

JPA-11
01/24/19**JOINT POWERS AUTHORITY
BOARD TRANSMITTAL****APPROVED****ACCEPTED****PENDING****DENIED****PRESENTED****MODIFIED****DATE:** January 24, 2019**TO:** Joint Powers Authority Board**FROM:** Nancy Howe, County Librarian *CD for N.H.***SUBJECT:** **THREE-YEAR TECHNOLOGY REPLACEMENT AND IMPROVEMENT PLAN
FISCAL YEARS 2019/2020 – 2021/2022****BY THE SANTA CLARA COUNTY LIBRARY
DISTRICT JOINT POWERS AUTHORITY****BY:** *Cynthia Rios***SECRETARY****DATE:** *1/24/19***RECOMMENDED ACTION**

It is recommended the JPA Board adopt the Three-Year Technology Replacement and Improvement Plan and direct that \$8,720,000 be transferred from fund balance to the designated Technology Reserve to finance the plan for Fiscal Years 2019/20 – 2021/22.

BACKGROUND

The JPA adopts a Technology Plan every three years, which provides a budgetary framework for the Library's acquisition of hardware and software, implementation of new technology, as well as wireless and network support. The last plan covered Fiscal Years 2016/17 - 2018/19. The purpose of this report is to provide a final synopsis of work completed in the 2016-2019, plan and present the proposed Fiscal Year 2019/20 - 2021/22 Plan.

2016-2019 Technology Plan Review

Of the \$7,316,695 allocated for the 2016-19 Technology Plan, nearly all projects were or will be completed. Any remaining unspent balances will be returned to the library fund balance at the end of this fiscal year.

Updated technology includes the replacement of staff and public PCs, self-check machines, security gates, and VoIP phones. Implemented 24-hour library book lending machines, and laptop dispensing kiosks.

Library's local network has been upgraded from 100 Mbps to 1 GB speed. This will result in better computer and WiFi experiences for patrons and staff, as well as the ability to offer more streaming programs in future years.

Innovative tools include Adobe, Tech Kits for library programming use which support STEAM (Science, Technology, Engineering, Arts and Math). Tech Kits currently include: 3D printers, 3Doodler 3D pens, Arduino circuitry kits, Cubelets for robotics, Dash & Dot for robotics, Keva Planks for building, LittleBits for electronics and invention, Oculus Go VR headsets, Ozobots for robotics, and stop motion kits. Each library received a Tech ToolBar with eDevices (iPads, Kindles, Galaxy Nexus Readers) to promote eResources and educate patrons on using our eResources on popular electronic devices.

Website enhancement includes online passport appointment booking, new fines payment options within account area, and translation of online catalog allowing patrons to select from English, Spanish, Chinese, Vietnamese, and Filipino options.

Introduced eCard online registration and the student portal, issuing 80,000 student cards

As the 2018/19 Fiscal Year concludes, the library will continue the work of the existing plan, including replacing Self-Check machines, Security Gates and AV system upgrade (MI and SA).

2019-2022 Technology Replacement and Improvement Plan

The Technology Reserve Fund was established as a designated budgeted reserve by the Joint Powers Authority Board to accrue financing for large, costly network and system upgrades, as well as equipment replacement identified in the Plan. Every three years the JPA is presented with a Technology Replacement and Improvement Plan, which outlines major initiatives during the next fiscal years.

Proposed technology is evaluated using the following criteria to ensure that the Library acts in a fiscally responsible manner:

- Public benefit
- Enable public and staff self-service
- Enhance staff interaction with the public
- Accommodate service equity
- Training impact for both staff and the public
- Implementation costs in dollars and staff time
- Cost of equipment, software and ongoing maintenance
- Security
- Support efficiency
- Standards based architecture
- Space in existing buildings
- Remodeling and expansion projects
- “Must be done” (i.e., when a critical piece of hardware fails, equipment or software no longer being maintained, or current hardware cannot handle increased workload)
- Network stability and recovery

Network and System Infrastructure

The Library requires a fast, dependable network link between each library and library administration, which houses the servers and the Internet connection. The Internet connection must be fast and reliable. Servers and the Internet connection must be available 24 hour a day, seven days a week for access to the Library's website, catalog and subscription databases and include reasonable failover servers, appropriate security and recovery capabilities.

In the next three years, the network capacity will be evaluated, and the Plan allocates funds for network enhancements, including wireless networks and routers.

Technology Replacement and Improvement

Automatic Material Handling (AMH) machines at each location have reached their end of life, and will be replaced during the 2nd year of the new plan. In Year 2, money has been allocated for AMHS replacement.

Technology in all community rooms will be reviewed, and equipment will be updated or replaced, such as projectors, sound systems, and microphones. This will create a better user experience and utilize the increased network capacity for initiatives such as streaming programs.

Website has been continually enhanced. It is an ongoing process with money allocated throughout the plan.

The Plan also includes replacement book scanners and microfilm scanners that will allow patrons to view and print and a large-scale digitization project.

Technology to Enhance Patron Experience

Support of patron digital literacy remains a priority for the Library. Line items in the Plan include technology to support literacy, tech learning for the public, and displaying and/or loaning devices for the public. Identified initiatives include mobile devices for the Reading Program to assist adult learners and tutors; adding software to public computers, and investigation of loaning additional devices to respond to patron needs.

Staff and Public Computers

With the high quality of the existing hardware and software, we anticipate replacing staff and public computers in Year 5 which is outside of this 3 year Tech Plan.

Budget

The total three-year budget of \$8,720,000 includes network improvements, hardware/software replacement and innovation. Costs are spread throughout the three years, with the bulk of expenditures in Year 2.

Summary

The Library must be prepared to take advantage of new products and technologies, which will enable the Library to better serve the information needs of our clientele, run an efficient workplace, and take advantage of self-service components for both staff and the public. The Santa Clara County Library District must continue to meet the high expectations of the residents of Silicon Valley by using the opportunities for improved service offered by new technology. The Plan will be reviewed annually by the JPA.

FISCAL IMPLICATIONS

Adoption of this plan does not commit the Board to the expenditures or timing outlined herein. Each fiscal year, the proposed technology expenditures will be presented in the Budget document for the Board's decision to appropriate funding.

| SCCLD Tech Plan Fiscal Year 2019/20—2021/22 | | | | | |
|---|---|--------------------|--------------------|--------------------|--------------------|
| No. | Item Description | FY 2019/20 | FY 2020/21 | FY 2021/22 | Total Cost |
| 1 | Updated audiovisual equipment, wireless microphones for each community room (CA, CU, MH & GI) | \$800,000 | | | \$800,000 |
| 2 | AMHS Replacement | | \$4,000,000 | | \$4,000,000 |
| 3 | Book Scanners replacement | | \$100,000 | | \$100,000 |
| 4 | Microfilm scanners replacement | | \$100,000 | | \$100,000 |
| 5 | Wi-Fi Access Points upgrade | \$150,000 | | | \$150,000 |
| 6 | Network Security and Privacy Audit | \$100,000 | | | \$100,000 |
| 7 | Network enhancement | \$100,000 | \$100,000 | \$100,000 | \$300,000 |
| 8 | Servers and Data Storage needs, UPS replacement - On going | \$100,000 | \$50,000 | \$50,000 | \$200,000 |
| 9 | Fee and Fine payment kiosks | | | \$400,000 | \$400,000 |
| 10 | Book Lending Machines | | \$300,000 | | \$300,000 |
| 11 | Network switch upgrade (SSC) | \$100,000 | | | \$100,000 |
| 12 | VoIP system upgrade | | | \$80,000 | \$80,000 |
| 13 | Digitization project | \$100,000 | \$50,000 | \$50,000 | \$200,000 |
| 14 | Library information and events display monitors and software | | \$75,000 | | |
| 15 | Collaboration and group learning for example Mondopad (public) | \$75,000 | | | \$75,000 |
| 16 | Technology to support literacy | \$50,000 | \$50,000 | \$50,000 | \$150,000 |
| 17 | Displaying and/or loaning smart devices for the public | \$200,000 | \$150,000 | \$150,000 | \$500,000 |
| 18 | Tech learning for the public including instruction, hardware, software and services | \$300,000 | \$300,000 | \$300,000 | \$900,000 |
| 19 | Website enhancements | \$50,000 | \$50,000 | \$50,000 | \$150,000 |
| 20 | Technology solution for extended library access | \$40,000 | | | \$40,000 |
| | Total All Priorities | \$2,165,000 | \$5,325,000 | \$1,230,000 | \$8,720,000 |