

San Joaquin Valley Library System
Technology Plan for July 1, 2004 - June 30, 2007

The San Joaquin Valley Library System supports the technology needs of its members through operation of a shared network and automation services such as e-mail, Internet access and filtering, and the Integrated Online Library System. System staff provides guidance on and coordination of technology-related purchases, hardware and software setup and troubleshooting assistance, and education and training of local staff. The SJVLS Automation Office works in partnership with staff of member libraries to promote the effective use of technology in libraries.

Technology planning process

Every 3 years the SJVLS completely reviews its technology plan and issues a new plan to address anticipated needs. The plan is based on input from the functional committees of the SJVLS, the member libraries, and the San Joaquin Valley Information Service. The plan is review by the SJVLS Automation Committee, and approved by the SJVLS Administrative Council. The Technology Plan serves as the basis for development of the annual System budget. This technology plan is also based on the San Joaquin Valley Library System Long Range Strategic Plan, 2003-2006.

1. Mission statement and goals

Mission Statement: The San Joaquin Valley Library System assists member libraries to enhance service to their public through cooperation, resource sharing, technology and networking.

Goals: To promote resource sharing among SJVLS libraries, other libraries in the region and libraries participating in the Library of California; to promote excellent public service at all library branches in the SJVLS; to facilitate services to underserved library users; and to improve communication and collaboration among SJVLS members.

2. CURRENT TECHNOLOGY OVERVIEW

SJVLS provides extensive technology-based services to some or all of its members. Support for technology is shared between member libraries and the system. Recent years have seen a dramatic increase in network services, such as Internet content filtering, antivirus protection, listserv and Exchange e-mail, and PC auditing and inventory management. Interest remains strong in cooperative implementation of new technologies.

Telecommunications Network: All member library locations, over 94 sites, are connected to the central network via leased lines, mostly frame relay to ATM. Most sites are T1 with a certified information rate (CIR) based on the number of PCs at the location. Bandwidth usage is monitored to identify locations at or near their CIR. One site, Alpaugh Branch Library, does not have T1 facilities because the local telecommunications provider, Verizon, has not built T1 facilities to the area. Internet access is shared over an ATM leased line, with bandwidth currently set at 10Mg. A CheckPoint firewall currently is managed by the system with support from Dynix, Inc.

Internet content filtering is provided through a system-wide subscription to the IPrism service with two IPrism appliances operated by System staff. Installation of building data cabling is coordinated through the System office.

Computer Network: The System runs a Windows2000 network with all computers joined to the domain and all staff members have user accounts. Files servers support users for system-wide file sharing and sharing within the library jurisdiction.

Applications support: The System provide a wide array of technology services to its members.

Web site hosting: The System operated its own web server, which hosts the System site, www.sjvls.org, the web site of the Heartland Regional Library Network, and web sites for 6 of the 9 member libraries. System staff assists with domain registration and administration as well as web site design and maintenance.

E-mail: A Microsoft Exchange server provides Internet e-mail services to all member libraries. SJVLS also runs LISTSERV Lite to enhance communication between technical support personnel and to support specific projects such as the Dynix to Horizon software migration.

Library Automation: A shared library automation system, Horizon (after November 2003), support library functions such as cataloging, circulation, acquisitions, and serials at all locations. The public interface is a web-based catalog with enhanced content such as book covers images and reviews included. Through the shared Horizon system library users are able to easily request materials from any public library in the 6 county area. The system also coordinates database purchases, such as the system-wide subscription to InfoTrac's General Reference Center Gold, and provides support for access by home users through operation of a Remote Patron Authentication server. Home users are also supported through the Telecirc automated telephone notification system which delivers notices and allows self-renewal of items. The URSA system to extend resource sharing activities beyond SJVLS is licensed, but not currently implemented.

PC support: Most members purchase PCs and software through the system in order to take advantage of volume discounts and to ensure that system standards are met. The TrackIt! software is in use throughout the system to provide PC software and hardware auditing for software license compliance, network planning, and technology inventory and replacement planning information. The help desk features of TrackIt! are also in implementation. Antivirus protection for all PCs is purchased and coordinated centrally to ensure that PCs on the network are protected.

Public PC management: Management of public use computers is supported through recommended configurations, imaging of new PCs, consultation with local technical support personal, and directly provided technical support. Print management services are provided through a system-wide purchase of Envisionware's LPT:One software, which is in use at most locations. CybraryN software to control reservation and timed access has been purchased with installation progressing slowly.

III. Technology-based Goals and Objectives

The full Goals and Objectives of the San Joaquin Valley Library System through 2006 are set forth in the Long Range Strategic Plan, 2003-2006, Appendix A. Included in the Technology Plan goals below are key technology-related initiatives included in that plan or added after the plan was adopted.

Strategic Technology Goal #1: Provide a reliable data network to support library operations

With the vast majority of library services now dependent on network connectivity to shared servers and the Internet, a robust network is essential to library operations.

Objective #1: Provide current network equipment capable of supporting local and system needs.

Project 1.1.1. Continue planned replacement of obsolete network hardware. Fund balance from previous year's telecommunications budget is used to replace network equipment.

Project 1.1.2. Monitor router/switch IOS requirements and ensure that existing equipment can be upgraded to the IOS needed to support emerging needs, e.g. Voice over IP, webcasts, etc...

Project 1.1.3. Identify network equipment spare needs and storage locations and ensure that a budget for spares is included in each annual budget as new telecommunications equipment with enhanced features are purchased.

Objective #2: Provide sufficient bandwidth to meet the normal operational needs of each location.

Project 1.2.1. Identify a method to provide sufficient bandwidth to Alpaugh to support the library automation system and shared network services. System is currently exploring cost and feasibility of Motorola's Canopy product.

Project 1.2.2 Identify alternative solutions to growing bandwidth needs in the Southern LATA. Currently served by dual T1 lines to Fresno, the need to increase bandwidth over this costly inter-LATA connection is probable given the high bandwidth needs of the new library automation system, increasing use of webcasts for staff development, and a growing array of web-based services.

Projects 1.2.3 Annually assess branch and Internet bandwidth usage and projected needs 24 months out for e-rate application purposes.

Project 1.2.4 Identify telecommunications options for bookmobiles which can provide sufficient bandwidth for Horizon staff functions, the library catalog, and Internet-based services. Issue an RFP August 2004 as part of the e-rate application Cycle for Year 2005.

Objective #3: Provide access options for telecommuting.

Project 1.3.1 Develop in-house expertise on Virtual Private Network technology. Identify necessary hardware/software components to enable use of VPN by library managers for 2004 budget cycle.

Objective #4: Support wireless options when possible

Project 1.4.1: Support secure wireless computing within libraries using library-owned devices to improve productivity and space utilization.

Project 1.4.2: Work with member libraries and local internet service providers to provide wireless access points for library user's own wireless devices separate from the system network.

Strategic Technology Goal #2: Improve user interface to electronic library services

Objective #1: Provide access to the library electronic library services in languages other than English.

Project 2.1.1. Implement the Spanish version of the library catalog.

Project 2.1.2. Work with system members to develop web pages in Spanish where currently lacking.

Project 2.1.3. Identify other (non-Spanish, non-English) language interface needs.

Objective #2: Develop metasearch capabilities for library electronic resources.

Project 2.2.1. Identify resources of interest on a system-wide level for consolidated searching – databases, library catalog, Internet search engines, etc. Agree on an initial wish-list for a consolidated search interface.

Project 2.2.2. Contract for consolidated search services system-wide, coordinate additional services with member libraries as needed. Because of disparities in database subscriptions and philosophies, implementation of consolidated searching at the system level will probably not meet the needs of all system members, and an approach to dealing with the diverse needs must be worked out prior to vendor selection and implementation.

Project 2.2.3. Develop patron education tools to help library users successfully navigate the results of consolidated searching.

Objective #3: Continue to pursue broader cooperative efforts with other libraries in the Valley and in the State.

Project 2.3.1 Assess the problems encountered to date in implementing a multi-type resource sharing system, and evaluate the prospects for use of URSA as a replacement for the never fully implemented RSS system. Any analysis must take into account the future of the Heartland Regional Library Network.

Project 2.3.2. Assess the potential for moving the successful, but staff intensive low-tech linked system project of the past into a computer-mediated mode using the URSA system.

Strategic Technology Goal #3: Develop in-house expertise to fully utilize available technology.

Objective #1: Ensure a base level of technical knowledge within each library jurisdiction.

Project 3.1.1. Assess usefulness of OCLC/Mindleaders online technical training. Determine if the subscriptions should be continued or expanded to include additional staff.

Project 3.1.2. Continue to explore options for delivering productivity tool training and assess cost effectiveness of purchasing training packages. Find methods to encourage all system members to provide basic computer competency training to permanent staff.

Project 3.1.3. Continue quarterly tech meetings and expand involvement to include all technical support people in the member libraries. Tech meetings are a key tool in sharing knowledge and teaching key system tools.

Project 3.1.4 Improve use of the SJVLS Tech-Talk online discussion list and archives to promote sharing of problems and solutions.

Project 3.1.5 Develop knowledge base, using available resources, such as TrackIt! and members only web site, to improve problem resolution capabilities within member libraries.

Objective #2: Identify and develop advanced technical skills.

Project 3.2.1 Identify skills sets needed in-house and skills which can be obtained through consulting contracts. Budget for both consulting and training on skill required in-house.

Objective #3: Develop expertise in the new library automation system.

Project 3.3.1. Assign responsibility for expertise on the various components of the Horizon automation system.

Project 3.3.2 Utilize existing committee meeting structure to share expertise and to ensure consistence in use of the automation system.

Project 3.3.3 Add a section to the SJVLS members only web site with updates and tips on the library automation system.

Objective #4: Develop a knowledge base to support RFID as implemented by member libraries.

Project 3.4.1 Assist with upcoming RFID projects.

Project 3.4.2 Facilitate system-wide discussions of the potential impact of RFID on system-wide resource sharing and delivery operations.

IV. Review and Evaluation

The Technology Plan and the Long Range Strategic Plan are informally reviewed annually as part of the budget development and CLSA Plan of Service process. Based on available funding, anticipated staffing levels and emerging new projects, specific projects identified in both plans are implemented, deferred, or set aside as no longer needed or not feasible in the foreseeable future.

Effectiveness of each project is assessed as appropriate through staff or public feedback, either directly to system staff or through member library customer feedback channels. Special projects and grant-funded initiatives have their own separate evaluation channels.

V. Budget

Annually the System develops its budget for the following fiscal year. As system policy, the full costs of anticipated services and purchases are funded each year, including the undiscounted cost of all telecommunications services. Savings in telecommunications costs from the e-rate program and the California Teleconnect fund contribute to a fund balance which is used to fund replacement of equipment, telecommunications services and other services the following year. Allocation of the fund balance to various programs depends on the health of local library budgets and the priorities developed during the funding process. Each member library also maintains a computer reserve fund to support the cost of replacement of system-owned servers and network equipment, local PCs and peripherals, software upgrades, and annual license and software maintenance costs.