

From the beginning of this initiative, the Secretary of State and his staff were clear that the primary value of a statewide digital archives was public service, not cost savings. The service value extended to a broad range of citizens, as well as state and local government agencies. The Office of the Secretary of State and the State Archives staff were thoroughly committed to their constitutional role as custodians of the public's records. They recognized that they needed to apply archival information science principles to digital media in order to provide easier and more permanent access to the records. The WSDA would simply be an extension of the existing State Archives itself into the digital domain, with new information technology as the enabler.

The main responsibility for initiating the project and communicating the value and strategy for the WSDA resided with Secretary Reed and a few key staff members. Steve Excell, Assistant Secretary of State, had the main management responsibility for the project. The team included the State Archivist, and later the lead technology developer, Adam Jansen. The State Archivist at the time of Secretary Reed's election, Phillip Coombs, was active in the early stages of the WSDA initiative, but died in mid-2001. Jerry Handfield, the former Indiana State Archivist, was hired shortly thereafter and became a key part of the WSDA project team.

Vision

The initial vision for the WSDA was a broad one, seeking both enhanced public value and improved government operations and efficiency. The vision was to fulfill the state's record keeping mandate for emerging digital materials, while improving customer service at the local level and enhancing efficiency for the overall system of records preservation and access. The customer base is broad, including the local County Auditors, state agencies, and all the citizens, businesses, and civic organizations that use public records for legal and commercial transactions or historical and genealogical research. The scope of the initiative would ultimately include the full range of state and local records of enduring legal and historical significance, combined with enhanced technology for digital access and long-term preservation.

Mobilizing Support and Resources

To translate this vision into a reality, the WSDA would have to become both a physical entity, with the necessary storage, access, and preservation technologies, and also a new system for collecting and processing the potentially enormous volume of records of archival importance. Digital archiving would require a transformation in both the technology and the business processes of record keeping. Both are costly and complex to achieve, requiring considerable financial and political support to develop and operate the WSDA itself and transform the business processes and information flows that provide the content. In the words of the Assistant Secretary of State Steve Excell, it was necessary to "create a tipping point for the cost benefit analysis for the agencies that would be our partners." That would include convincing the legislature to provide the financial support and the partner agencies to implement the new flows of information. If the value of the WSDA's new capabilities did not appear to exceed the costs, neither the political support nor the financial resources would be forthcoming.

The financial part of the problem required skillful marshalling of legislative support. Secretary Reed and his staff were realistic in their expectations, given the low priority typically assigned to public records access or digital archiving in the competition for capital funding. So they devised an alternative funding solution. The first part was to add an additional dollar surcharge to the document recording fee collected by the County Auditors. This would provide the revenue for the auditors to access the WSDA's digital archiving capability without impacting their local budgets. With the help of stakeholders (described below), Secretary Reed persuaded the legislature to approve the additional surcharge, thus creating a revenue stream to support development and operations.⁽⁹⁾ The capital to build and equip the WSDA was acquired by arranging to borrow against this revenue stream in the private capital market using Certificates of Participation.⁽¹⁰⁾ The legislation was approved and the fee implemented by early 2002. Following that, the capital financing of the WSDA was approved in December of that year.

Making the Case to Stakeholders

To marshal their support, Reed and his team had to make both the government and public value proposition clear to the stakeholders. The team asked the County Auditors what record series was in highest demand in their counties. Making them available in digital form and Web accessible would free server space and relieve significant foot traffic in county offices. Secretary Reed and his team also worked to enlist state agency support by highlighting how the WSDA could relieve state agencies of growing digital record management and preservation responsibilities. The public value message was carried to the Heritage Caucus, a group of state legislators and other elected officials, state heritage, cultural and lands agencies and non-profit organizations that meets weekly

to discuss local and state history. Local historical societies and genealogy researchers were enlisted to lobby for the greatly improved access and preservation the WSDA would provide for their activities. Genealogist became particularly strong supporters, many of whom currently volunteer to help archive family history records.

The WSDA team was required to deal with most agency stakeholders through two boards of the state's Department of Information Services, the Information Services Board (ISB) and the Customer Advisory Board (CAB). Approval of the 15 member ISB, composed of state legislators and executives from state agencies, was necessary for the WSDA and all large state IT projects. The CAB brings customers and stakeholders together to review and advise on projects, particularly in the planning and design phases. The WSDA team was thus required to first convince stakeholders in the CAB of the project's value, and then present a full project plan to the ISB for ultimate approval.

Working with the CAB was where the value of the WSDA came into conflict with the potential costs of transforming the archiving process. The initial plan presented to the CAB was for the WSDA to choose a digital content management system for the sending agencies to use in collecting and preparing digital records for the WSDA. That plan met with substantial resistance. The counties and state agencies did not want to have a new system imposed on them, with all the attendant costs of the new systems and changeover. Neither did they want to take on responsibility for the archiving process. Some agencies said they would go to the legislature to have the program abolished, or simply delete the records rather than deal with some new, high cost archiving system. After months of deliberation, the WSDA team agreed to avoid any new technology that would require the agencies to install any new systems or make radical changes to their current record keeping processes. Whatever the new technology would be, it would place the burden on the WSDA of accommodating its intake process to the existing record systems in the agencies. This concession to maintain the WSDA's value to the agency partners, while reducing the cost to them, allowed the planning and legislating process to move forward.

Some important issues that arose during the WSDA project team's work with the stakeholders through the ISB and CAB are shown below in Table 1. State regulations required that all large IT projects, like the WSDA, be evaluated by the Department of Information Services (DIS). This review examines benefits to stakeholders and risk management. Table 1 includes examples of the policy, technology, and management risks identified and the WSDA project team's plans to mitigate these risks.⁽¹¹⁾

Table 1. Examples from the WSDA Risk Management Plan

| Risk | Impact | Likelihood of Occurring | Mitigation Plan Example |
|--|---------------|-------------------------|--|
| Local and state government client agencies may demonstrate some resistance to archiving of electronic records | High | Medium | The state legislation governing archives will be revised with participation from all stakeholder groups to ensure their understanding of requirements for archiving electronic records and that the requirements are doable. With client agency involvement in development of the rules, we anticipate a sense of ownership on their part and an additional desire to participate. The Secretary of State will meet with management of state and local agencies, working with them to determine which records are of archival value and the method by which they will be transmitted to the Digital Archives. Processes will be established to allow for transmittal of records with a minimum of manual intervention, and instead focus on automated processes that will require initial set up only. |
| There is no universal content management system used by state and local government client agencies. Lack of a universal system necessitates more manual and less automated systems for capturing, managing and preparing data for inclusion in the archives so that the data can be easily searched and retrieved. | Medium | Medium | The agency will not immediately impose universal use of a content management system. The Digital Archives will utilize a combination of off-the-shelf applications, sound data structure and processes, use of content management software at the Digital Archives and manual processes to manage and prepare the data. The agency will continue to work with client agencies in how to manage their content. |
| Inability to import and use legacy data due to outdated technology | Low to Medium | High | At a minimum, the Digital Archives will be able to convert data to the lowest common denominator (ASCII). The Digital |

| | | | |
|--|--|--|--|
| | | | Archives plan also includes a legacy equipment lab that can be used for conversion and/or use of outside commercial conversion services if necessary. The percentage of unreadable data will decrease over time. |
|--|--|--|--|

Developing a Technology Strategy

Delivering the value of digital archiving for the agency partners and the public required both an accessible repository and a way to populate it, i.e., both a place and a process. The planning and development for these two components went forward in parallel. Once the financing arrangements were completed in early 2002, the plans for the repository itself went forward. Early discussions took place with Washington State University about siting the facility, but the University later declined. Secretary Reed then approached the administration of Eastern Washington University with the same proposition, which they accepted. With a site and financing in place, planning and construction continued through late 2002 and 2003.

Developing the process and supporting technology took much longer. Once the “no top-down mandate” compromise with the CAB was decided in 2002, the WSDA team began searching for suitable technology solutions. The constraints embedded in that compromise were quite limiting. According to Adam Jansen, “We need to have as minimal an impact on state agencies’ and local governments’ main operation as we possibly can. They are not mandated, they aren’t funded, they do not have the staff resources to deal with this.” The record archiving process and its supporting technology had to accommodate the enormous diversity in data systems and formats existing in the counties and state agencies.

The search for a workable solution extended well into 2004. Early in that year the state hired a consulting firm with digital archiving experience to transform the existing plans and requirements into a formal feasibility study to present to the ISB. The firm, Glasshouse Technologies, began in March of 2003 and submitted their report the following June. The report contained detailed cost and performance estimates for the repository and details of the facility layout and phasing in of record acquisition. The report did not, however, describe the information processing methods to be used to actually acquire the digital content of the WSDA.

The actual solution employed resulted from consultations between Adam Jansen and Microsoft. By early 2004, Microsoft had developed Web services and their BizTalk application to the point that it could possibly serve as the record acquisition platform. With assistance from Microsoft staff, the WSDA team and technical staff developed a system design that could accommodate the diversity among record senders and maintain consistent content formatting and data standards for the WSDA content itself. The system consists of a relatively simple Web services application running on the sender’s server and the BizTalk server to handle the reception of records at the WSDA. An MOU for each record series (birth records, etc.) establishes the data standards and metadata to be provided by the sender. The Web services application creates an encrypted XML version of the record with metadata and sends it to the BizTalk server, where it is converted to the standard format and archived. The XML wrapper and encryption preserve the record’s integrity and security. The sender’s legacy systems are not affected. As Jansen put it, “we went to the agencies and told them we don’t care how you give us the data, but give it to us consistently. We will build everything around what you send us and take it all in.” This approach, according to Excell, had the counties “singing our praises,” and quite willing to participate in the project.

The WSDA investment plan was approved by the ISB in September of 2003. By June of the following year, the Office of the Secretary of State had selected and begun implementing the final technology solution. By that time, construction and equipping of the facility in Cheney were well underway. The way was then open for the grand opening on October 4, 2004, and proceeded with the phase-in of record acquisition, which is still underway.

(9) For details on this legislation and the Digital Archives funding plan see sect1 V.f. Financing Plan for the Digital Archives, **Washington State Digital Archives Investment Plan** at <http://www.digitalarchives.wa.gov/staticcontent/Investment%20Plan.pdf>

(10) Certificates of Participation differ from general obligation bonds in that they are loans against a specific state revenue source rather than the “full faith and credit” of the state itself.

(11) Both documents are available on the Washington State Digital Archives Web site at <http://www.digitalarchives.wa.gov/Content.aspx?txt=background>.