# Washoe County Library Technology Plan
## FY 2014/15 – FY 2018/19

**Executive Summary:** *In order to better align with the Washoe County Library System's Strategic plan, this document will first address technology for patrons or customers in the first half, and then technology as it can be used by the library to improve and sustain itself as an organization in the second half.  Not all items mentioned in the plan can or will be completed.  Some will turn out to be placeholders, some will be evaluated and completed, and others will be found to be impractical.  In essence, this is a technology road map that the Library will use in support of its mission and vision.  The Library will not be limited to only the items included in the plan, but will use the plan to provide a well-thought-out-solution to certain known needs.  The plan was created through brainstorming sessions by staff, and by thinking of possibilities, not just realities.*

**Washoe County Library System Mission Statement:**  *Our Mission is to connect people with information, ideas and experiences to support an enriched and engaged community, one person at a time.*

**Washoe County Library System Vision Statement:**  *Our Vision is that all Washoe County residents benefit from the Library's support of literacy and self-education.*

**Background on current state of library technology:**  *The Library is trying to function with about one-half the technology budget it had in 2007.  It is necessary to rely on grants and Friends of Washoe County Library (FWCL) yearly allocations to do anything beyond maintaining what we have.  Since we expect this situation to continue into the near future, the Library has employed "open source" solutions, wherever it seems feasible, to make our institution more sustainable.*

*We are faced with upgrading 356 Windows XP public computers, with the County's Technology Services Department only willing to replace 91 with new machines.  The end-of-life of Windows XP in April of 2014 makes upgrading mandatory.*

*Branches are reporting a dramatic increase in patrons bringing their own mobile devices and making use of our wireless service.  There is a real need for public printing from all types of mobile devices.*

*We have two busy branches in leased spaces that need more bandwidth and better infrastructure. At present, North Valleys has no affordable solution to a low-bandwidth problem*

*for staff and public networks, yet their demand for internet access remains high. Sierra View has maxed out its ability to add power and data connections. Wiring at Sierra View gets wet during rainy weather, and sand bags are often needed to prevent water from entering the building.*

## The Library's Technology Goals and Objectives concerning patrons:
### Connecting people with services

### Kiosks, In-House, and Remote:
- *Use Self Service Kiosks with online payment, and other options in the branch; may offer access to other county services*
- *Remote Self Service Kiosks serve as PACs to reserve items, renew, pay, and pick up, and return. Possible use for lower-volume existing branches or new underserved locations*
- *Lockers serve as after-hours pick up locations, making it more convenient for patrons – first deployment goes online in Jan 2014*
- *Self-registration at OPAC stations will allow patrons to enter their own information and staff can verify and issue a card very quickly - Feb. 2014*
- *Public copiers become public printers for all devices, solving the problem of low use on public copiers and allowing for cheaper printing – Feb. 2014*
- *Meeting room technology upgrade and standardization - 2014*

### Virtual Branch:
- *Improve access to and usage of library resources*
- *Test, select, and implement new content management system (CMS) as part of the County's Internet Working Group CMS Subcommittee – May, 2014*
- *Complete look and feel redesign of library website – May, 2014*
  - *Dovetail with WC redesign*
  - *Consult with KPS3*
  - *Implement responsive designed theme which will allow users to view the full library website on any sized screen (smartphone, tablet, laptop/desktop)*
  - *Updated theme will also ensure cross-browser compatibility*
  - *Allow patrons to subscribe to RSS feeds to learn about new catalog materials, news, and events*
  - *Allow patrons to sign up to receive reminders about library events*
  - *Implement website translator for viewing in Spanish and other languages*
  - *Implement single search box with options to search the catalog, e-books, or the website*
- *Implement Overdrive API in Koha to view availability of e-books and number of holds from within the catalog – Spring, 2014*
- *Implement database APIs in Koha to improve database use and discovery – Spring, 2014*

- **Increase access to Virtual Branch services**
  - Implement patron self-registration from the OPAC – February, 2014
  - Implement online payment of fines and donations – have been waiting on WC for 2+ years
  - Revise Research Databases pages – May, 2014
  - Revise Children's and Teens pages to feature useful homework tools including live tutor service – May, 2014
  - Assist patrons at point of need
    - Create database and catalog instructional tutorials in a variety of formats including handouts, screen casts, and pathfinders – May, 2014
    - Online summer reading program – participants can sign up and log their reading time at the library website – June, 2014
    - Track progress, write reviews
    - Online meeting room reservations – allow patrons to view available meeting and study rooms and to reserve them online – June, 2014
- **Facilitate content creation**
  - Revise Lifescapes website – February, 2014
    - Feature titles on browseable bookshelves
    - Allow readers to add comments
    - Allow authors to create profiles
    - Add e-commerce feature to sell Lifescapes titles and anthologies
  - Create WCLS micropublishing platform – October, 2014
    - add e-books of local authors to our catalog and loan them to patrons
- **Mobile device lending program**
  - Checkout Nooks and Kindles to patrons – February 2014
  - Checkout tablets to patrons for periodicals, early literacy – summer 2014

## Mobile Staff:
- Purchase mobile devices for use out in the stacks – Spring 2014
- Staff uses tablets for answering questions, finding stuff, checking out to patrons - Spring 2014
- Staff "sells" our products, (Home Depot/ Mac Store model)
- Tablets with 4G connections may give our outreach programs more connectivity
- Go To Meeting, Google Hangout can be used for virtual meetings and online collaboration
- SharePoint (County purchases newest version) has many online work and collaboration options 2014

## Library users discover and learn about current technologies

## Training Labs:

- *A permanent, stationary lab with regularly scheduled public computer classes, that can be used as public Internet stations when not having training classes, and also provide a holds pick-up and drop off station (Senior Center) - 2015*
- *Convert an existing small branch, or create a new one to   2015*
- *2 Mobile laptop labs with new laptops used on public wireless only, can be reserved, or use multiple 4G hotspots for anywhere deployment of the mobile lab – Feb 2014*
- *Dual-boot machines to use Windows 7 and Linux for public Windows and Linux based classes*

### Public: education or technical training
- *Expand training on computers (Windows and Linux), Internet use, email, searching catalog and databases - 2014*
- *Linux public workstations need a printing solution - Feb 2014*
- *Increased digital content downloading*
- *Download music and movies added to digital content offerings*
- *Training classes on Android OS and iPad - 2015*
- *Makerspace - 2014*

### Replace and Enhance Aging Public Computers:
- *Find a way to replace aging public computers - Spring 2014*
- *Offer tablets and possibly Chrome books for public in-house use to replace some Windows workstations - 2014*
- *Create public use multimedia workstations that may be a starter Makerspace, providing photo and video editing - 2015*
- *Create Skype public use workstations*
- *Create dedicated teen gaming computers, with added upgraded video cards*
- *Create a teen hacker space*

# The Library's Technology Goals and Objectives concerning the organization:

## The Library becomes even more sustainable

### RFID: Investigation with possible multi-year implementation - 2016
- *Can check out items to patrons on mobile devices*
- *Scan multiple items at self checks, and security gate*
- *Get rid of red bayonets in DVDs and Music CDs*
- *Inventory control using a wand to record items on the shelves*
- *Efficient search for missing items using the wand to identify items out of place*

- *Cost is high - Must do this in a multi-year plan, beginning with cataloging new items using the smart barcodes*
- *Returned materials management offers the ability to auto separate returned items by their type, such as a DVD vs. a book.*

### Koha:
- *Improve acquisitions module, and give public training on searching - 2014*
- *Video tutorials on Koha use to be incorporated into public computer classes - 2015*
- *Formalize improvement suggestions and training for staff*
- *Need to find a new way to deliver staff training, using video tutorials, video cameras - 2015*
- *Catalog clean up, Marcive, or using Koha on-board tools - 2014*
- *Employ RDA for cataloging, giving end user better searching - 2014*
- *Responsive design for the public catalog, scaling to fit any mobile device - 2014*
- *Koha database, some staff learn MYSQL to be able to create new reports - 2015*

### More Open Source Software:
- *Investigate Libki (open source) and other vendors as a possible replacement for Envisionware to enable time management for operating systems other than just Windows - 2015*
- *Improve wireless printing by testing Paper Cut that will manage printing across all operating systems including mobile devices Feb 2014*
- *Investigate creating our own security gates - 2017*
- *Look at CamCage for making video tutorials, desktop video capture - 2014*
- *Use Mantis (open source) to track and manage Systems work requests - 2014*

### Wyse Thin Clients:
- *Investigate using thin clients as circulation workstations with central server management  - 2015*
- *Use thin clients as PACs (Public Access Catalogs), informational screen savers with central server management - 2014*
- *Find a solution for printing from PACs -  2014*

### Network Improvements:
- *Create a staff wireless network in larger branches for mobile devices (six branches have Charter public wireless) - 2014*
- *Test using 4G mobile network for emergency and outreach use (purchase more?) - 2015*
- *Work with Technology Services to improve our connection to the data center - 2014*
- *Need a proxy server solution to prevent illegal downloading by patrons using our wireless service - 2014*
- *Incline Charter build out to the branch approx. $50,000?*
- *Need a library network map to better troubleshoot problems*

- *North Valleys needs a network solution (partner with others for a Charter build out) or move to a better, County-owned location*

## Collaboration:
- *Join local group, test products. Reno Bridgewire - 2014*
- *Continue pushing ITOSC (Information Technology Open Source Committee) county open source group - 2014*

## Library staff enhances current technical skills and learn new ones

## Staff Enhanced Skills:
- *Training on basic computer skills (a high priority in light of people leaving and skills lost)*
- *Koha searching, purchased database searching*
- *Downloading, and troubleshooting digital books - 2014*
- *Training on use of mobile devices - 2014*
- *Staff tutorials on SharePoint*
- *Staff collaborative work space, links for reference using "SharePoint" - 2014*
- *Use staff technology competencies for baseline training*
- *Train all staff to have more technology skills (formerly Wizards) - 2014*
- *We need another DCAS (or other technical position) - 2015*

### Glossary of terms

*4G Mobile Network – fourth generation mobile phone network*
*API – Application Program Interface, specifies how some software components should interact with each other.*
*BridgeWire – Bridgewire is a member-funded makerspace/hackerspace workshop located in Sparks, Nv.*
*CamCage – Video system*
*Libki – Open source time management system for public computers*
*OPAC – Online Public Access Catalog*
*Open source software - Collaborative software with free source code, freely available for use and modification*
*OverDrive – Vendor providing downloadable audio and eBook content*
*Paper Cut – Print management software*
*SharePoint – Microsoft's web-based intranet content management software*

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