**Best Practice for Public Computing Centers**

This document is designed to help public library directors, staff, and Information Technology (IT) Support Staff improve and maintain their public computing centers. Montana State Library Staff have used the Library Edge Benchmarks to develop this document. We have identified basic steps that every library should follow when managing a public computing center. Libraries that strive for the ideal benchmarks will enhance the staff and public’s experience with the public computing center.

*REFERENCES FOR DOCUMENT:*

* Library Edge Benchmarks - <http://www.libraryedge.org/>
* Digital Literacy Resources - <http://www.digitalliteracy.gov/>

***TRAINING[[1]](#footnote-1)***

*The library provides technology/digital literacy training either one-on-one or in groups.*

|  |  |
| --- | --- |
| **BASIC** | **IDEAL** |
| * Curricula and classes are available in the following topics
	+ Basic computer skills
	+ Office productivity software
	+ Internet searching
	+ Library resources
 | * Curricula and classes are available in the following topics
	+ Privacy and security
	+ Social media
	+ Multi-media (photo, video, audio)
 |
| * Training is available for patron owned devices
 | * Technology classes are available in languages other than English
 |
| * The library provides individual assistance for digital literacy at all outlets
	+ One-on-one help is available on-demand for at least 10 minute sessions
	+ One-on-one help is available for patron owned devices
 | * The library provides individual assistance for digital literacy at all outlets
	+ One-on-one help is available on-demand for at least 30 minute sessions
	+ One-on-one help is available in languages other than English
 |
| * Library classes and services are listed on the [Everyone On Website](http://www.everyoneon.org/)
 | * Library participates in the [Connect2Compete](http://www.connect2compete.org/) and [Everyone On](http://www.everyoneon.org/) campaigns
 |

***Digital Content Access and Creation[[2]](#footnote-2)***

 *The library provides access to relevant digital content and ways for community to create content*

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| **BASIC** | **IDEAL** |
| * The library supports the creation of digital content
	+ Patrons can use portable devices such as thumb drives while using public computers
	+ Office productivity software is available
 | * The library supports the creation of digital content. Private rooms are ideal when offering video/audio recording and editing software.
	+ Photo editing software is available in at least 50% of library outlets
	+ Video/audio recording and editing software is available in at least one library outlet
	+ Web development software is available on at least one public computer
 |
| * The library monitors its service delivery of online content
	+ Website links are checked and content is updated at least monthly
	+ Library website usage reports are reviewed at least quarterly
	+ Subscription content (databases) usage reports are reviewed at least quarterly
	+ A content inventory of the library’s website is performed annually
 | * All benchmarks are basic
 |
| * The library provides access to information resources through its website
	+ eBooks can be downloaded through the library’s website
	+ Audio books can be downloaded through the library’s website
 | * The library provides access to information resources through its website
	+ The library offers access to online interactive language learning tools through its website and/or language learning software
	+ The library selects and organizes online technology training resources
	+ The library provides real-time reference services (through Short Message Service (SMS), instant messaging, etc.)
 |

***TECHNOLOGY RESOURCES[[3]](#footnote-3)***

 *The library provides technology resources that help meet patron needs and community priorities*

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| **BASIC** | **IDEAL** |
| * The library supports use of public technology for workforce development and entrepreneurship
	+ The library offers access to online career testing preparation tools
	+ The library selects and organizes online resources for
		- Job seeking and employment skill-building
		- Small business development
 | * The library supports use of public technology for workforce development and entrepreneurship
	+ At least quarterly the library leads or hosts group instruction on small business or career development
 |
| * The library supports the use of public technology for [eGovernment](http://mt.gov/services/default.mcpx) or legal purposes
	+ The library selects and organizes online links to local, state and federal eGovernment resources.
	+ The library offers access to electronic legal research information and services.
 | * The library supports the use of public technology for eGovernment or legal purposes
	+ The library partners with their local [Montana job services](http://wsd.dli.mt.gov/) office.
	+ The library partners with [Montana Department of Public Health and Human Services](http://www.dphhs.mt.gov/index.shtml) (DPHHS)
	+ At least quarterly the library leads or hosts group instruction on navigating online government resources.
 |
| * The library supports use of public technology for patrons pursuing educational opportunities
	+ Early literacy games/tools are available
	+ Library offers access to test preparation (SAT, GRE, GMAT)
	+ Library proctors exams
	+ The library offers online resources related to
		- homework help, research, and information literacy for students
		- college selection and financial aid
 | * The library supports use of public technology for patrons pursuing educational opportunities
	+ At least quarterly the library leads or hosts group instruction on using educational resources
 |

***DIGITAL INCLUSION AND INNOVATION[[4]](#footnote-4)***

*The library makes strategic decisions based on digital inclusion and innovation.*

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| **BASIC** | **IDEAL** |
| * The library has leaders who maintain ongoing relationships with community leaders
	+ At least quarterly the library places information about library technology and/or digital inclusion in local media outlets
 | * The library has leaders who maintain ongoing relationships with community leaders
	+ Library leaders attend regular meetings of local funding bodies
	+ At least annually a presentation about library technology is made at local community group meetings
	+ At least one library leader sits on a key community board
	+ At least one community leader sits on a key library committee or board
 |
| * The library gathers feedback from the community about its technology needs
	+ Questions about community technology are included in a library sponsored needs-assessment survey
		- Survey covers workforce development, eGovernment, Education, Health
	+ Library identifies technology needs and resources for people with disabilities
 | * The library gathers feedback from the community about its technology needs
	+ An analysis of social and economic conditions of the community is conducted as part of an information gathering process
	+ The library conducts focus groups on the community’s technology needs
	+ Library holds forums about community technology needs
 |
| * The library evaluates its technology programs and services
	+ Web analytics are used to evaluate the use of online library resources
	+ Annually the effectiveness of partnerships, digital literacy programs, and outreach activities are evaluated
 | * The library makes strategic decisions based on information about community needs and priorities
	+ Strategic plan addresses
		- Digital inclusion and innovation
		- Staffing needs
		- Technology resources and services
	+ Annually technology goals are evaluated
 |

***BUILDING PARTNERSHIPS[[5]](#footnote-5)***

*The library builds relationships with community partners to maximize technology services.*

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| **BASIC** | **IDEAL** |
| * The library develops and maintains partnerships that amplify the library’s reach, avoid duplications, aid the library in planning or are otherwise mutually beneficial
	+ The library engages in partnerships w/some or all of the following organizations
		- Workforce development organization
		- Educational organization (K-12, college)
		- Local government or social service organization
		- Local health and wellness organization
		- Community service organizations (Rotary, Boy Scouts, Women’s Club)
 | * The library develops and maintains partnerships that amplify the library’s reach, avoid duplications, aid the library in planning or are otherwise mutually beneficial
	+ The library has strategies for strengthening existing partnerships and developing new partnerships to advance digital inclusion and innovation
	+ Devices or space in the library are loaned to community organizations for technology related classes
	+ The library collaborates on grant or other funding opportunities with a community organization
	+ The library has mobile technology that can be used to train offsite
 |
| * The library engages in technology outreach activities
	+ The library tracks emerging technology trends and applications in the community
	+ The library maintains a plan to provide technology services to the community in the event of a disaster or other emergency
 | * The library engages in technology outreach activities
	+ A roster of community organizations is maintained to help distribute materials about library technology resources
	+ A roster of community organizations that offer technology services is maintained to easily refer community members to additional services
 |

***CONTINUOUS IMPROVEMENT[[6]](#footnote-6)***

 *The library supports continuous improvement in public access technology.*

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| **BASIC** | **IDEAL** |
| * The library participates in a community of practice and shares public access technology knowledge, resources, and other tools.
	+ Existing resources are used to help improve library technology management and public services (e.g., [TechSoup](http://www.techsoup.org/), [WebJunction](http://www.webjunction.org/explore-topics/slo.html), [Edge](http://www.libraryedge.org/))
	+ The library participates in peer learning  through technology programs sponsored by a state library, consortium, library association, or other organization
	+ Training resources and curricula are shared with other libraries or community-based organizations
	+ Network management policies and practices are shared with other libraries or community-based organizations
 | * The library participates in a community of practice and shares public access technology knowledge, resources, and other tools.
* At least one technology-related presentation is made by library staff at formal professional gatherings (in-services, conferences, webinars) annually
* The library participates in or facilitates a technology mentorship program that pairs library staff with more experienced or knowledgeable mentors involved in managing library technology and public technology access.
* The library has a collection of technology devices that it loans out for staff development and programming purposes
* The library hosts a [dedicated development environment](http://www.libraryedge.org/glossary#Dedicated_development_environment) to allow library staff to experiment with new applications and online environments
 |
| * The library conducts surveys to gather feedback about library technology. Surveys cover patron satisfaction, personal importance of technology and importance of library technology to others in the community.
 | * No ideal benchmarks
 |

***PLANNING AND POLICIES[[7]](#footnote-7)***

 *The library integrates public access technology into planning and policies*

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| **BASIC** | **IDEAL** |
| * The library maintains technology and patron data management policies.
	+ The library has a hardware replacement plan with a 3-5 year [refresh cycle](http://www.libraryedge.org/glossary#Refresh_cycle)
	+ The library has a software upgrade plan with a 3-5 year refresh cycle
	+ Library staff
		- Run updates to current versions of Internet browsers, web applications, and plug-ins (e.g., Java, PDF, Flash, Shockwave, Windows Media Player)
		- Installs network security updates and [patches](http://www.libraryedge.org/glossary#Patches)
		- Has a process for system recovery in the event of catastrophic technology failure
	+ Practices to ensure the security of patron data, including at least clearing online [session](http://www.libraryedge.org/glossary#Session) data from public computers and procedures for handling sensitive information, are included in a patron privacy plan
	+ Library has policies for computer, Internet, and wireless usage
 | * The library maintains technology and patron data management policies.
	+ Library has policy for mobile devices provided by library to either staff or patrons
* Library has a technology management plan that addresses regular software updates, network security, and disaster planning and recovery.
 |

***STAFF EXPERTISE AND TRAINING***

 *The library has sufficient staff with technology expertise to help patrons achieve their goals.*

|  |  |
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| **BASIC** | **IDEAL** |
| * The library provides staff with work time to engage in technology-related learning activities.
	+ All public services staff are allowed work time
		- to engage in technology-related learning activities such as webinars, online tutorials, or classes
		- for hands-on learning with new devices, software, or other technology
	+ All staff are provided the opportunity to attend annual training during work time from experts in the following areas:
		- Workforce developmenteGovernmentEducationHealth & wellness
 | * The library provides staff with work time to engage in technology-related learning activities.
	+ Key staff are provided the opportunity to attend training in the creation of digital content during work time
	+ Key staff are provided the opportunity to attend training in instructional design and techniques during work time
 |
| * Library staff assigned to assist patrons are responsible for maintaining technology competencies.
	+ Job descriptions for public services staff contain technology competencies and responsibilities
	+ Annual evaluations for public services staff include review of technology related performance
	+ Annual goal setting for public services staff includes expectations for technology performance
 | * No ideal benchmarks
 |

***STAFF EXPERTISE AND TRAINING (CONT.)[[8]](#footnote-8)***

 *The library has sufficient staff with technology expertise to help patrons achieve their goals.*

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| **BASIC** | **IDEAL** |
| * Staff assigned to assist patrons are able to answer patrons' technology questions.
	+ 100% of public services staff are able to assist patrons with basic technology questions
	+ 25% of public services staff in each location are able to assist patrons with intermediate technology questions
	+ 10% of public services staff in each location are able to assist patrons with advanced technology questions
	+ Money is budgeted for technology training for staff
	+ Key staff are trained in how to use library resources
 | * Staff assigned to assist patrons are able to answer patrons' technology questions.
	+ Money is budgeted for the purchase of software and devices that staff can use to learn new technology
	+ Library staff and administrators use PCC Learning Targets to assess training needs
 |

***BANDWIDTH AND DEVICE HOURS***

 *The library has sufficient devices and bandwidth to accommodate user demand.*

|  |  |
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| **BASIC** | **IDEAL** |
| * The library has a sufficient number of computer and mobile device hours available on a per capita basis.
	+ The library monitors usage of its equipment to determine when more equipment hours need to be added to the system.
	+ The library provides 3.00-6.00 equipment hours per capita
 | * The library has a sufficient number of computer and mobile device hours available on a per capita basis.
	+ Library provides 6.01 - 12.00 equipment hours per capita
 |
| * The library meets or exceeds the minimum bandwidth capacity necessary to support public user demand.
	+ The library monitors bandwidth usage. When usage is consistently at 80% or higher the library upgrades if possible to the next level for bandwidth capacity.
 | * The library meets or exceeds the minimum bandwidth capacity necessary to support public user demand. Bandwidth and speed are often determined by the library’s location. Not all places in Montana have access to the speed listed nationally.
	+ Check the [Library Edge](http://www.libraryedge.org/) benchmarks for the latest information.
	+ If library is at the maximum speed possible for the area library administration purchases more Internet pipelines. Having separate Internet connections for public and staff computers can often achieve necessary improvements in speed. Local Internet Service Providers are often willing to assist libraries with upgrading their connections.
 |

***BANDWIDTH AND DEVICE HOURS (CONT.)[[9]](#footnote-9)***

 *The library has sufficient devices and bandwidth to accommodate user demand.*

|  |  |
| --- | --- |
| **BASIC** | **IDEAL** |
| * The library assures adequate time for patrons to complete tasks.
	+ Library has method for managing computer usage
	+ Library staff are empowered to extend public access sessions
	+ The wireless network signal extends to all public areas of the library
	+ Some public access terminals are designated with extended session periods
	+ Library has a method for managing printing
 | * The library assures adequate time for patrons to complete tasks.
	+ Library has session management software
	+ Internet-enabled devices with extended session periods are loaned within the library
	+ Internet-enabled devices are loaned for use outside the library
 |
| * The library provides peripheral equipment that enables patrons to complete tasks.
	+ Headphones are available to loan to patrons
	+ Patron needs for privacy while conducting sensitive transactions are accommodated through at least one of the following:
		- Placing computer monitors so they can't be viewed by other patrons
		- Installing partitions between workstations
	+ Patrons are able to scan documents into digital formats
 | * The library provides peripheral equipment that enables patrons to complete tasks. Usage of video conferencing, presentation, and multimedia production equipment is best done in a private or dedicated room.
	+ Patron needs for privacy while conducting sensitive transactions are accommodated by installing privacy screens for computer monitors
	+ Wireless-enabled printers are available for patron-owned devices
	+ Video conferencing equipment is available for public use
	+ Presentation equipment (e.g., projector, microphone, etc.) is available for public use
	+ Multimedia production equipment (e.g. digital cameras, audio recorders, video cameras) is available for public use
 |

***MANAGING TECHNOLOGY[[10]](#footnote-10)***

 *The library manages its technology resources to maximize quality*

|  |  |
| --- | --- |
| **BASIC** | **IDEAL** |
| * The library actively manages Internet connectivity.
	+ The library knows the maximum available bandwidth speed available at each location
	+ Speed tests are performed on public computers to compare advertised and actual bandwidth speed
 | * The library actively manages Internet connectivity.
	+ Alerts about connectivity problems are received in real time
	+ Connectivity (up/down/ping) is continuously monitored at the network level for all locations
	+ Library allocates bandwidth for library staff functions and public Internet access through separate data circuits or through hardware/software mechanisms to prioritize network traffic
 |
| * The library minimizes out-of-service devices.
	+ Library staff have access to a troubleshooting guide for network devices and peripherals, including call numbers and service provider information
	+ A lockdown software program (e.g. Deepfreeze) is installed on public computers
	+ The library has access to personnel with sufficient IT expertise to maintain the library's network and public technology systems
 | * The library minimizes out-of-service devices.
	+ The library uses a master image deployment and recovery (e.g. Clonezilla, Ghost) system for public computers
	+ Cold spares are available to switch out downed devices with fresh hardware within a business day
	+ The library has at least one staff member located onsite with sufficient IT expertise to maintain the library's network and public technology systems
 |
| * Library has a notebook that contains network and system admin information. This notebook should include:
	+ Usernames and passwords for computer admin logins
	+ Contact information for IT support
	+ Basic library network information
	+ Inventory of hardware
	+ Software license information
 | * The library tracks key measures about public technology services for planning purposes. This includes:
	+ Number of hours public devices are in use by patrons
	+ Number of attendees in technology classes
	+ Average wait times for public devices
	+ Number of wireless sessions
	+ Number of requests for one-on-one technology help
 |

***ACCESSIBILITY[[11]](#footnote-11)***

 *The library ensures participation in digital technology for people with disabilities*

|  |  |
| --- | --- |
| **BASIC** | **IDEAL** |
| * The library accommodates users with disabilities.
	+ At least one public terminal with assistive technology that enable use by the visually impaired (e.g., screen readers, magnification, high contrast keyboards and displays) is available at all locations
	+ The library has at least one workstation in each location that can accommodate a wheelchair or mobility vehicle
	+ At least one public terminal that can be converted with assistive technology to facilitate usage by people with motor and dexterity impairments (e.g., touch screens, trackballs, switches, voice-recognition software) is available at all locations
	+ Staff are provided with training at least annually for recognizing and serving patrons with disabilities
 | * The library accommodates users with disabilities.
	+ The library website is compliant with [World Wide Web Consortium (W3C) disability standards](http://www.w3.org/WAI/) as evidenced by the use of an online validation service
	+ Specific accessibility goals are included in the strategic plan
 |

1. *Training Resources – includes curricula, self-paced courses, and information about programs in languages other than English*

Montana State Library Learning Portal Digital Literacy Section - <http://learning.montanastatelibrary.org/digitalliterac/>

Webjunction Spanish Learning Outreach Program - <http://www.webjunction.org/explore-topics/slo.html> [↑](#footnote-ref-1)
2. *Digital Content Access and Creation Resources – includes links for database usage, website usage, and technology resources*

Montana State Library Library Directory for Usage Reports on Statewide Databases - <http://msl.mt.gov/Library_Development/Library_Directory/Access/Login/default.asp>

Google Analytics for Website Usage - <http://www.google.com/analytics/>

Montana State Library Learning Portal - <http://learning.montanastatelibrary.org/> [↑](#footnote-ref-2)
3. *Technology Resources – includes information about employment, health, eGovernment and early literacy*

Montana State Library Learning Portal Digital Literacy - <http://learning.montanastatelibrary.org/digitalliterac/>

Ready2Read – <http://msl.mt.gov/WhatsYourStory/Campaigns/Ready2Read/default.asp>

HomeworkMT - <http://www.homeworkmt.com/> [↑](#footnote-ref-3)
4. *Digital Inclusion and Innovation Resources – includes information about technology available for patrons with disabilities*

MonTECH - <http://montech.ruralinstitute.umt.edu/>

Talking Book Library - <http://msl.mt.gov/talking_book_library/default.asp> [↑](#footnote-ref-4)
5. *Building Partnerships – includes information and ideas for creating and sustaining partnerships*

Community Track Handouts from 2013 Montana Library Association Pre-Conference - <http://riskrewardrevolution.wordpress.com/tracks/abundant-community/> [↑](#footnote-ref-5)
6. *Continuous Improvement Resources – information about purchasing software, hardware, and opportunities to learn*

Montana State Library Learning Portal - <http://learning.montanastatelibrary.org/>

Montana Library Association - <http://www.mtlib.org/>

Survey Monkey - <http://www.surveymonkey.com/> [↑](#footnote-ref-6)
7. *Planning and Policies Resources – includes information about where to easily run updates and how to order new computers and software*

Ninite - <http://ninite.com/>

Montana State Library Tutorials on ordering new computers and software through state contracts - <http://www.webjunction.org/partners/montana/mt-resources/sustainability.html> [↑](#footnote-ref-7)
8. *Staff Expertise and Training Resources – includes links to webinars, self-paced courses, and possible face to face trainings*

Montana State Library Learning Portal - <http://learning.montanastatelibrary.org/>

Webjunction - <http://www.webjunction.org/>

Tech Soup Webinars - <http://www.techsoup.org/community/events-webinars> [↑](#footnote-ref-8)
9. *Bandwidth and Device Hours – the following website can assist libraries in determining their Internet speed*

National Broadband Plan Connecting America - <http://www.broadband.gov/> [↑](#footnote-ref-9)
10. *Managing Technology Resources – includes information about how to maintain technology and test Internet speeds*

National Broadband Plan Connecting America - <http://www.broadband.gov/>

Webjunction - <http://www.webjunction.org/> [↑](#footnote-ref-10)
11. *Accessibility Resources – includes information about technology for those with disabilities and checklists for libraries to be more ADA compliant*

ADA Checklist for Libraries - <http://www.access-board.gov/adaag/checklist/Libraries.html>

MonTECH - <http://montech.ruralinstitute.umt.edu/>

Talking Book Library - <http://msl.mt.gov/talking_book_library/default.asp> [↑](#footnote-ref-11)