

CHAPTER 3 – ELECTRONIC GOVERNMENT FRAMEWORK

“Colorado voters are enthusiastic about a greater governmental online presence. Most voters want state government to offer one or more specific services on the Internet.” NCC Poll of Colorado Registered Voters

Technology influences the way people interact, communicate, shop, and carry out day-to-day business. State employees and citizens depend more and more on the Internet for information and to conduct business, collaborate, and communicate. Public information should no longer be available only via traditional print media. Citizens expect the same ease of access from their state governments as they do from businesses.

There is an ever increasing expectation among consumers that instead of driving to a brick-and-mortar office to pick up permit applications, they are able to fill out the permits online and track their progress through the approval process. By using an interactive state website, or portal, Colorado citizens will benefit greatly from the timesaving, cost efficiency, and convenience offered by this type of electronic government.

Figure 3-1: Electronic Government Framework Recommendations

| Recommendation | Estimated Cost Savings / Cost Avoidance | Support for NCC Goals | Status |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 3.1. The State should take a coordinated, statewide approach to electronic government, including the development of an interactive, service-oriented portal. | Initially, \$5.5 to \$10.0 million cost avoidance – long-term savings and fee reductions are also possible | <ul style="list-style-type: none"> ✓Efficiency and Effectiveness ✓Innovative Technology ✓Access to State Government ✓Collaboration and Information Sharing | Ready to Implement |
| 3.2. The State should pursue a coordinated statewide approach to all online licensing and registration efforts. In addition, the State should consider additional applications for inclusion on the statewide portal, including driver’s license renewal and motor vehicle registration applications. | Pending | <ul style="list-style-type: none"> ✓Efficiency and Effectiveness ✓Innovative Technology ✓Access to State Government ✓Collaboration and Information Sharing | Ready to Implement |
| 3.3. The State should implement an electronic procurement solution to allow for integration of all processes related to procurement. | Initially, \$3.0 to \$7.0 million cost avoidance – long-term operating efficiencies are also possible | <ul style="list-style-type: none"> ✓Efficiency and Effectiveness ✓Innovative Technology ✓Access to State Government | In Progress |

STATEWIDE PORTAL

Many states began their foray onto the Internet by advertising who they are and what they do, and by publishing on web pages information that was traditionally printed for citizens. Colorado’s website has approximately 60,000 different web pages. This website contains a great deal of general information about the State, including reference materials and

weather and road conditions. Information on Colorado State Government, including descriptions of the various state departments and associated program areas, makes up a large portion of the total website. The State is using the Internet to increase access to publicly available information.

The trend for most websites, including government websites, is a shift from informational sites to

transaction-oriented portals. A portal refers to a web page used as a starting point for linking to Internet information and content. Effective portals are organized and designed so users can easily find their way to the desired information or services.

State government portals provide a doorway to a variety of online government services and information. Successful state government portals also provide links to local governments, nonprofit groups, and other organizations. These links extend and enrich the customer's access to related electronic services and information throughout all levels of government. The e-government experience can provide seamless access to all governmental services and information.

Opportunity Statement

A highly interactive site allows the citizens to complete web forms and submit payment for services online rather than necessitating a visit to a state office.

Colorado's website currently contains valuable information; however, it lacks the features and functions necessary to make it truly interactive, service-oriented, and user-friendly. Although changes were recently made to the State's website to make it easier to use, the information is still organized along departmental lines. Citizens unfamiliar with the specific responsibilities of Colorado's many government agencies will have difficulty accessing the desired information. A citizen focused website can reduce this ambiguity by grouping available services by type rather than by agency.

In addition, the State's website is not keeping pace with other highly interactive, transaction-oriented portals. Transaction-oriented sites bring a full-service counter to the user. Online interactivity is a key feature for effective future government. Currently Colorado's website has very few applications for interactive transaction-based services. Colorado agencies provide several forms on the state website that can be downloaded, printed, filled out, and mailed in to the State. Colorado is just beginning to use interactive forms. The online services currently available include:

- ◆ Submitting income tax returns;
- ◆ Ordering of marriage, divorce, birth, and death certificates;
- ◆ Filing and access to corporate records;
- ◆ Renewing real estate licenses; and
- ◆ Purchasing passes to state parks.

Recent legislation regarding use of digital signatures and electronic payments has positioned the State to expand its e-government initiatives. Becoming an effective e-government requires leadership and commitment from all three branches of government. The commitment to support a statewide portal is critical to the success of Colorado's e-government effort.

Online Applications

A successful portal must provide services of value to citizens. Using this criterion, the NCC team selected some applications to implement via the portal. These applications include professional and occupational licensing and registrations, driver's license renewals, and motor vehicle registrations. These applications are prime candidates for implementation on the portal as these services are used by a large number of citizens. In addition, the volume of applicants is increasing for each of these services. The expanded use of technology can assist in addressing the increased workload anticipated in the future.

- ◆ Online Professional and Occupational Licensing and Registrations: The Department of Regulatory Agencies (DORA) licenses certain businesses, occupations, and professions. Colorado's growth has resulted in a large increase in numbers of applications and registrations for professional and occupational licenses. DORA's business plan includes a goal of expanding the use of electronic commerce and making the majority of DORA's public information and services accessible online. To begin fulfilling this goal, DORA implemented a pilot application for online renewal of Real Estate licenses in December 1999. At the completion of the pilot, 1,904 licenses were renewed online. Overall, the public's reaction was very positive. From an online survey of people submitting their renewals over the Internet, over 97 percent rated the online system favorably.
- ◆ Driver's License Renewals: The Department of Revenue issues Colorado driver's licenses. Population growth is driving an increase in the number of driver's licenses issued and renewed. A 1998 performance audit conducted by the Office of the State Auditor found a decline in customer service with this increase in volume. Over 50 percent of recently renewed drivers surveyed spent 30 minutes or more waiting at

their local office before speaking with a clerk. When combined with the time required to drive to and from the facility, the average time to renew a driver's license is over 50 minutes. Unless the licensing renewal process is improved, wait times are likely to increase, customer service levels will further decline, and additional brick- and-mortar facilities may be requested.

- ◆ Motor Vehicle Registrations: The Department of Revenue, in conjunction with counties, registers motor vehicles. The number of registered vehicles in Colorado is growing 2.3 percent per year. Each year, over 94,000 additional vehicles are registered in Colorado. A survey conducted by the Office of the State Auditor showed that 67 percent of customers would use telephones and / or the Internet for renewing vehicle registrations.

In addition to the applications that were reviewed by the NCC team, additional program areas have expressed an interest for inclusion in the statewide portal, specifically agencies within the Department of Revenue and the Department of Natural Resources.

Assessment

Many state governments have transaction-based services on their websites. For example, a recent Digital State Survey shows that 62 percent of states have licensing and permitting services available through the Internet or dedicated kiosks. Seven more states soon will implement online licensing and permitting applications. Forty-four states offer some type of electronic tax filing for citizens, whether through their websites or through third party sources. Several other states have implemented or are in the process of implementing statewide portals including Alaska, Arizona, Georgia, Kansas, Texas, Utah, Virginia, Washington, and Wisconsin. In each of these states, the portal functions as a complete system, integrated with back office applications, to provide seamless interaction with citizens and business partners.

Three alternatives were reviewed for the development and ongoing support of a statewide portal in Colorado.

- ◆ Alternative #1 - Department of Personnel / General Support Services (GSS): Colorado Information Technology Services (CITS) would have complete responsibility for developing the

statewide portal and day-to-day operations. CITS would adhere to the policies set by the Office of Innovation and Technology (OIT) and a schedule proposed by an advisory board.

- ◆ Alternative #2 - Department of State: – The Secretary of State's Office would have complete responsibility for developing the statewide portal and day-to-day operations. The Secretary of State's Office would adhere to the policies set by OIT and a schedule proposed by an advisory board.
- ◆ Alternative #3 - Private Funding Model: A public / private collaboration would use an integrator to develop the statewide portal in cooperation with CITS to ensure technical and operational issues between the portal and the State's infrastructure are coordinated. The vendor and CITS would adhere to the policies set by OIT and a schedule proposed by an advisory board.

Alternative #3 is the recommended approach for the development of the Colorado portal. The integrator will provide the portal infrastructure and develop web-based applications, in conjunction with appropriate state agencies. The portal will allow businesses and citizens to access government information and complete transactions online without using tax dollars. With the private funding model, the vendor is paid for its services through convenience or a delivery fee on selected transactions. While some services on the portal will be offered to the consumer at a nominal fee, many services may be offered at no charge. The convenience or delivery fee can be added to the existing fee or can be absorbed by the departments into the existing fee. In this scenario, it is anticipated that departments will experience no additional infrastructure costs, as additional applications are placed online. The only costs to the departments will be integration of the front-end application developed by the vendor and the existing legacy system within the department. In most cases, this integration can be accomplished using existing Information Technology (IT) resources.

This alternative is superior to the in-house development alternatives for several reasons:

- ◆ Reduced Risk: The total implementation costs for any of these alternatives are estimated to be between \$5.5 million and \$10.0 million. However, with the private funding model, the

integrator bears the vast majority of costs and associated development risks. The only cost to the State under the private funding model is the staff costs associated with day-to-day portal vendor coordination.

- ◆ **Core Competencies:** The core business of the State is providing valuable information and services to citizens. Staying abreast of current software and hardware needs and updates is not one of the State's core competencies. Instead, the integrator should be focused on ensuring that the software and hardware are kept updated and that the portal is technologically current and sound.
- ◆ **Resource Demands:** The State has experienced a resource problem with hiring and retaining qualified technical staff over the past five years. The integrator brings developed skills and experience with proven state portals to the table. State employees will be exposed to these new technologies by working with the vendor.
If state resources alone were used to develop and implement the portal, implementation dates could potentially suffer. Extensive training of existing state IT staff would be required prior to planning, development, and deployment of the portal. In addition, this project would be completed using the same IT resources as existing projects that carry on mandatory state business. This would result in a prolonged development and implementation that would increase the risk of budget overruns.
- ◆ **Accountability:** The State has the ability to maintain control over the actions of the integrator in a different manner than if completing the project using only state staff. Certain penalties for non-delivery may be written into a contract. This ensures the integrator deploys operationally sound applications and reduces the State's risk.

Other states that have deployed statewide portals faced these same issues. Although some states initially attempted to develop their portals in-house, these developments were not successful. The only successful statewide implementations the NCC team found were those using a public / private partnership as proposed for Colorado.

Recommended Solutions

Recommendation 3.1: The State of Colorado should take a coordinated, statewide approach to electronic government, including the development of an interactive service-oriented portal.

A single statewide portal would create the necessary foundation for e-commerce applications throughout the State. The creation of a single portal will eliminate the need for individual departments to create independent and duplicative infrastructures.

The statewide portal will need to include a variety of technologies including security, infrastructure, electronic payments, interactive forms management, day-to-day operations, customer support call centers, standards, and marketing efforts.

- ◆ **Security for Government:** Tamper-resistant websites have security infrastructures that include firewalls and authentication technologies. These technologies protect data and computer systems by controlling access to data transmitted among parties over a network and assure that all parties involved in a transaction are authentic. Portal security demands a sophisticated approach to protect electronic payment transactions and sensitive information. This security configuration must be more advanced than those that protect information-only websites.
- ◆ **Infrastructure:** In order to provide an effective e-government site, a portal needs to have broadband capabilities for handling large volumes of digital traffic. The network needs the capability of carrying data, voice, and video.
- ◆ **Electronic Payments:** Portals require a standard method to facilitate credit card payments. In addition, other forms of electronic payments need to be considered, so that citizens have other payment options such as electronic funds transfer (EFT), electronic cash, and electronic checks.
- ◆ **Forms Management:** A successful e-government portal should include the functionality provided by intelligent forms. This type of form interfaces across state agency databases to retrieve and store commonly requested information. With the user's consent, standard information, such as a person's date of birth,

needs to be entered only once. Through this technology, the State can present users with customized forms that are pre-filled with names, addresses, and other information previously on file, making processing easier for the citizen and allowing the citizen to readily update information.

- ◆ Portal Operations: The oversight and management of the portal must be established in a way that ensures a statewide focus is maintained, yet addresses the needs of individual departments. Other states achieved this balance via legislation that created an interagency oversight committee with representation from the legislature, Judicial Branch, state executive directors, and state Chief Information Officers (CIOs). Typically, such committees direct the implementation and growth of the statewide portal and have the decision-making input for the order, selection, and scope of services on the portal, including time frames.
- ◆ Call Center for Internet Transactions: Customer service support to resolve questions regarding content navigation and transaction processing is critical for providing satisfaction to portal customers. Typically, questions will arise regarding the portal's "search" functionality and verification of electronic payment charges. Accessibility to a central call center should be available 24 hours a day, seven days a week, through an 800-number and e-mail. The call center should provide the initial, up-front problem resolution, and forward more complex issues to agencies and departments as necessary so appropriate agency personnel can respond during regular business hours.
- ◆ Standards for Consistent Presentation of Services: To provide user-friendly e-government services, the State will need to standardize the presentation of portal, agency, and department web pages. A common format for the "look and feel" of Colorado State Government web pages will be developed and implemented so that the viewer has a web experience that is consistent. By developing these standards, the Colorado portal will enhance its value to the customers by making it easier to understand and navigate.
- ◆ Marketing Outreach: In order for a statewide portal and interactive services to be successful,

state employees and citizens must be aware of these services. Therefore, it will be necessary to develop a marketing strategy that best describes and presents the e-government effort. This marketing strategy should focus on creating a brand awareness of the online presence and services being provided.

Portal Implementation Team

The implementation of a statewide portal will require the involvement of several entities. A Project Manager, should be assigned to this initiative. The Portal Project Manager will be responsible for creating an implementation team that consists of the following groups.

- ◆ An advisory board could streamline and enhance the ways in which citizens and businesses access government information. This could be accomplished by legislation to create a board to review and approve portal services. In Colorado, this Board could be a subcommittee of the existing Information Management Commission or a completely separate Board comprised of Executive, Legislative, Judicial, and private sector representatives. The primary purpose of the Board would be to ensure the Colorado portal reflects the best possible citizen focused website for the State of Colorado.
- ◆ The Department of Personnel / GSS – CITS should be involved in the portal implementation. CITS is currently responsible for providing statewide IT operations, including much of the infrastructure that would be integrated with the portal. CITS will need to work with the integrator to coordinate technical and operational issues between the portal and the State's infrastructure.
- ◆ The Secretary of State should work with the integrator and CITS on disaster recovery efforts and business resumption planning for the portal. Because the Secretary of State's Office has a large and new network in place, it could accommodate a disaster recovery site in case of a catastrophic situation.
- ◆ Individual departments should work with the integrator to interface the web-based front-end applications with their legacy applications. Representatives from departments with a

significant portal presence should be included on the implementation team.

- ◆ The Governor's Office, including OIT, should be directly involved in the management oversight of this project.

Recommendation 3.2: The State of Colorado should pursue a coordinated statewide approach to all online licensing and registration efforts. In addition, the State should consider additional applications for inclusion on the statewide portal, including driver's license renewals and motor vehicle registration applications.

Because the DORA oversees more than 100 license types and more than 500,000 professional and occupational licenses, DORA will play a major role in moving towards the vision of e-government and online licensing. DORA should continue efforts to accept licensing and registration applications via the Internet. This should begin with migration of the pilot Real Estate renewal application to the statewide portal, followed by implementation of additional licensing applications on the statewide portal. Furthermore, all departments conducting transactions with citizens should consider using online applications for the portal.

Justification

The portal and related applications will allow businesses and citizens to access government information and complete transactions online at their convenience. These recommendations support all four of the Governor's NCC goals by streamlining government and introducing new technology to improve access to state government.

Efficiency and Effectiveness

A coordinated approach to the development of a single statewide portal will eliminate duplicate efforts of various departments, resulting in the efficient provision of e-government services to the public. Furthermore, using the private funding model to develop the portal will result in cost avoidance. The estimated three-year cost for development and implementation of the portal ranges from \$5.5 million to \$10.0 million.

Several intangible efficiency and effectiveness benefits are also expected from these recommendations. Online applications will reduce staff intervention required for processing applications. For example, online processing of some applications will reduce paper handling and decrease employee data entry time. Also, data can be stored electronically rather than on microfilm, and make records retrieval faster and easier.

In addition, the processing time for applications can be completed in less time. For example, the current license application and renewal processes require a number of handoffs and substantial manual intervention in DORA. As a result, it takes 12 to 14 days to process mail-in license renewals. Online processing can reduce this turnaround time to two days.

Web-based applications will also improve the accuracy of data and will prevent submission of incomplete applications. Users will enter their own information, reducing the risk of data entry errors. In addition, the online applications can be developed to perform validity checks on information submitted and incomplete applications can be rejected.

These benefits will typically result in cost avoidance for future staffing increases, as agencies will be able to manage increasing workloads with existing staff. In some cases, these benefits will also result in actual savings and may eventually lead to reduced fees. This was true when the Secretary of State's Office implemented online filing and accessing of corporate records. The fee for this service was reduced from \$15 to \$5 for online transactions. The Secretary of State's Office was also able to avoid hiring five clerical staff as a result of decreased in-person transactions. Similar reduction in costs can be expected for motor vehicle registration based on the experience of other states. According to the State Auditor's report, Arizona estimated that a manual brick-and-mortar transaction for vehicle registration costs about \$6.60 compared to an electronic transaction that costs about \$1.60, a 76 percent reduction. Wisconsin also reported a lower transaction cost for online renewals than in-person renewals. These types of cost avoidance scenarios will apply to numerous online application implementations.

Eventually, increased automation should reduce the number and size of walk-in facilities, and produce additional long-term cost savings for the State.

Innovative Technology

These recommendations employ innovative technology solutions, as they will allow the State to move forward with web-enabled transactions.

Access to State Government

The portal will provide citizens with an additional service delivery method for many services provided by the State. This added choice would be of value to many citizens. The online functions will improve customer service through 24-hour access and convenient access from the customer's home or office. Customers using traditional walk-in facilities will also benefit by improved access. Use of online applications will reduce the number of in-person visits to state offices. As a result, customers at facilities should experience reduced wait times.

Collaboration and Information Sharing

These recommendations will result in improved information sharing. The existence of the portal technology will provide the State the ability to better share information within state government and with citizens where appropriate.

e-PROCUREMENT

The Colorado Procurement Code governs procurement of supplies, services, and construction by state government agencies and institutions of Higher Education. The Procurement Code does not govern procurement by political subdivisions (e.g., municipalities, counties, and school districts).

Presently, there are 46 procuring agencies at locations throughout the State of Colorado. There are an estimated 150 purchasing agents who issue requests for documented quotes, invitations for bids, and requests for proposals. Agencies and institutions delegate authority to other personnel to make purchases not exceeding \$3,000.

Opportunity Statement

The State lacks a comprehensive integrated information system to support the procurement process.

The State's procurement process involves a combination of automated tools and manual processes. The State presently maintains a web-based solicitation system called the Bid Information and Distribution System (BIDS). BIDS links all 150 of the

purchasing agents throughout the State. The system permits web-based solicitations and facilitates policy dissemination and online discussions of procurement matters. This system has provided a valuable service; however, the BIDS system is outdated and lacks certain necessary functions to be completely effective in the current environment.

BIDS is a stand-alone application that does not facilitate the entire procurement process. For example, BIDS currently does not have the capability to permit online submission of offers. This means that bidders must submit quotes, bids, and proposals to the State in written form. The bids must then be reviewed manually by purchasing agents. Notice to selected vendors is provided manually or via BIDS. After an award is issued, purchasing documents including purchase requisitions, purchase orders, and payment vouchers are separately entered into the State's financial system, the Colorado Financial Reporting System (COFRS).

As a result, the State of Colorado does not have aggregated information on commodity procurements, resulting in an inability to take advantage of volume discounts on combined purchases.

A fully automated electronic-procurement system can streamline the procurement process. An electronic-procurement system allows an entity to manage supply chain operations and provides a number of benefits, including reduced cost of goods and services, improved productivity, and reduced cycle time.

Assessment

Governmental entities and corporations have aggressively adopted electronic commerce for a variety of different applications. One of the key applications being implemented among corporations is electronic procurement. Vendors are developing trading communities that utilize "facade level" integration. Facade level integration allows vendors of procurement software to integrate with existing order and sales entry systems within the community so that orders to these systems can be entered electronically. This approach allows suppliers to reduce their cost of sales. The procurement software then provides the catalog of items and the necessary forms processing and workflow to automate the entire procurement process. The electronic procurement application saves money as procurement time, average acquisition costs,

and resources required to procure items are all reduced.

Two implementation alternatives and two funding alternatives were reviewed as part of this project. Implementation of an electronic-procurement system can be accomplished using a thin-client architecture or a heavy-client architecture. Thin-client architectures utilize a web browser to access a centrally deployed application. A heavy-client architecture requires client software be installed on each workstation in addition to central application software. Applications developed using thin-client architectures are typically less costly than heavy-client applications which often require additional resources to deploy due to inconsistent workstation configuration environments requiring multiple versions of client software. These multiple configurations and versions can lead to increased support costs over time.

The overall cost of an electronic procurement system, complete with financial system integration, can range from \$3.0 million to \$7.0 million using a thin-client architecture and \$8.0 million to \$12.0 million for a heavy-client architecture. The costs associated with an e-procurement system include systems integration, Application Service Provider setup costs, hardware, and procurement software costs. Due to the differences in cost and ongoing support issues, the thin-client architecture is recommended.

An electronic-procurement system can be funded via a traditional state-funded model or through a private funding model. In the state-funded model, the State would pay the selected vendor for the development and implementation of the electronic-procurement system using existing state funds. In a private funding model, the implementation vendor would collect transaction fees from vendors of goods or services for the State. Fees would be from two primary revenue sources: transaction fees and successful bid fees. Transaction fees are fees that would be added to the base amount of any goods or services that are procured by the State, through any method. The fee leveraged against successful bidders could take the form of a fixed percent of the overall bid amount. Since there are very large contracts awarded, the individual transaction fee associated with an award should be capped. The fees should also be capped, over the projected five-year life of the initial contract.

Using this model, the State would be able to achieve cost avoidance between \$3.0 million and \$7.0 million.

Therefore, the private funding model is recommended for the electronic-procurement application.

Recommended Solution

Recommendation 3.3: The State of Colorado should implement an electronic procurement solution to allow for integration of all processes related to procurement.

The Department of Personnel / GSS, working in conjunction with OIT and the NCC project, has issued an request for proposal for an e-procurement system.

In order to achieve the benefits discussed above, the e-procurement system will need to contain several technical and functional requirements.

- ◆ The system should be a portal-based system that is accessed using a web-based browser. In general, the user interface should be intuitive. Browser interfaces should be used for all functions related to the procurement software including order entry, product selection, administrative functions, and reporting. The e-procurement application must integrate with the single statewide portal.
- ◆ The electronic procurement system must be able to interface with COFRS and accept account numbers validated in COFRS as well as credit card numbers. The system must also be prepared to interface with any future integrated human resources and financial systems.
- ◆ The system should include a product catalog to present all goods and services available through existing State of Colorado awards. The product catalog must be able to display pricing information unique to the State of Colorado, descriptions of items, warranty information, service information, early payment discounts, and late payment penalties. The product catalog must be able to support price comparison for similar goods or services across multiple vendors. The product catalog will also be a place for vendors to publish specials or sales related to goods and services procured by the State.
- ◆ The procurement system must be able to receive invoices from vendors through electronic means. In addition to receiving invoices, it should be able to perform a

rudimentary analysis of the invoice and the order so that these are matched and stored together within the procurement system. These items will then be compared with the receiving report to determine if the order was accurately processed.

- ◆ The e-procurement solution should have the capability to electronically place and receive bids from potential vendors. The proposed bid process must also support decentralized creation of solicitations and direct publishing of invitation for bid, request for proposals, and request for information to an Internet website so that companies can see potential opportunities to do business with the State.
- ◆ The procurement system should have the ability to place orders electronically. In addition, the procurement system should be able to receive electronic order acknowledgements from vendors. The State should have the ability to check order status for line items on a purchase order or the purchase order as a whole.
- ◆ The procurement software should support comprehensive workflow management. For example, the system should provide support for electronic creation of a purchase requisition, provide support for the routing of the requisition to the appropriate individuals based upon a state-defined set of business rules, and provide support for electronic authorization by appropriate individuals.
- ◆ The e-procurement system should include a comprehensive reporting package including tracking of purchases by individual, group, department, location, or account; purchases by good or service and by supplier; aggregate purchases of a good or service; and average, minimum, and maximum prices for a good or service. The reporting system should interface with existing and future financial systems and ensure the ability to track payments by fund source and fund type.

The Portal Project Manager should also be responsible for implementation of the e-procurement system to ensure appropriate interoperability in the systems. The implementation team for this project should include representatives from the Department of Personnel / GSS – Division of Finance and Procurement.

Justification

This recommendation primarily supports three of the Governor's goals as described below.

Efficiency and Effectiveness

Automation via the e-procurement system will result in efficiency and effectiveness improvements of the overall procurement process. Specifically, the system will result in a reduction in the cost of procured goods and services. This can be accomplished for three primary reasons. First, the supplier has less work to perform to sell products with an automated system. The number of sales staff and administrative personnel can often be reduced. Second, a supplier in a portal is aware of the need to compete more aggressively with others in the portal to win business as comparison shopping can be performed more quickly with a portal and electronic trading community. Third, the collection of comprehensive data about State of Colorado spending can be used to better leverage the State's buying power to achieve savings. It is estimated that three to five percent operating savings can be realized through reduced prices based upon the experiences of other states and organizations. Furthermore, the e-procurement system should result in a reduction in the procurement cycle time. One company using an electronic procurement system was able to reduce the overall procurement time in half.

In addition to these savings, the utilization of the private funding model is estimated to result in \$3.0 million to \$7.0 million in cost avoidance. These funds represent costs that will be incurred by the vendor and recovered through fees to vendors, rather than paid by the State.

Innovative Technology

This recommendation addresses innovative technology, as it will allow the State to move forward with web-enabled transactions.

Access to State Government

This recommendation results in improved access to the State for the vendor community. The electronic integration with the vendor community allows vendors of procurement software to integrate with existing order and sales entry systems within the community so that orders to these systems can be entered electronically.

Collaboration and Information Sharing

This is a collaborative effort with the State of Utah and should result in an e-procurement system that could be made available for use by local

governments in Colorado. However, this is not the primary benefit of this recommendation.