Biennial Operating Plan Project Detail
86th Regular Session, BOP Submissions
Automated Budget and Evaluation System of Texas (ABEST)

306 Library & Archives Commission

CATEGORY CODE/CATEGORY NAME
Project Number/Name

Type of Project	DESCRIPTION

5005 ACQUISITN INFO RES TECH

    1   *Acquisition of IRT Computer Resourc*

        370   Acquisition and Refresh of Hardware and Software

Project Description: This project includes the acquisition of equipment and parts to maintain the agency's 200-user local area network, its wide area network across three facilities, and its telecommunications to provide reliable computing resources for the completion of the agency's mission. The project will allow the replacement of obsolete network equipment as well as the scheduled replacement of desktop and laptop computers.

Project Status: This project is on-going and allows replacement of desktops and laptops in accordance with the agency's established PC refresh schedule. The technical staff works with the business units to ensure that there is a cost-effective strategy for technology refresh and only needed equipment is acquired and implemented.

Needs-analysis Summary: The agency must manage its computing resources to help ensure that it has the resources necessary to complete its mission. As network devices reach the end of their useful life cycle, the agency must ensure that an effective strategy is in place for their replacement. The agency continues to increase the number of information services it makes available to the public. This makes an efficient and reliable network a critical factor in the success of the agency mission. Postponement of this project will result in slower computer response times, workflow delays due to equipment failure, and the eventual inability to complete the agency mission.

Project Justification: The project allows the agency to continue to provide reliable information services to the public as part of its mission. Each of the agency's goals is addressed by the project. The goals to make information and library services available to the public, state agencies, the visually-impaired, and local governments and to provide cost effective management of state and local records are accomplished by agency programs that are dependent upon the availability of computing resources. Replacing obsolete equipment is a proactive strategy to help ensure this availability.

Outcome Measures: The outcome measure of the success of this project is the reliable availability of computer resources critical to the completion of the agency mission. The benefit to the State is the continuation of existing services to the public, librarians, and records managers across the state and Texans with visual disabilities. This outcome can be measured by the results of customer satisfaction surveys gathered by agency business units as well as by the availability statistics for public access systems and internal systems and the corresponding minimal system downtime due to failures.

Output Measures: Project success can be measured in the decreasing downtime of critical computing resources. The benefit is the continuation of agency services. Performance measurement is achieved via systems availability reports to IT management.

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5005 ACQUISITN INFO RES TECH

   1   *Acquisition of IRT Computer Resourc*

      370   Acquisition and Refresh of Hardware and Software

Acquisition-of-Alternatives Analysis: The alternatives to the project include the postponement or elimination of the project or an alternative technology refresh schedule. Postponement or elimination of the project would eventually result in system failure and the inability to complete the agency mission. The selected option makes optimal use of existing equipment without making any equipment prematurely obsolete. It uses industry standards and utilizes the DIR statewide contracts to achieve the best value. Any other alternative would result in a lower quality network at a higher cost.

Cooperative-Project Area: The systems supported by this project are internally maintained, however, the efforts supported with these computing resources include cooperative endeavors such as the multi-state effort to provide libraries with the ability to maintain a web presence which these libraries would otherwise be unable to support on their own. The effort is centered on an open source content management system configured and implemented as a cooperative project with Oregon and Colorado.

   2   *Electronic Records Archive*

      230   Document Imaging and Processing

Project Description: The Texas Digital Archive (TDA) is a searchable online repository designed to manage, preserve, and provide access to the electronic records collections of state government held at the Texas State Archives. This project will ensure that these materials of permanent value to the state of Texas will be preserved, maintained, and made available to Texans now and for generations to come

Project Status: The project began September 1, 2015. The Texas Digital Archive launched on January 20 with over six terabytes of electronic records from the administration of former Texas governor Rick Perry. Since then TSLAC had added the records of former Lt. Governor David Dewhurst, 18 terabytes of digital audio files from the Texas Senate that date from 1972 to 2006, and over 150,000 image files.

Needs-analysis Summary: TSLAC is mandated by statute to manage state archives regardless of format. This project is necessary for the agency to fulfill its mandate to collect, preserve, and provide access to the permanently valuable records of the state, including those created and maintained in digital formats. A centralized digital archive for state agency records in digital formats will enable TSLAC to preserve and safeguard valuable state records in an effective, efficient and economical way, ensure access to materials of enduring value by the public and state government, and fulfill requests from state agencies for electronic records management and archival services.

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Type of Project	DESCRIPTION

5005 ACQUISITN INFO RES TECH

> *2   Electronic Records Archive*
>> 230   Document Imaging and Processing

Project Justification:	Transparency of state government depends upon access to the permanently valuable records of state agencies and elected officials. The Commission's mandate is to identify, collect, preserve and provide access to those records. Prior to 2015, the Commission had no way of fulfilling its responsibilities for the ever- increasing body of archival records created and maintained in electronic formats. The Texas Digital Archive, will be a centralized digital repository for these records and will help 1) Ensure public access to government – in the current arrangement, the files are scattered throughout agencies with no meaningful access by the public to records of permanent interest. 2) Safeguard these important materials – currently these high-value data sets of enduring historical and legal value are not under the care of professional archivist and thus at risk of loss. 3) Protect the state from liability – without proper maintenance, confidential items can be lost or decisions based on non-current versions of documents. 4) Save taxpayers money – without current guidance in archival records management, agencies are incurring unnecessary storage fees and staff costs in the maintenance of records eligible for disposal or less expensive storage.
Outcome Measures:	The outcome measure of the success of this project will be the acquisition, preservation and availability of state government records created and maintained in electronic formats.
Output Measures:	Project success can be measured by the increasing amount of archival agency records ingested into the Texas Digital Archives and the number of assists (hits) with information resources in the TDA.
Acquisition-of-Alternatives Analysis:	The agency prepared a cost analysis to ingest, preserve, store and provide access to archival electronic records in a way that is compliant with recognized standards for a Trusted Digital Repository based on the Open Archival Information System (OAIS) model with six distinct functional areas: ingest, archival storage, data management, administration, preservation planning, and access. A "trusted digital repository" is designed to create, store and retrieve data according to well-documented processes that ensure records based on those data are authentic and reliable. The agency considered both cloud and local access storage, including that available at the DCS State Data Center and determined the cost and resources needed to be prohibitive for local storage In addition we considered the available SaaS packages that would be required to manage the necessary archival activities. The most widely used archival packages combine SaaS and cloud storage. The agency consulted with DIR to determine the feasibility and issues related to cloud storage for state data.
Cooperative-Project Area:	The agency is working to add select digital collections and data sets during the FY 2020-2021 biennium. The agency is continuing to work with state agencies to identity high-value and at- risk record series for ingest in the coming biennium.

6000 DAILY OPERATIONS

> *3   Daily Operations*
>> 100   Daily Operations

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CATEGORY CODE/CATEGORY NAME

Project Number/Name

Type of Project	DESCRIPTION

6000 DAILY OPERATIONS

   3   Daily Operations

      100   Daily Operations

Project Description: This project supports all on-going computer technology operations for the agency. Daily Operations includes LAN and WAN connectivity, end-user support, remote access, Internet access, email, coordination with the consolidated data center staff for system administration of servers for database applications, client-server applications, and web-based applications, disaster recovery, and security. Additional services include applications development, maintenance, and support of web-based and client server applications as well as systems analysis, project management services and assistance with contract management for IT-related projects sponsored by the business units of the agency.

Project Status: Project Description: This project supports all on-going computer technology operations for the agency. Daily Operations includes LAN and WAN connectivity, end-user support, remote access, Internet access, email, coordination with the consolidated data center staff for system administration of servers for database applications, client-server applications, and web-based applications, disaster recovery, and security. Additional services include applications development, maintenance, and support of web-based and client server applications as well as systems analysis, project management services and assistance with contract management for IT-related projects sponsored by the business units of the agency.

Project Status: Daily Operations are on-going. The library's technical staff is working with the consolidated data center staff to coordinate the administration of our application servers as well as our email system and print and file services. The application developers create and maintain applications to meet agency needs. The operations staff has implemented appropriate documentation as well as adequate network security measures. The agency contracts for an auditor's annual review of the agency's compliance with security standards in the TAC.

Needs-analysis Summary: Needs Analysis for Daily Operations is always on-going. Every network component, device, and workstation has a projected life cycle and requires appropriate review, monitoring, and maintenance during this life cycle. The business units of the agency rely on the availability of computing resources to perform their job tasks. The work completed by the ITS staff in operations, development, analysis, and project management is critical to the success of the agency mission. Failure to perform this work on an on-going basis would eventually result in component or system failure and would significantly impact the mission of the agency.

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CATEGORY CODE/CATEGORY NAME

Project Number/Name

Type of Project	DESCRIPTION

6000 DAILY OPERATIONS

   3   *Daily Operations*

      100   Daily Operations

Project Justification: The state library continues to increase its reliance on computer technology to meet and expand its mission to provide information to the public and to provide efficient library services, records management services, and services for visually impaired patrons. The Daily Operations project supports the agency's goals by ensuring the availability of computing resources. The library continues to add services accessed via its website. It uses computer technology to gather performance data from academic and public libraries across the state. In evaluating the options of Lease vs. Purchasing of resources, the IT Division works with agency business units to assess user needs, its own ability to support end-user computing, and the agency's rate of technology change compared to the industry's rate of change to review and maintain the agency's technology refresh schedule. Following the guidelines provided in the DIR publications PC Life Cycle and Lease vs. Purchasing, the agency has established its technology refresh schedule of 6 years for desktops and 4 years for laptops with some laptops extending past 4 years. The agency uses a cascading strategy and user profiling to extend computer life cycles. We also have centralized procedures for developing standardized technical specifications acquisitions, and deployment

Outcome Measures: The benefit from this project is the continued availability of reliable computer resources for agency staff and patrons who access these services.

Output Measures: This project represents a proactive strategy to mitigate risk by proper maintenance, efficient configuration, proper documentation, and the application of sound operation and project management procedures. IT management receives system availability reports as well as problem log summaries and meets regularly with operations staff to keep informed, provide direction, and ensure acceptable performance of operations. Efficiencies achieved are allowing staff to work on other projects such as providing technical expertise and project management support for business unit technology projects such as the installation of security cameras and the implementation of mobile training labs with laptops and projectors

Acquisition-of-Alternatives Analysis: The data center consolidation mandated by HB 1516 reduced the number of technical staff at the state library to the limited number of staff required to support internal operations. This include support of the local area network, telecommunications, end-user computing, security and audit compliance, resources planning and refresh, applications development, website and intranet, project management and technical assistance for IT-related projects, and coordination with the consolidated data center for required services. The limited internal technical staff have the expertise and legacy knowledge to accomplish the support function and coordinate with the state data center for required services. The technical team is crossed trained to function as backup to one another in all areas of responsibility. This is a practical and cost effective strategy for the agency to continue to ensure the availability of its computing resources.

Cooperative-Project Area: All agency customers benefit from this project because it helps ensure that the services they access continue to be available. The agency IRM and technical staff participate with DIR and other state agencies in the consolidated state data center project that directly impacts this daily operations project.

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CATEGORY CODE/CATEGORY NAME
Project Number/Name

Type of Project	DESCRIPTION

6000 DAILY OPERATIONS

    6   *TBP SYSTEM*

       240   Enterprise Application Integration /
           Middleware Deployment

Project Description: The Texas Talking Book Program (TBP) serves Texans with disabilities under the Library of Congress National Library Service (NLS) for the Blind and Physically Handicapped. The agency plans to replace the legacy information system used by TBP by contracting for the development and implementation of a system that uses current technology to meet the current and future needs of this service program. The current system supports the program in managing the State's collection of talking books, Braille and large print books, distributing books to patrons and managing distribution of federally-owned electronic book readers. The program also supplies media and readers to qualified persons through approximately 130 public and private schools, nine hospitals, 232 nursing homes and the Texas School for the Blind and Visually Impaired.

The new system will also include an Online Public Access Catalog (OPAC) to allow patrons to browse and order from the Agency's collection of materials. This additional functionality has been needed and recommended in previous years' audits of the current system.

Project Status: Project migration successfully completed in 2018.

Needs-analysis Summary: The Texas Talking Book Program (TBP) serves Texans with disabilities under the Library of Congress National Library Service (NLS) for the Blind and Physically Handicapped. The agency plans to replace the legacy information system used by TBP by contracting for the development and implementation of a system that uses current technology to meet the current and future needs of this service program. The current system supports the program in managing the State's collection of talking books, Braille and large print books, distributing books to patrons and managing distribution of federally-owned electronic book readers. The program also supplies media and readers to qualified persons through approximately 130 public and private schools, nine hospitals, 232 nursing homes and the Texas School for the Blind and Visually Impaired.

The new system will also include an Online Public Access Catalog (OPAC) to allow patrons to browse and order from the Agency's collection of materials. This additional functionality has been needed and recommended in previous years' audits of the current system.

Project Justification: The agency and the patrons served by this program will be assured that the operation of this essential service program continues uninterrupted.

Outcome Measures: The costs incurred to replace the TBP legacy system will be offset by the quantitative benefits to the agency as well as the citizens of Texas who are patrons of the TBP.

Output Measures: By reducing the risk inherent in continuing to operate a legacy system without an adequate support structure the new system will help ensure that the TBP will continue to efficiently manage this level of service.

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CATEGORY CODE/CATEGORY NAME
Project Number/Name

Type of Project	DESCRIPTION

6000 DAILY OPERATIONS

   6   *TBP SYSTEM*
      240   Enterprise Application Integration /
           Middleware Deployment

Acquisition-of-Alternatives Analysis:

In 2010, the agency distributed an RFP to solicit responses from qualified vendors for a commercially-available system to replace the aging TBP information system. The responses demonstrated that the systems available for use by TBP could not provide the level of functionality that the Texas TBP required. Without the missing automated functionality, TBP would require additional FTE's to manually accomplish tasks already automated in the current system. Adding the functionality was cost prohibitive. Along with the high cost of upgrading the functionality of either one of the commercial systems, the state of the technology platforms and technical support for the systems would leave the agency in almost the same situation as it was with its own system.

In 2013, the agency contracted with a technology consultant to evaluate the system modernization options to (1) upgrade the TBP system to update its technology and identify a support path to continue the productive life of the system; (2) replace the system with a commercially-available alternative that has the required functionality; or (3) built a new system to replace the legacy system. The research of the second option included a review of the functionality of the commercial systems to see if the required system features had been added since our last review of those alternatives.

The consultant's study found that (1) the current system is a legacy system with no sustainable path for technology upgrade; (2) the commercial systems do not have the required functionality; and that (3) a new system should be build to replace the legacy system in order to maintain the automated functionality.

Cooperative-Project Area:

- the Library of Congress National Library Service (NLS) for the Blind and Physically Handicapped
- Texas Department of Information Resources
- Texas Quality Assurance Team (QAT)
- technology vendors who respond to the RFP for the development of the system
- the state consolidated data centers

7000 DATA CENTER
CONSOLIDATION

   4   *Data Center Consolidation*
      150   Data Center Consolidation

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CATEGORY CODE/CATEGORY NAME

Project Number/Name

Type of Project	DESCRIPTION

7000 DATA CENTER
        CONSOLIDATION

   4   Data Center Consolidation
      150   Data Center Consolidation

Project Description: H.B. 1516 mandated that the state agency data centers be consolidated. In compliance with this mandate, the state library's utility and application servers were migrated into the state data center and the agency contracted through DIR for data center services. Project includes the provision of data center services and network telecommunications between the consolidated data center and our facilities. The goal of the project is to achieve a greater efficiency in the operation and management of these resources through economies of scale and consolidation of resources across the enterprise. The library technical staff is working with DIR and the data center vendor team to ensure the continuation of uninterrupted data center services required to deliver information and library services to our customers and accomplish the mission of the library.

Project Status: H.B. 1516 mandated that state agency data centers be consolidated. To comply with this mandate, the state library's utility and application servers were migrated into the state data center and the agency contracted through DIR for its data center services and the required telecommunications. The goal of the project is to achieve a greater efficiency in the operation and management of state resources through economies of scale and consolidation of resources across the enterprise. The library technical staff works with DIR and the data center vendor teams to ensure the continuation of uninterrupted services required to deliver information and library services to our customers and accomplish the mission of the library.

Project Status: The library's information resources are now located at the new data center. The library's Information Resources Manager and our Customer Representative participate in the governance workgroups set up to help coordinate data center services for DCS agencies. Our staff is working with the DCS vendor team on the refresh project for our servers as well as other technology projects which expand and improve the services we deliver to our customers.

Needs-analysis Summary: The project is underway to comply with HB1516. From the perspective of the State as an enterprise, consolidation of resources can eliminate redundancy and under utilization and result in less cost to the State. The program can consolidate disparate legacy agency facilities, modernize aging equipment, and increase security and disaster recovery capability.

Project Justification: The project is underway to comply with HB1516. The agency staff is coordinating with DIR and the data center vendor team to help ensure a continuation of data center services to assist the business units in delivering information and library services to our customers.

Outcome Measures: The outcome measure of the success of this project will be an overall more efficient strategy for delivering data center services to the state agencies and a demonstrated cost savings.

Output Measures: Project success can be measured by documented increases in services when compared to preexisting operations. The benefit is the continuation of agency services. Performance measurement can be achieved via systems availability reports to the state agencies by the data center service provider.

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CATEGORY CODE/CATEGORY NAME

Project Number/Name

Type of Project	DESCRIPTION

7000 DATA CENTER
           CONSOLIDATION

   4   Data Center Consolidation
      150   Data Center Consolidation

Acquisition-of-Alternatives Analysis: The project is already in progress. Alternatives have been discussed by the Department of Information Resources. The selected option offers the expectation that the state will stabilize at a more efficient level of services.

Cooperative-Project Area: The agency IRM and technical staff are participating with DIR and other state agencies in the project to consolidate data centers. This project will continue to require the cooperative effort of the agencies and DIR to ensure the required data center services are delivered to state agency staff to allow them to accomplish their mission.

9000 CYBERSECURITY

   5   Cybersecurity Controls 86R
      420   Cyber Security

Project Description: Project includes the hiring of an Information Security Officer (ISO) and an Information Security Analyst to help implement the comprehensive plan for the security controls recommended by Gartner for the purpose of elevating the agency's level of maturity to properly safeguard our information assets. Of the 22 recommendations from the security assessment, seven are being implemented with current resources and one other was eliminated when the use of the VPN for staff remote access was removed. Two other recommendations are dependent on the DCS program developing an enterprise solution for securing data at rest. The remaining twelve recommendations are included in the appropriations request for this project.

Project Status: The agency completed implementation of the security awareness program enhancement and changed its strategy for providing remote network access for staff and is in the process of implementing several other security recommendations that the agency can address with current resources. The rest require the skills and expertise of an Information Security Officer and team to plan and implement.

Project Status: The agency did not receive the funding necessary to implement the proposed project. We will continue implementing additional security controls as funding and resources allow.

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Project Number/Name

Type of Project	DESCRIPTION

9000 CYBERSECURITY

> 5   *Cybersecurity Controls 86R*
>> 420   Cyber Security

Needs-analysis Summary: The agency has never had funding for an ISO position and has had to rely on its IT staff to carry out security-related tasks along with their other daily operations tasks. The agency has security policies and procedures in place which are reviewed annually by the internal auditor during the TAC 202 review. However, without automated security systems in place to monitor traffic and collect the massive amounts of information that is generated, or the security expertise to analyze this traffic information and implement effective solutions, there is a very real limitation to an effective proactive security solution to properly protect the agency's information assets. Our business partners and the people of Texas who we serve expect the state library to have and utilize adequate security resources and expertise to protect these assets. The risk to our assets continues to grow so the need for these security controls and security staff also continues to grow.

Project Justification: Texas state agencies are required to achieve a security maturity level that will allow them to properly protect the information assets entrusted to their care and management. This requires an agency to have the sophisticated resources to manage the security of these assets. Proper security management requires the collection of massive amounts of security-related data. Automated systems are required to collect and manage this data and the agency must have the security expertise to evaluate the data and determine the most effective strategy for securing its information assets. The security assessment conducted by Gartner identified the gaps that occur in a security posture when the agency does not have adequate resources to fund a proper security strategy to bring us up to an acceptable maturity level.

Outcome Measures: The outcome measure of the success of this project will be the continued assurance of the confidentiality, integrity, and availability of the state library's information assets even in this environment of ever-increasing security threats, exploit attempts, website defacement, denial of service and other attempts to disrupt the business of government to serve the people of Texas. The implementation of the recommended security program will result in this continued availability of information and corresponding minimal system downtime

Output Measures: Project success can be measured by the decreasing amount of time agency and data center staff have to devote to addressing intrusion attempts into the agency's resources.

Acquisition-of-Alternatives Analysis: The alternatives to the project include postponing or eliminating from consideration the implementation of the recommendations from the security assessment. While it is a given that security threats can never be completely eliminated, and agency management must on occasion accept the risk of some threats, postponing or eliminating the implementation of the recommended security controls and resources in the current environment of ever-increasing security threats is not in the best interest of the people of Texas. These threats are increasing in number and in their level of sophistication and the agency must have the proper resources to meet this challenge to the security of these information assets.

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9000 CYBERSECURITY

    5   Cybersecurity Controls 86R

       420   Cyber Security

Cooperative-Project Area: This project is being implemented as a component of the overall State of Texas security program for the purpose of protecting the information assets that the citizens of this state entrust to our care. The project is planned and will be implemented in compliance with the state's security standard, the Texas Cybersecurity Framework.