal process to notify bidders of the reason for any bid disqualifications so that they can address these issues in future submissions. Use the flexibility of the solicitation process and procurement tools such as RFIs and draft RFPs to a greater degree to tap into vendor and market expertise Consider using technology and innovative tools such as procurement wiki pages		

Bureau of Strategic Sourcing (BOSS) continued		
	Estimated Savings	
Recommendation	**Year 1**	**5-Year**
Establish New Bidding and Contracting Opportunities	**$12 M**	**$330 M**

Investigate neighboring states' and other consortium membership to determine if Illinois should join.

Investigate specific product consortia, such as those purchasing Medicaid and/or other pharmaceuticals, to determine if Illinois should join.

Prioritize development of a reverse auction capability

Initiate a special project to develop short-term "work-arounds" to identify spending in key areas and develop a plan for increasing master contracts

Complete a one-time study to identify what agencies are purchasing in the under $5,000 category

Revise the notification and posting system for master contracts

Set targets to increase the number of master contracts' and potential savings

Launch a formal and ongoing initiative with Higher Education to increase joint contracting opportunities

Fast track a pilot project to initiate a P-Card system

Enact legislation, similar to Florida, to open contracts for possible renegotiation and savings

Bureau of Communication and Computer Systems (BCCS)		
	Estimated Savings	
Recommendation	**Year 1**	**5-Year**
Support BCCS New Technologies	**$4.2 M**	**$22.1 M**
Expand eTime application to all agencies on the Central Time Accounting System (CTAS)		
Convert remaining State agencies to EPASS system		
Standardize State agency business rules and practices so that fewer unique applications are needed to support agency-specific systems		
Continue to support application modernization efforts that will produce additional savings for the State while a longer-term solution is identified		
Support Implementation of New Technologies – Thin Client		
Eliminate the BCCS warehouse	**$0**	**$1.9 M**
Eliminate the BCCS warehouse through attrition		
TOTAL ESTIMATED SAVINGS	**$16.2 M**	**$364.5 M**

PRELIMINARY PERFORMANCE REVIEW OF TWO BUREAUS IN THE ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES

1. INTRODCUTION

The Illinois Department of Central Management Services (CMS) engaged **Public Works** to conduct a one-month, preliminary review of two bureaus – the Bureau of Strategic Sourcing (BOSS) and the Bureau of Communication and Computer Systems (BCCS) – using **Public Works'** Performance Review model.

This model is a highly interactive one that relies on extensive interviews of staff throughout an organization, asking the people who do the work day-to-day about their ideas and opinions on how to work smarter and improve efficiency. This information is coupled with rigorous data collection and analysis, review of best practices from around the country, and financial analyses to produce findings and recommendations on how an agency may gain efficiencies in operations. The model is scalable and has been used for entire statewide reviews of virtually every Executive Branch agency, a single agency and even a single program.

In this instance, CMS requested we review two bureaus, BOSS and BCCS, with a quick turnaround so that both short- and long-term recommendations may be considered in the current budget cycle.

We thank the managers and staff in CMS, BOSS and BCCS for taking the time from already busy schedules to talk with us about agency operations and to help collect whatever data is available. The following report outlines several major areas that could yield significant savings for the state if implemented. Using conservative estimates based on data available in CMS, as well as best practice examples applied to Illinois, we identify 31 recommendations that total one-year savings of $16.2 million and five-year savings of as much as $364.5 million.

2. BUREAU OF STRATEGIC SOURCING

With the passage of Senate Bill 51 and the establishment of the Executive Ethics Commission (EEC), Illinois policymakers have clearly expressed their desire for a State procurement system with the highest standards and above all reproach. This is an admirable goal. However, the State should avoid creating a system that focuses more on statutory compliance requirements than achieving maximum value from its procurements. Illinois must develop procurement practices that provide adequate flexibility for users while upholding the integrity and intent of the Code.

The new leadership in CMS and BOSS inherited an agency in transition. With the introduction of the EEC and the inability to hire in a tight budget cycle, BOSS must continue to conduct procurement activities for State agencies while roles and responsibilities are changing. BOSS, however, is presented with an opportunity to re-invent itself and develop state-of-the-art techniques being used around the country to manage its procurement responsibilities. Some of these techniques, in fact, like reverse auctions and purchasing through consortia as discussed below, were included in the new legislation. The challenges faced by CMS and BOSS, however, to implement this legislation in partnership with EEC has hampered its ability to devote resources to the design and implementation of these new techniques. Thinking strategically at this time can provide the opportunity for BOSS to focus resources on priority tasks that will move the entire procurement operation in the right direction. The themes for such a reinvention should revolve around:

- Establishing guiding principles for procurement and metrics across all aspects of the procurement process to monitor performance and drive consistent and effective management of performance.

- Establishing a leadership role in identifying procurement opportunities that will save the State money and support agency operations with new technologies, products or services.

- Ensuring goods and services are being procured at the lowest and best value for the State, including expanding use of purchasing techniques allowed by law but not currently used.

- Emphasizing a customer focus that involves stakeholders in the process and supports their business needs.

- Delivering excellence in services that are based on standardized procedures, timeliness targets for processing, goals for successful outcomes, and alignment of resources to priorities.

- Maintaining a knowledgeable and skilled professional workforce that understands and uses best practices in procurement strategies.

2.1. Revise BOSS Staffing and Review Procedures

In this economy, all states are looking for ways to save money and work more efficiently. This has increased the pool of states implementing procurement best practices and pinpointing savings for both the short- and long-term. Just a few examples include:

- Virginia set targets for reducing procurement costs and increasing the dollar volume of statewide contracts.[1]

- Minnesota and Virginia developed strategic training opportunities to strengthen the skills of procurement staff. They also revised hiring procedures to attract well-qualified procurement professionals. Virginia actually developed the Virginia Institute of Procurement to offer courses to all procurement professionals in the Commonwealth and to offer Contracting Officer Certifications. Administrative improvements are estimated to save $11 million per year. Minnesota also offers training on effective negotiation strategies.[2]

- Tennessee improved its procurement system by developing a stronger partnership with agencies, developing new processes for review of procurements that require approvers in the review process to work together more closely, and setting goals for improved processing to make the system easier for agencies and vendors.[3]

The following observations and analysis are presented based on interviews and a review of information provided by BOSS. New leadership in CMS and BOSS recognize many of the issues discussed below and want to take steps to move the agency forward. It is hoped these observations will support their goals to improve operations and help focus resources on priority areas for improvement and savings.

The creation of the Executive Ethics Commission (EEC) introduces an uncertainty with BOSS staff as to new roles and responsibilities and the authority they now have. There is some uncertainty as to what is actually in law and regulation as opposed to simply past practices within CMS's authority to change. While larger policy issues are being addressed, there are actions BOSS can take to establish a strategic plan for going forward within BOSS and within current resources.

First and foremost, CMS leadership understands the importance and need to conduct a complete spend analysis, something that will require gathering data from 268 independent financial systems now supporting State agency operations. Until that can be done, there are some indicators of work levels and processes in BOSS that can inform decision-making in the short run. A snapshot of BOSS activity for FY2011 shows the bureau processed:

- 1,411 Solicitations
- 3,284 Notices (some combination of new bids/RFP awards, purchases and contract renewals)

As shown in *Table 1: Snapshot of BOSS Activity*, the value of Notices issued in FY2011 was estimated to be about $26.6 billion. The staff assigned to the various units within BOSS are also depicted.

Table 1: Snapshot of BOSS Activity

Category	Number of Notices	Number of Solicitations	Estimated Value of Notices	Number of Staff
General Services	982	309	$652.2 million	4
Commodities and Equipment	896	540	$571.2 million	19
Facilities	537	294	$227.7 million	7
IT and Telecom	570	169	$3.1 billion	7
Highway Construction	157	24	$256.6 million	No CMS review
Health & Medical Services	96	26	$6.1 billion	No CMS review at this time, changes being considered
Employee Benefits	31	5	$15.2 billion	Reviewed by Employee Services
Pharmaceuticals	4	6	$750,000	Commodities
Unspecified	59	50	$25.2 million	
Canceled	84			
TOTAL	**3,368**		**$26.2 billion**	

BOSS has a "process map" that outlines each step in the procurement process. The new Chief Information Officer also developed such a map for IT purchases (not dissimilar to all purchases)[4]. Both maps show the complex, intensive, and resource-consuming steps in the current solicitation review process, and clearly indicates that the majority of resources within BOSS are used for the procurement process, not contract monitoring or compliance once contracts are executed.

Some highlights from the RFP Process Map and other observations from interviews and review of available data indicate:

- Purchases below $250,000 (not requiring Office of Management and Budget approval) require six approvals/signatures within CMS. These are approvals *after* the requesting agency has already determined the need for the purchase.

- There could be as many as 23 steps in the RFP process (including the six signatures if under $250,000). Adding in BEP or OMB approvals adds two additional steps to the process.

- If an approver has questions, requires more information, or rejects the request, the process goes back to the beginning once the agency has addressed the concerns, requiring all approvers to review the request again.

- If required approvals are not completed within 45 days, the Procurement Business Case is automatically canceled and the requesting agency must start the process all over again.

- There are no performance targets, establishing goals for timeliness of reviews, successful completion of the bid/RFP process leading to signed contracts, or customer satisfaction goals.

- Managers and staff can clearly describe the problems in the review process, however, they feel helpless to do anything to correct the problems. They do not feel as though they have the authority or mechanisms in place to strategically identify issues and recommend solutions.

- In clarifying roles and responsibilities within BOSS, managers should ensure staff understand the goals of the organization, especially who the customer is. For many procurements the customer is an agency, however, because of the unique role of the Bureau of Communications and Computers Services in purchasing large amounts of IT goods and services, BCCSs is a customer of BOSS also.

Interviews with managers and staff in BOSS, and a review of the data available on the volume of work handled by the bureau, quickly show a dedicated staff "hunkering down" to get the job done with limited resources compared to previous years. BOSS now consists of 44 total staff, with 23 vacant positions and five "frozen" positions – 66 percent of the staff the bureau had in recent years. The current staffing includes 20 managers and 24 non-supervisory positions. It is understood that some manager titles, such as the Statewide Travel Coordinator or Personnel Liaison, appropriately have no direct reports. Some titles, however, most notably Portfolio Managers and Strategic Sourcing Managers, are titles that have direct reports in some cases but not all.

Staff should be commended for continuing to handle the volume of work required. CMS, however, should carefully consider which vacant positions are going to be filled, as well as take this opportunity to shift staff to priority tasks within BOSS as new roles and responsibilities are redefined in light of the new EEC.

One such shift should be to contract compliance activities. Currently, BOSS has two staff dedicated to this function. Clearly, the majority of BOSS resources are devoted to the bidding and contracting process and considerably less to oversight of contracts once they are in place. Yet procurement professionals all recognize the importance of contract compliance – consistent monitoring of terms and conditions can help the State avoid liabilities, ensure savings by compliance with pricing agreements, and improve rebidding and renewal processes because there is sufficient documented history to determine the best interest of the State.

Recommendations

1. **Consider reorganizing staffing to meet new BOSS priorities**. There are numerous ways in which BOSS staff could be redeployed to do business with the EEC, as well as addressing span of control and assigning staff to a priority area such as contract compliance, strategic planning, or developing and monitoring performance measures.

2. **Streamline the internal BOSS review process.** New procedures should be developed (and committed to writing) that will clearly define each person's role in the review process, eliminate duplicative steps, and complete tasks simultaneously where possible. This type of initiative works well when involving staff (including agency staff who are reliant on BOSS) in work groups to revise workflows, making the job easier and more clearly defined.

3. **Establish meaningful performance measures and track progress and/or identify issues.** BOSS staff can be energized by clear goals in the review bid/RFP process. Goals should be set for targets on time to complete each step in the process, customer satisfaction, and ensuring clear communications with customers and vendors.

4. **Increase contract monitoring and compliance.** The vast majority of resources in BOSS are currently involved in the upfront process to eventually get to a contract. Once a contract is executed, little is known about the quality of the goods or services delivered, contract compliance or agency satisfaction unless a problem is raised. Contract compliance should include such activities as post award vendor orientation. It should also include working with BEP to monitor the degree to which contractors are meeting BEP goals.

   With the introduction of the EEC, this actually provides BOSS with an opportunity to redefine itself, eliminating some bidding processes and switching emphasis to contract compliance.

5. **Devote resources to identifying new products or other opportunities to save through purchasing.** The investment in understanding what client agencies are purchasing and finding new products to help agencies deliver services to the public more efficiently can produce significant savings. BCCS does this for IT procurements, however, it should be done on a wider basis for other goods and services purchased through BOSS.

6. **Standardize bid review processes where possible.** Many of the steps in the bid review process, like scoring, are similar whether purchasing food for corrections, medical supplies for health or tires for fleet services. Standardizing steps in the process and internal CMS forms will reduce staff time and help agencies and vendors understand the process more clearly.

7. **Prioritize the launch of the planned Customer Satisfaction initiative.** CMS is outlining plans to launch such an initiative. All of BOSS purchasing managers and staff should have a focus on their customers and how to best provide services to them. This includes viewing BCCS as a customer, similar to other agencies because of the volume of purchasing they must accomplish. Where possible, Portfolio Managers should spend time at customer agencies so that agencies know purchasing representatives understand their requirements.

8. **Develop an improved system to issue regular communications to customer agencies describing key decisions and potential impacts**.

9. **Renegotiate with EEC to bring them back to using the Remedy system.** More paperwork is now required by EEC since they stopped using the Remedy system, resulting in time spent by BOSS staff completing forms, tracking status manually and spending time ensuring forms are sent correctly.

Long-term Recommendation – E-Procurement

Beyond the more immediate steps that can be taken to streamline the procurement process and introduce new opportunities for purchasing, states have moved aggressively to establish e-procurement systems.[5]

- Virginia developed an e-procurement system in 2001. While they experienced some issues with implementation and higher costs than expected, the system is now considered one of the best in the country. The system now has 38,000 vendors registered and over five million products available. Virginia reports savings since 2001 of over $280 million, not including administrative savings.

- Pennsylvania's annualized savings on its e-procurement system is estimated at $80 million per year.

- In 2011, Minnesota state agencies saved about $210 million over costs of goods and services compared to 2009.

- Texas estimates it is saved $114.8 million over FY2006 spending on goods and services.

As CMS and BOSS develop a strategic plan, implementing an e-procurement system should be one of the highest priorities.

Estimated Savings

Significant savings can be achieved through streamlining administrative processing and redeploying staff to critical new responsibilities in BOSS. Implementing changes will also help BOSS deal with the limited hiring they may be able to do for FY2013 and

beyond. Since CMS is in the processing of working with the Governor's Office of Management and Budget, it is not know if and what hiring BOSS may be able to do, and therefore, what savings might be achieved at this time.

The following sections outline four purchasing techniques with proven records of savings in other states, that are currently allowable in Illinois code, however, are not currently being used.

2.1. Develop Strategies to Expand the State's Bidder Pool

In August 2011, state and local purchasing officials across the nation were surveyed to determine procurement agency priorities for FY2012. More than 27 percent of respondents cited "attracting more vendors to increase competition" as a major focus for their agency in the upcoming year.[6]

In tight budget times, purchasers are searching even more for ways to bring more vendors into the procurement process with an end goal of creating more competition and, in turn, more competitive prices for needed goods and services.

Streamlining State Procurement and Contracting

Massachusetts is currently proposing procurement reforms to make its systems more user-friendly, cut costs to bidders, and ultimately create savings for the Commonwealth.

In announcing his FY2012 budget, Governor Deval Patrick outlined steps being taken by the Operational Services Division (OSD) to improve bidder interest in State contracts. These changes include a variety of measures to improve contract terms, conditions, and amendments. OSD is also planning to utilize reverse auction technology to drive down the cost of doing business with the Commonwealth.

Currently, OSD uses a standard Request for Response (RFR) template when issuing solicitations for statewide contracts. Governor Patrick directed OSD to build on the success of this template and the standardization of terms that it provides for bidders to create a standard RFR template for State agency contracts as well. This is intended to help streamline the procurement process and standardize the terms for agencies and potential bidders. Additionally, a task force was appointed to examine the State's standard terms and conditions and other procurement terms and bid requirements in an effort to increase bidder interest, simplify the procurement process, and reduce costs.

Procurement agencies are also considering ways to improve the bidding process by reducing the burden on vendors who are asked to file multiple registrations, certifications, and disclosures with each bid submission. Purchasing officials frequently site onerous filing requirements as the greatest barrier to increasing their pool of potential vendors. Frequently, vendors complain that State bid forms are too complex and that the number of certifications and disclosures is excessively burdensome.

Vendors' struggles with bid filings are well-known by procurement professionals. This is reflected in the August 2011 BidNet survey in which purchasing officials were asked the most common mistake made by vendors in bid submissions. Over half of the respondents noted that vendors do not (or cannot) follow the bid specs and instructions. Another 16 percent pointed to vendors' failure to submit all bid documentation. See Figure 1 for more on this survey question.

Figure 1
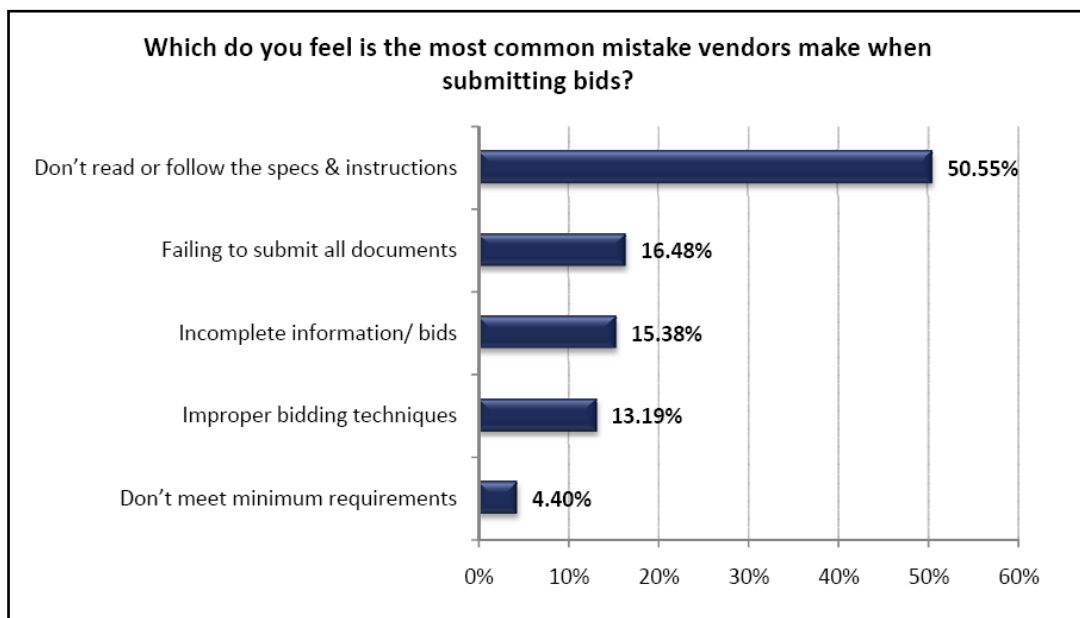
Source: Bid//net Survey, August 2011.

Evaluating Multiple Bidder Certifications and Disclosures

The growing trend in government purchasing is to allow vendors to pre-certify basic information about themselves, along with representations of compliance with conditions for procurement eligibility. While vendors are required to update this information regularly (once a year, under the federal system), they do not have to re-file it with every proposal or bid, and procurement officials do not have to review redundant filings of the same information.

Requiring multiple vendor certifications and disclosures, the current practice in Illinois, imposes an unnecessary burden on potential vendors—particularly when such information must be filed in hard copy with each submitted bid or proposal. This is particularly true for the state's smaller businesses. At a minimum, the State should evaluate the public value and utility of each certification and disclosure, and determine areas in which filings can be eliminated or consolidated without risking full compliance with state procurement laws, regulations, and ethics standards.

Developing a State Vendor Database

After policymakers have conducted such a review and determined the most appropriate and useful vendor certifications and disclosures, further steps can be taken to achieve additional efficiencies in the procurement process and maximize the State's bidder pool. One such step is to create a single vendor database with basic information on venders and their qualifications.

While there are different designs for such databases at the state and federal level, this tool typically allows vendors to create an online profile that includes basic business contact information as well as all of their required representations, certifications, and disclosures. Below is a description of the federal database as well as one used in the State of New York.

Federal System - CCR and ORCA

The Central Contractor Registration (CCR) is the primary vendor database used by the federal government. The CCR collects, validates, stores and disseminates data to support agency acquisitions.

All current and prospective government vendors are required to register in CCR in order to be awarded contracts. Vendors are required to complete a one-time registration to provide basic information relevant to procurement and financial transactions. They must update or renew their registration annually to maintain an active status.

The CCR system validates the vendor's information and then electronically shares the data with federal agency finance offices to facilitate paperless payments through electronic funds transfer (EFT). CCR also shares the data with government procurement and electronic business systems.[7]

In 2005, the Federal Government supplemented the CCR system by launching the Online Representations and Certifications Application (ORCA). ORCA replaced most of the paper-based representations and certifications (Reps and Certs) required in federal solicitations with an internet application.

CCR and ORCA are complementary systems. ORCA reuses data pulled from CCR and pre-populates many of the required certification forms. Then, vendors provide additional information required in the forms. When vendors enter information into the ORCA system, they certify that they will keep this information current, accurate and complete for use with all solicitations.[8]

State of New York - VendRep

In 2006, the New York State Comptroller launched VendRep, an online system designed to provide more effective and efficient access to vendor information. VendRep was specifically designed to support both vendors and State contracting entities to provide and assess information related to vendor responsibility determinations. The system provides vendors with the convenience of filing required disclosures online, and similarly

provides State contracting entities the convenience of accessing that information electronically as part of the bid/proposal review process.

Participation in the VendRep system is voluntary for both State contracting entities and vendors. Paper filings can still be required by agencies and filed by vendors with each submitted bid or proposal. A vendor's VendRep file is considered "current" if it has been certified within six months of a solicitation. When enrolling in the system, the vendor agrees to keep the file current and correct.[9]

The Comptroller's Office has described the benefits of VendRep as:

Benefits to vendors -
- Ease of completing, filing, accessing, submitting, and updating vendor responsibility information (efficiencies are multiplied for vendors who frequently bid and contract with the State);
- Eliminates the need to fill out basic information on each filing submission (the system saves this data automatically on each form);
- Reduces the costs associated with paper documents, including copying, delivery, and filing;
- Secure vendor information, available only to the vendor and State contracting entities (upon certification by the vendor); and
- Enhanced communication with State agencies.

Benefits to State agencies:
- Direct, immediate, easy access to current, standardized vendor disclosures, eliminating the need for each State contracting entity to separately administer and maintain paper files with each solicitation;
- Online information shared with other authorized State users;
- Reduces the costs associated with paper documents, including receipt, distribution and filing; and
- Improved consistency, accuracy and timeliness of the information used in the vendor responsibility review.[10]

Some procurement experts recommend that a vendor database also include data from both internal company performance information (collected by request) and from external sources of supplier information. With or without such enhancements, a vendor database can make vendor information much easier to file, maintain and evaluate, creating a more business-friendly environment (and a more robust bidder pool for the State). Further, such systems reduce the amount of time and money departments spend collecting and storing this information with each bid and proposal submission.

Reducing the Number of Automatic Bid Disqualifications

In addition to requiring a full and duplicative hard-copy submission of vendor certifications and disclosures with each bid/proposal, the current system also makes any failure to submit such information grounds for immediate and irrevocable disqualification of the vendor from the bid in question. This unnecessarily reduces the number of

bidders, without any differentiation of substantive versus non-substantive (technical) "errors" in terms of their seriousness, or the ease with which they might be corrected given an opportunity.

Since Illinois has no formalized process for notifying vendors of the specific error or errors that justify disqualification for a particular bid, vendors are given little information by which they can improve their compliance in the future.

CMS staff members who open bids regularly estimate that as many as 50 percent of bids are automatically disqualified for technical error such as failing to include a required disclosure form.

While allowing bidders the opportunity to alter substantive elements of a bid would certainly create an unfair advantage, affording them an opportunity to "cure" non-substantive filing omissions could increase the State's potential bidder pool significantly. When the Board of Elections disclosure form was first required, Illinois allowed a grace period for bidders to submit a missing form. The State should determine whether a similar grace period might again be considered for inadvertent filing omissions.

A vendor database as described above could address this issue in the current system. If a database maintains a current record of basic bidder information and certifications, then there is no need for bidders to resubmit these documents with each solicitation response.

Recommendations

1. **Evaluate need for multiple vendor certifications and disclosures.** Consider opportunities to consolidate or streamline required filings.

2. **Create a state vendor database with basic vendor information and verification of required representations, certifications, and disclosures.**

3. **Consider instituting a grace period for bidders to cure non-substantive omissions in solicitation responses.**

4. **Institute a formal process to notify bidders of the reason for any bid disqualifications so that they can address these issues in future submissions.**

Estimated Savings

As noted earlier, Massachusetts is currently proposing procurement reforms to make its system more user-friendly, cut costs to bidders, and ultimately create savings for the Commonwealth. The estimated savings for these reforms is $30 million annually.

The Massachusetts savings estimate includes strategies addressed elsewhere in this report such as reverse auctions and expansion of master contracts. The remaining Massachusetts strategies designed to improve vendor relationships, streamline the bid process, and reduce ultimate product costs can be estimated conservatively at $3 million annually.

Presuming a three-year phase-in for these savings with none in year one while reforms are instituted, 50 percent in year two (the first year of implementation) and 100 percent in year three, total savings over five years is $10.5 million.

These savings do not reflect the cost for developing a State vendor database. Such costs are unique to each jurisdiction based on the application design and the extent and complexity of the filings to be maintained on the system. BOSS should work with BCCS to estimate system costs and consider applying the savings outlined in this report to create this tool that will further streamline the procurement process.

Year 1	$0
Year 2	$1,500,000
Year 3	$3,000,000
Year 4	$3,000,000
Year 5	$3,000,000
5-YEAR TOTAL	**$10,500,000**

It should also be noted that many of the benefits of creating a more business-friendly environment for bidders and growing the State's bidder pool may be less tangible, more long-term, and not immediately obvious or easily measurable. Such benefits include:
- Higher quality goods and services
- Beneficial contract terms
- Time savings for staff
- Improved relationships with vendors

2.2. Develop Innovative Uses of Traditional Procurement Tools

There is a wide spectrum of procurement tools that officials can use in solicitations to maximize the value in procurements. These tools vary according to the nature of the solicitation and the product or service sought.

The State of Illinois employs a variety of traditional solicitation instruments such as Invitations for Bids (IFBs), Requests for Proposals (RFPs), and Requests for Information (RFIs). However, there is an opportunity for the State to expand the use of these tools

and utilize them in innovative ways to generate savings and improve the quality of State procurement.

Maximizing Use and Benefit of RFIs

As a variation on the Request for Proposal (RFP) that aims principally at collecting non-price data, a Request for Information (RFI) can be used to leverage vendor expertise about different strategies for achieving a particular procurement goal. The RFI has become particularly useful in procurement areas like technology, where maintaining up-to-date in-house expertise is difficult, and the range of "solutions" available to address the State's procurement goals can vary significantly.

RFIs can be utilized to collect information about vendor capacities and the overall marketplace of suppliers and trends for particular goods and services. The primary purpose of RFIs is to help gather market knowledge from suppliers or experts. RFIs are best used in conjunction with RFPs and other market research to learn more about the marketplace. They are also used to inform public contracting entities when procurement staffing resources or sector expertise is limited. Many public entities have found that it may be necessary to send out an RFI in advance of an RFP to fully understand the relevant cost drivers for a product or service.[11]

Vendors and market experts may also be able to assist the State in understanding:
- What is needed to achieve the State's desired business outcome;
- Who the experts or industry leaders in the particular sector are; and
- General commercial and government best practices.[12]

In FY2011, the State of Illinois issued over 1,400 total solicitations. Of these, only 24 (less than two percent) were Requests for Information, primarily from IT and public safety agencies.[13] Given the value of RFIs as a tool to collect valuable market information and tap into sector expertise (free of charge!), the State should explore opportunities to use this tool more frequently and across more agencies.

Of course, the main concern with using RFIs to educate public entities on potential solutions is that, if improperly used, they could create an unfair advantage if an agency selects one vendor to the exclusion of others based upon the RFI. When states use this tool, they must be careful to tailor the RFI so that it solicits the needed information without requesting extensive information that might taint the subsequent procurement process. Generally, the more vendors that participate in an RFI process, the better the chances of not creating a conflict of interest.

Publishing Draft RFPs

Another flexible tool for improving the value of procurements is simply to publish draft RFPs and give all potential vendors an opportunity to comment and make suggestions for improved RFP language. Like an RFI, a draft RFP procedure solicits non-price information that may help clarify procurement strategies while also maintaining the largest feasible vendor pool. In either event, cost savings can be achieved by more precisely aligning procurement solicitations to ultimate State procurement goals, without

compromising savings achieved through the more traditional route of securing low-price bids once the goods or services desired have been more definitively identified.

Illinois should strive to use the flexibility of the solicitation process to a greater degree to increase the value procurements may provide and ultimately improve the way the State conducts business.

Utilizing Procurement "Wiki" Pages

In 2007, then Mayor Adrian Fenty challenged Washington, DC's Chief Procurement Officer to transform the Office of Contracting and Procurement (OCP) into a more accountable and transparent agency with robust procurement practices and processes.[14] Soon thereafter, OCP had a chance to respond to the Mayor's challenge when it was asked to help procure the needed resources to design, build, and equip a new state-of-the-art evidence storage warehouse for the Washington Police Department.

OCP established its own internal goals to create a process that would:
- Cut in half construction times for a building of this magnitude;
- Decrease construction costs and save revenue;
- Allow vendors to be innovative in their thinking and not limit the scope of the project;
- Establish a benchmark for future procurements; and
- Provide transparency from the beginning of the project to the end.[15]

OCP launched a web-based procurement process focused on obtaining innovative ideas from industry experts and challenged designers and builders to think creatively. OCP's goal was simple - to simply state the problem the District was seeking to solve and allow experts in the commercial sector to invent a solution.

The agency created a special website for the procurement to ensure that ideas were shared publicly. The website used "wiki" technology that gave contractors easy access to procurement updates, documents, ideas, suggestions, images and videos.

The open web format allowed all interested parties access to the same information, ensuring a level playing field. Through the "Questions and Answers" section, the wiki allowed real-time collaboration between contractors and government officials. This process allowed the District to cut its traditional six month competitive proposal process in half.

OCP cites the major achievements from this process as a significant reduction in the cost of staff time, engaging the vendor community in the procurement process, decreasing the procurement cycle time, and providing transparency and detailed reporting throughout the entire process. OCP was also able to redeploy 120 hours per week in staff time that would have been required to answer questions, respond to emails and meet face to face with vendors (all now done via the wiki).

In just this one procurement, the District recognized the following cost savings:
- $25,000 in OCP staff savings;

- An estimated 20 percent unit cost reduction (on average) for paper, supplies, equipment; and
- Overall facility cost reduction of nearly 50 percent.

Officials estimate that the District will see approximately $4 million in ongoing savings through the use of wikis compared to similar commercial off-the-shelf procurement products.[16]

Recommendations

1. **Use the flexibility of the solicitation process and procurement tools such as RFIs and draft RFPs to a greater degree to tap into vendor and market expertise.** This will also increase the value procurements may provide and ultimately improve the way the State conducts business.

2. **Consider using technology and innovative tools such as procurement wiki pages.** Such strategies have proven successful in reducing the cost of procurement supports and staff time, streamlining the procurement cycle, and engaging the vendor community.

Estimated Savings

More expansive use of Illinois' procurement tools will generate savings in a variety of ways.

First, by tapping into vendor and market expertise, the State will be able to formulate more precise and better researched solicitations. This will ultimately lead to more focused and better informed purchasing. Sector and market knowledge provided by outside experts through RFI and draft RFP processes costs the State nothing. This practice also saves hours of staff time spent on research and project design.

As seen in Washington, DC, innovative use of procurement tools can also influence the quality and costs of the goods and services purchased. Beyond the savings and efficiencies recognized by CMS, purchasing agencies will benefit from a more expeditious procurement cycle and better ultimate prices.

2.3. Purchase through Consortia to Realize Significant Savings

Illinois code already allows the Department of Central Management Services to enter into joint purchasing agreements for

> "personal property, supplies, and services jointly with a governmental entity of another state or with a consortium of governmental entities of one or more other states. Subject to provisions of the joint purchasing

solicitation, the Department of Central Management Services may designate the resulting contract as available to governmental units in Illinois."[17]

At the present time, no consortium agreements are in place. As noted above, this legislative authority was created at the same time that the EEC was established. As such, resources have been devoted to working out new roles and responsibilities and not yet to designing new procurement tools.

There are now several well established consortia and the savings achieved by states that participate in consortia is well documented.[18] Through the Western States Contracting Alliance (WSCA) started in 1993, 15 states report savings to member states of between 15 and 30 percent on goods and services purchased through the consortium.[19] In addition, purchasing through consortia saves administrative costs for participating states since each state does not need to establish contracts; ordering and inventory costs are also reduced.

There are five major multi-state buying pools for pharmaceuticals alone. The most well established is The Minnesota Multistate Contracting Alliance for Pharmacy (MMCAP), founded in the 1990's, which combines the purchasing power of 45 states and other jurisdictions, including many of Illinois' neighboring states and the City of Chicago, though not Illinois itself. MMCAP reports savings of about 23.7 percent below Average Wholesale Price for brand name pharmaceuticals and 65 percent savings on generic drugs. [20]

Examples of states' success in using and increasing consortium purchasing include:

- The University of Texas estimates it saved about $14 million on $255 million in purchases.

- In FY 2010, New Jersey reported a savings of $25 million from reforms in state purchasing, including use of consortia.

- The Western States Contracting Alliance, a 46 member group of states and other government jurisdictions, purchased $2.57 billion of IT equipment at a discount of 10-75 percent for members.

- Delaware aggregated the electricity load for state and local facilities, including schools, and increased its purchasing power. Combined with a reverse auction, the State saved $9 million the first year.

Recommendations

1. **Investigate neighboring states' and other consortium membership to determine if Illinois should join.**

2. Investigate specific product consortia, such as those purchasing Medicaid and/or other pharmaceuticals, to determine if Illinois should join.

Estimated Savings

According to the report produced by BOSS, state Notices of Awards for FY 2011 totaled approximately $26.6 billion in goods and services. If two percent of this purchasing ($532 million) were done through consortium purchasing, with a possible savings of 10 percent over current contracting prices, the State of Illinois would be saving over $50 million. Calculating a gradual ramp up, savings in the first year are estimated to be approximately $2 million to $10 million, with five-year savings as much as $100 million.

Year 1	$2 million – $10 million
Year 2	$10 million – $15 million
Year 3	$20 million – $30 million
Year 4	$30 million – $35 million
Year 5	$40million – $50 million
5-YEAR TOTAL	**$102.0 million – $140.0 million**

2.1. Establish a Reverse Auction Capability

Illinois procurement code currently permits the Department of Central Management to establish reverse auctions as a means to purchase goods and services for the State.

> "Competitive Sealed Bidding; Reverse Auction… may procure supplies or services through a competitive electronic auction bidding process after the purchasing officer explains in writing to the chief procurement officer his or her determination that the use of such a process will be in the best interest of the State."[21]

States and local jurisdictions have been able to save between 10 and 30 percent on purchases through the use of reverse auctions. Some examples:

- In 2004, Pennsylvania conducted its first reverse auction for office supplies and saved the Commonwealth 40 percent over the previous year -- $9.5 million in savings. The Commonwealth now purchases more than 20 commodities through this method and estimates it is savings about $100 million per year compared to purchases of the same items prior to the reverse auction.[22]

- Chicago conducted a reverse auction in 2009 to obtain the best pricing for snow removal equipment at O'Hare Airport. The city saved $1 million on the purchase.[23]

- Indiana has been hosting reverse auctions since 2007 and reports savings of $5 million (10 percent) on $50 million in state purchasing.

Recommendations

1. Prioritize development of a reverse auction capability.

Estimated Savings

Reverse auction savings for Illinois could grow into the millions.

If Illinois targeted one percent of its purchases (based on the $26.6 billion in volume for FY2011) to be purchased through reverse auctions, and saved 10 percent on those purchases, it could realize savings of as much as $26 million when fully implemented. A gradual implementation could yield almost $100 million over five years.

Year 1	$5 million – $10 million
Year 2	$10 million – $15 million
Year 3	$15 million – $20 million
Year 4	$20 million – $24 million
Year 5	$24 million – $26 million
5-YEAR TOTAL	**$74 million – $95 million**

2.2. Increase the Use of Master Contracts

In current operations there is no well-defined and consistent mechanism used to identify opportunities or need for master contracts. The process relies on someone within BOSS in the review process "noticing" similar requests from agencies and alerting management to the possible need for a master contract. By this time, contracts may already be in place that will need to expire before all agencies using a similar product or service would be able to take advantage of a new master contract. Likewise, BOSS reviewers can "catch" an agency request for goods or services and alert the agency to the fact that a master contract exists.

While agencies are required to check SharePoint to identify whether a master contract is in place or not, BOSS has no real way of knowing if this is the case. BOSS interviewees cited numerous examples of times they "caught" a request and were able to alert the agency of a master contract already in place. There is no way to know if agencies' purchases under $5,000 are being made through master contracts.

Improving the master contract process, ensuring agencies know contracts are executed and expanding the use of master contracts can mean significant savings to a state.

- California contracted with a private vendor in 2004 to help identify and create strategic sourcing opportunities, primarily establishing mandatory master contracts for statewide use. An Auditor's report last year identified $160 million in net savings to California between 2004 and 2007.[24]

- Georgia established a commission in 2003 to upgrade its purchasing systems that are responsible for $5.7 billion in purchasing per year. A 2008 report from the commission noted strategic sourcing through the increased use of master contracts is now saving the state $100 million per year.[25]

- Michigan worked with a private contractor to develop an improved and expanded master contract system in 2005. Savings on products under the master contract system range from 3 percent to ten percent lower than contracts prior to establishing the master; desktop systems are 25 percent lower.[26]

Recommendations

1. **Initiate a special project to develop short-term "work-arounds" to identify spending in key areas and implement a plan for increasing master contracts**.

2. **Complete a one-time study to identify what agencies are purchasing in the under $5,000 category.** Armed with this information, BOSS could develop specific plans for increased master contracts, reverse auctions, purchasing cards, and consortium purchasing.

3. **Revise the notification and posting system for master contracts.** The process should be managed more closely at the front-end to ensure master contracts are being used and to more systematically identify new opportunities for master contracts.

4. **Set targets to increase the number of master contracts and potential savings.** What gets measured gets done. This type of strategic planning can move the Illinois purchasing system in the direction needed to increase savings opportunities.

5. **Launch a formal and ongoing initiative with Higher Education to increase joint contracting opportunities.** BOSS reports discussions at various times to review joint purchasing opportunities with Higher Education. A more systematic and formal review should be undertaken to tap into the enormous buying power that Higher Ed brings to the table.

Estimated Savings

Since no data is available to determine the current master contract spend and potential for new contracts, estimates must rely on experience from other states. The three states noted above (California, Georgia and Michigan) report savings from about $50 million per year to as much as $100 million. If Illinois could save just half of the lowest estimate, it is saving $25 million per year.

Year 1	$5 million – $10 million
Year 2	$10 million – $15 million
Year 3	$15 million – $20 million
Year 4	$20 million – $25 million
Year 5	$25million – $25 million
5-YEAR TOTAL	**$75 million – $95 million**

2.3. Establish a Purchasing Card (P- Card) System

BOSS has taken some initial steps to investigate the use of P-Cards through issuance of a survey to agencies to determine opinions on the use and estimated volume of spending that might lend itself to such a system.

Since P-Cards have been used for many years now, there is a large body of evidence supporting their use, and considerable documentation on how to design policies and procedures that ensure the integrity of the system.

- A Virginia study showed:[27]
  - 60 percent of agency payments are less than $1,000.
  - 50 percent of suppliers are used only once per year.
  - 80 percent of suppliers are used only twice per year.

- The National Association of Purchasing Card Professionals estimates the cost to process a traditional invoice is between $50 and $200, with an average of $89. The typical P-Card process costs about $22.[28]

- Wisconsin recently reviewed spending and found the average spend on a purchasing card was $233 with a total spend of $161.7 million – that is almost 700,000 purchases.[29]

- South Carolina has been using a P-Card since 1996 and uses the card for over $163 million in purchases annually.[30]

- Beyond administrative savings, states using P-Cards are benefiting from rebates of between 1 percent and 2 percent on purchases. Vendors are able to lower P-Card purchase prices because of the ease of invoicing and payment that saves them money for processing. Wisconsin's analysis of rebates for some states in 2008 report:[31]
  - Ohio received $1.1 million in rebates based on $66.7 million in purchases (1.59 percent).
  - Wisconsin received $534,600 in rebates based on $42.5 million in purchases (1.26 percent).
  - Michigan received $489,700 in rebates based on $40.1 million in purchases (1.22 percent).
  - Minnesota received $174,100 in rebates based on $14.6 million in purchases (1.19 percent).

Recommendations

1. Fast track a pilot project to initiate a P-Card system.

There are many obstacles that CMS must overcome to implement a P-Card system for the State, not the least of which is 268 different financial management systems. CMS should, however, move as quickly as possible, working with the Comptroller, to at least establish a pilot project to test the use in Illinois. CMS should also ask for an Attorney General's opinion on the use of rebates in a P-card system.

Estimated Savings

The question of rebates should be revisited, and if necessary, legislation proposed that would allow vendors to discount purchases based on savings they achieve because of ease of use. Other states are benefiting in the millions of dollars from such arrangements. Administrative savings would occur for the Comptroller. CMS may be able to achieve some administrative efficiencies also.

2.4. Another Innovative Idea

Florida legislators enacted a law last year that saved the state $420 million on existing contracts. The law created a three-month window to open all contracts with vendors to

renegotiate terms of the contracts. In many instances, vendors were willing to reduce pricing in exchange for extensions on the length of the contract period. One example: Accenture, the State's online marketing vendor, agreed to cap prices, upgrade hardware and software, and add 4,000 person-hours to the existing contract in exchange for an additional two years on the contract. Florida saved about $2.5 million on the contract and received $3.2 million for the new hardware and software.[32]

3. BUREAU OF COMMUNICATION AND COMPUTER SERVICES

The Bureau of Communication and Computer Services (BCCS) has a comprehensive and well thought-out strategic plan for moving the state's IT solutions well into the 21st Century. In conjunction with the Chief Information Officer in the Governor's Office, BCCS has successfully completed several major consolidation efforts from email to entire agency systems and server consolidations. The plan is in place to continue this work, as well as to plan and develop new technologies and infrastructure to support government operations. BCCS management and staff understand the rapidly changing IT environment and are focusing resources as much as possible on advancing technologies while maintaining existing systems. The Bureau reports it will soon be submitting a strategic plan to the Director for approval that will encompass these objectives.

The stakes are high. According to a survey completed by the CIO, in FY2011:

- State agencies' IT spend totaled $408.1 million, including all staff, contracted services, hardware, software, training and maintenance.

- 31 percent of this spend ($126.1 million) was in BCCS.

- Throughout the state, 1,967 FTEs are identified as IT – 29 percent (567) are in BCCS.

- BCCS' current FTE count of 569 (with 744 funded positions) is down over recent years – 2009 shows 679 FTEs (771 funded), 2007 had 742 FTEs (860 funded).

The challenge for BCCS, as in all states that have successfully moved to consolidate IT planning, oversight, and operations, is to ensure resources are targeted for the best return on investment for the state, both in terms of existing systems and procuring new technology. In Illinois, BCCS must do this with the additional challenge of the changing environment for IT purchasing brought about by the creation of the EEC. In fact, in a survey conducted by the CIO, agencies noted that the procurement system governs IT solutions, not a strategic plan and governance process. As BOSS revises and improves purchasing processes, BCCS will benefit.

Additionally, application modernization is one way of bringing legacy systems "up to speed" so they can meet today's requirements. The good news for budget planners is that this approach does not always mean wholesale system replacement (as with a new

ERP) and can even produce cost savings for the State as funding is identified for longer-term or enterprise-wide system solutions. In 2011, the National Association of State CIOs (NASCIO) ranked application modernization as one of its highest priorities (#4) for state government.[33] As states continue to struggle with tight budgets, this approach is being utilized more and more across the country.

3.1. Streamlining Employee Timekeeping - eTime

Given the limited personnel resources of most agencies, states are prioritizing technology solutions and application modernizations that can maximize employee productivity and focus staff time on their agency's primary missions rather than administrative paperwork.

Currently, many Illinois departments still use manual, paper-based processes for employee time reporting. This antiquated approach wastes countless hours of staff and supervisor time each pay period as well as the printing and storage costs for the hundreds of thousands of pieces of paper that are shuffled each month.

To provide a more efficient option for Illinois agencies, the BCCS Enterprise Applications and Architecture Team has developed a web-enabled electronic time-keeping system (eTime) application for capturing, approving, and processing daily time sheets, official leave requests, overtime requests, and other time-keeping related information. The eTime application provides users with a new web interface that is integrated with the existing Central Time Accounting System (CTAS) and the CMS Payroll System.[34] The new eTime system is expected not only to reduce dramatically the time spent by employees and supervisors on administrative paperwork, but also to improve personnel accountability, standardization, and accuracy.

The eTime system has been used by BCCS employees for several months. The system is now being piloted by CMS internally and for Shared Services agencies. Currently, there are slight variations in the business rules used by personnel officials in each agency (e.g., how hours are counted/measured; whether and how comp time or leave may be used within a pay period; etc.). Agencies also have different data entry points for recording time (e.g., some agencies use timesheets, others use time clocks). Recognizing this, BCCS is working with interested departments independently to make sure that the eTime application addresses the agency's internal practices and procedures.

BCCS has already established a successful partnership with the Department of Revenue (DOR) to launch a department-specific version of eTime. DOR employees are required to record their time using a time clock model.   So, BCCS, in conjunction with Revenue IT staff, is designing an "eClock" addition to the basic eTime application. Recognizing the anticipated ROI from significant staff time efficiencies, DOR detailed members of its own IT staff to expedite this project.

It should be noted that when developing application solutions, limited IT resources can be maximized by reducing the number of "agency-specific" apps that must be

developed. This can be achieved by updating and standardizing departmental business rules and practices (some of which are more antiquated than the IT infrastructure supporting them). In 2010, New Jersey launched a substantial application modernization process in state government. When initial estimates suggested that the modernization effort might cost $300-400 million, officials decided that they should first consider how to make improvements in the State's business processes and then design apps to support those processes.

Then-New Jersey CTO Adel Ebeid commented that, "One thing that people don't really think about is that the legacy systems are mainly there to support legacy processes, legacy business practices…[IT systems] were designed in the '70s and early '80s to support whatever business process was in place. So if we're going to embark on a modernization effort, we are not going to do it unless we rethink the business process."[35]

Eighty-six percent of the states surveyed by NASCIO in 2010 noted that changing or re-engineering business processes was the number one driver for their system modernization.[36] Illinois must similarly consider updating business processes as part of its IT modernization efforts.

3.2. Continue with Implementation of ePASS

Other BCCS-designed applications have already proven successful in producing savings for the State. BCCS created the Electronic Pay Stub System (EPASS) as an easy-to-use web-based tool that allows employees to view current and past pay stubs electronically (EPASS maintains historical pay stub information for seven years). Using EPASS, State agencies have reduced the cost of paper, printing supplies, and postage, as well as storage costs involved with managing employee pay stubs. The agencies have also seen improved efficiencies as they have reduced administrative personnel time and costs required to process and distribute stubs and reproduce lost stubs.

BCCS estimates that converting to electronic pay stubs saves approximately $2.00 per employee per pay period in printing, paper, envelopes, postage, and storage. Although certainly present, BCCS did not attempt to quantify the additional benefits generated by EPASS such as expanded system access for payroll administrators, reduced costs for replacing lost or undelivered pay stubs, and the benefit of immediate responses to employee payroll questions.

Currently, the EPASS application is used by only 34,000 of the approximately 66,000 employees on the State payroll

Recommendations

1. **Expand eTime application to all agencies on the Central Time Accounting System (CTAS).**

2. **Convert remaining State agencies to EPASS system.**

3. **Standardize State agency business rules and practices so that fewer unique applications are needed to support agency-specific systems.**

4. **Continue to support application modernization efforts that will produce additional savings for the State while a longer-term solution is identified.** BCCS has developed an eBenefits application that will be ready for deployment in Fall 2012. Similar savings will be generated here as employee benefits statements will be provided electronically. Similarly, BCCS is working on a variety of e-government programs to allow the State to go "paperless" and reduce printing and storage costs significantly.

Estimated Savings

eTime

In its own use of the eTime application, BCCS has seen significant reductions in staff time required to process, approve, and transmit regular timesheets. Based on the average BCCS employee salary, these savings were estimated at approximately $563,500 annually. (Note: These are not direct savings, but rather the value of staff time hours that can be reallocated from the administrative paperwork involved in time-keeping to projects more directly related to the agency's mission.)

If eTime is expanded throughout the CTAS agencies, BCCS has projected that similar opportunity savings could be millions of dollars annually. Currently, it is estimated that each employee produces 25-75 pieces of paper each month in timesheets, leave requests, and other time-keeping forms. The State currently employs approximately 66,000 employees. This means that with eTime the State could avoid printing and storing on average 3.3 million pages each month, almost 40 million pages every year!

Of course, there would be development and deployment costs associated with a rollout to all CTAS agencies. BCCS estimates that the cost to develop the initial eTime application was approximately $368,000. Moving forward, costs will be significantly less as BCCS will only need to customize the basic application to each agency's time system. BCCS estimates that the total cost to take eTime to all CTAS agencies would be no more than $750,000 and could be achieved in 18 months. If agencies are willing to partner with BCCS to develop and deploy their eTime system (as seen with the Department of Revenue), much of this cost could be absorbed in the agency's current budget and the implementation timeline could be expedited.

ePASS

According to BCCS' most recent estimates, there are over 34,000 State employees on the ePASS system. At a rate of $2.00 per employee per paycheck, this equals over $1.6 million in annual savings in printing and storage costs. If EPASS is expanded to all 66,000 State employees, these savings could be over $3 million annually.

3.3. Support Implementation of New Technologies – Thin Client

Thin client technology, around since about 2000, runs all applications that are normally located on a PC, centrally. PCs require data storage, memory, processing power, on-site updates and maintenance. Thin client allows IT professionals to support agency applications centrally – updates, maintenance, and security can be done through a central operation, often times after working hours to reduce end-user staff downtime, rather than at individual sites. Thin client technology also is an efficient disaster recovery tool and uses less power, saving energy costs.

- Michigan estimates it saved between $3 million and $5 million in its first year after migrating 27,000 employees to Thin Client.[37]

- A University of Pennsylvania study found energy savings of about $29,000 for 1,000 Thin Clients (45 percent savings). Traditional desktops consume about 280 watts of power compared to about 30 watts for most Thin Client devices.[38]

BCCS is piloting the use of Thin Client technology within the Bureau and is working with the Department of Human Services to test its use, including in field operations. BCCS is developing a new end-user service option that will save agencies on the cost of hardware, maintenance and support of the Thin Client technology over traditional PCs.

Recommendations

1. **Support implementation of Thin Client technology.**

   Moving in this direction puts Illinois on the right track and ahead of many states that have not yet begun to investigate and embrace such technology. Devoting resources to full implementation will allow BCCS to introduce savings to agencies and position the Bureau to better support agencies' IT needs.

Estimated Savings

For 10,000 users, BCCS estimates a yearly savings of about $4.2 million; a five-year savings of $22.1 million.

3.4. Reduce Warehouse Use

BCCS leases a 25,000 square foot warehouse in Springfield from the Department of General Services to house its IT and telecommunications inventory. The rental, utility, and supplies costs equal about $27,000 annually. The average annual amount of

inventory that goes through the warehouse is approximately $14 million; at any given time an average of $2 million of equipment is sitting in the facility.

Central warehouses incur expenses that often result in unnecessary and costly operations. To avoid these costs, many enterprises use a system called "just in time" (JIT) delivery mechanism to replace warehouses. Created by the Toyota car company in the early 1970s, the JIT philosophy requires the vendor to ship directly to the end-user rather than shipping to a warehouse. Some states that use JIT systems are Ohio, Iowa, and Delaware.

One obvious expense that a JIT system can eliminate is the cost to transport goods from the warehouse to end-user destinations. These transportation costs are often in addition to vendor delivery charges that are built into the price of a commodity regardless of the commodity's destination. According to BCCS, warehouse transportation costs are about $113,000 annually. Some of these costs are associated with the transportation of BCCS employees who would require transportation even if no warehouse existed.

Pilferage, damage, and expiration of warehoused items also adds an unnecessary expense. According to BCCS, of the total $14 million of inventory that passes through the warehouse, under 1 percent is lost, stolen, or unusable. Assuming slightly less (0.75 percent) of this $14 million of inventory is pilfered, damaged or expired, the State loses about $105,000 per year at the warehouse. This estimate may be low because BCCS does not systematically identify these losses.

Warehouses also incur significant personnel expenses. The fully loaded cost of BCCS staff dedicated to warehouse operations is over $885,000 annually for eight positions.

BCCS warehouse staff believe that the warehouse is necessary for two reasons. One is so that equipment can be tagged and put into the Illinois' inventory system. However, just as the BCCS can require vendors to deliver products to the end user, the Bureau can also require vendors to tag equipment and report inventory information to the BCCS so that the State inventory can be accurately maintained.

Secondly, BCCS warehouse staff believe that it is more efficient for its technicians to image all computers at the warehouse rather than imaging some computers individually at the end users' locations. This may be true. As discussed above, however, factoring in only a partial reduction in transportation costs, still produce savings.

Recommendations

1. Eliminate the BCCS warehouse through attrition.

Estimated Savings

Allowing for a two-year phase out plan, the following savings can be achieved by Year 3.

- $56,500 reduction in transportation costs.
- $105,000 savings to eliminate typical warehouse losses.
- $27,000 savings in lease costs.
- $440,000 in personnel savings by Year 3.
- $628,500 total savings in Year 3 and continuing.

Year 1	$0
Year 2	$0
Year 3	$628,500
Year 4	$628,500
Year 5	$628,500
5-YEAR TOTAL	**$1.9 million**

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