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Montana BTOP Final Statistics

BTOP Public Computing Center Goals and Objectives

Montana's project promotes three BTOP statutory purposes:

1) provide improved access to broadband service to consumers residing in underserved areas of the country;

2) provide broadband education, awareness, training, access, equipment, and support to libraries; and,

3) stimulate the demand for broadband, economic growth, and job creation.

Objectives

1) increase broadband speeds at participating libraries up to 21 mbps;

2) cut wait times in half by increasing the total number of workstations and expanding library operation hours;

3) improve access by purchasing ADA compliant software, hardware, and furniture, and through minor renovation projects aimed at increasing accessibility of computing center facilities;

4) offer courses to increase computer literacy; and

5) provide Internet and library resources to rural Montana using a mobile computer lab.

Successes of 42 BTOP libraries

With support from The United States Department of Commerce and the Bill & Melinda Gates Foundation, the Montana State Library pooled two grants totaling over $2.7 million. Forty-two libraries participated in the project to improve their public computing centers.

One of the top priorities of the project was to increase broadband speeds at all participating libraries. Montana, being an extremely rural state, had some challenges in this area. The infrastructure of our state did not allow for the massive increases in speed that we hoped to see. However, all but two libraries were able to increase their speeds by working with their local Internet Service Providers. Our lowest speed was 1.5 mbps and is now 3 mbps.

All of the libraries reported little to no wait times after the number of workstations available to patrons were increased. All of the libraries also added ADA compliant software and hardware to their libraries improving the overall accessibility of their computing centers. Finally, all of the libraries improved the number of technology training hours provided to their patrons. This could not have happened without first increasing the number of hours of staff training.

MONTANA State Library

- **Montana BTOP libraries received 478 new computers.**
- **Library operating hours increased by 5%.**
- **Wait times for public computers dropped to an average of less than one minute.**
- **BTOP libraries offered 51,280 hours of technology related training to 130,345 patrons and 2,373 staff members.**

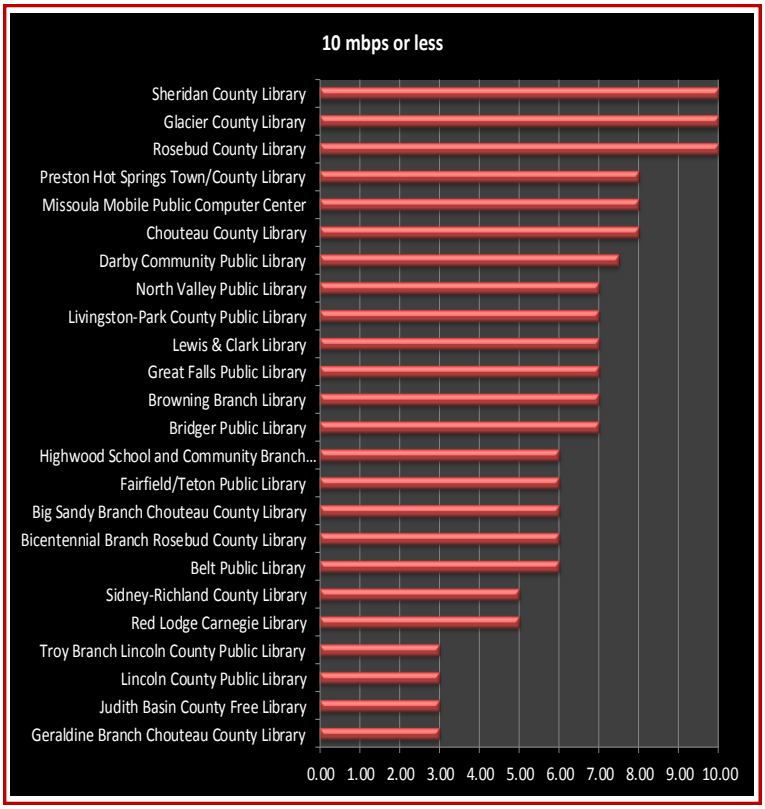
Montana State Library Mission

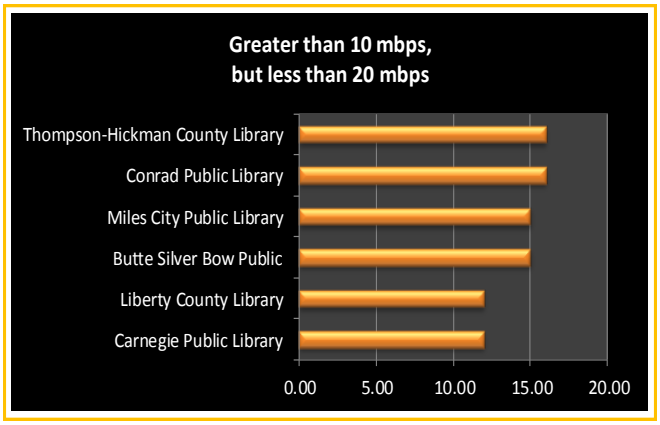
The Montana State Library is committed to strengthening libraries and information services for all Montanans through leadership, advocacy, and service.

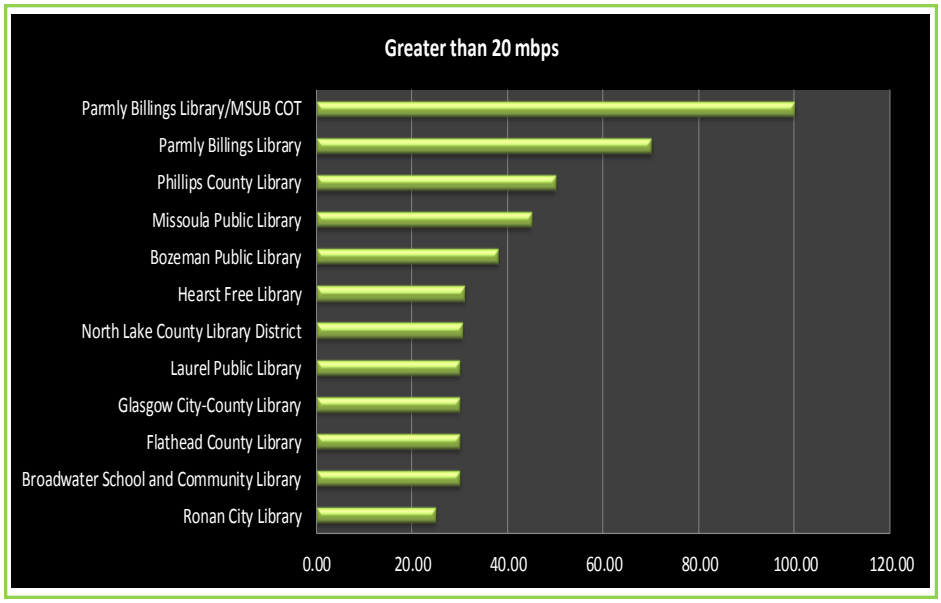
Broadband Speeds

Broadband speeds for community anchor institutions is a hot topic nationally. The Schools, Health, and Libraries Broadband Coalition's annual conference in 2013 was entitled *Getting to Gigabit: The Future of Broadband for Anchor Institutions and Their Communities*. This conference was a good reminder that improved broadband is something that Montana must continually fight to attain.

We are a long ways from Gigabit status; however we are seeing gradual increases. Twenty-two of our BTOP libraries report broadband speeds of less than 10 mbps. In many of these locations, they are getting the fastest speeds available to them in their rural area. In towns where faster speeds are available, cost becomes a major factor. Six of our BTOP libraries reported speeds between 10 and 20 mbps, while twelve reported speeds of over 20 mbps.

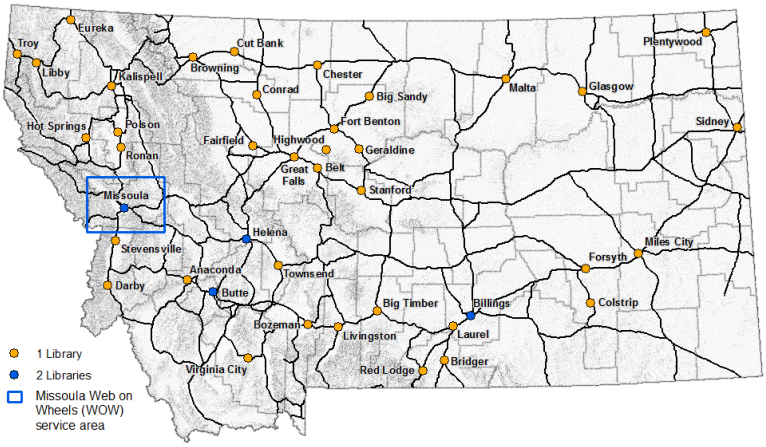






Busy Public Computer Centers despite Rural and Really Rural

Nationally, Montana is ranked fourth in land area, but 48th in population density with one million residents. Twenty of the BTOP libraries have a service population of less than 5,000 people. Thirteen of the libraries serve populations ranging from 5,000 to 16,000. The remaining nine libraries serve populations of 34,200 to 141,254 people. Despite the small service populations, our library public computer centers are busy places. To keep up with the demand and to minimize wait times, some BTOP funding was used to increase the number of workstations available in our libraries. We purchased 478 computers for library public computing centers. Some of these machines replaced old units while some expanded the number of computers available for patron use. Reported wait times dropped from an average of 20 minutes to less than one minute.



Digital Literacy

Technology related training has been a major focus of the grant project. Six libraries opted to hire an additional person in their library to present trainings. BTOP helped fund these positions with the understanding that every effort would be made to keep the technology trainer on staff beyond the grant. Four of the six libraries have found the funding to do so.

The Montana State Library also hired a technology trainer. The trainer offered numerous webinar and in person trainings throughout the grant period. Most of these were offered to library staff in hope that they would use the information to train patrons on the same topics. In addition, BTOP funded a WebJunction partnership and the trainer developed the Montana page.

During the grant period, libraries reported that 51,280 hours of training reached 130,354 patrons and 2,373 staff members.

"Twenty of the 42 BTOP libraries have a service population of less than 5,000 people."

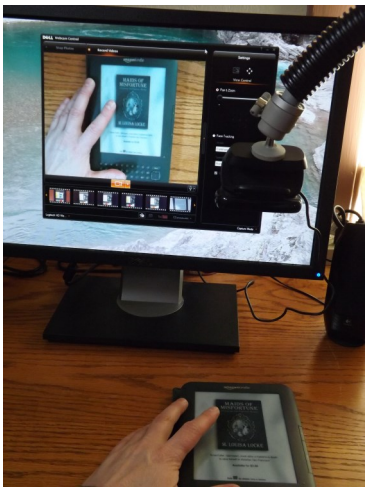
Reaching ADA compliance

Montana BTOP aimed to improve the accessibility of public library computer centers to all patrons. We partnered with many state agencies to learn more and to find the best solutions for hardware and software updates.

BTOP funding purchased 25 adjustable-height ADA compliant desks.

All BTOP libraries acquired low vision keyboards with large letters and yellow keys, low-dexterity trackball mice, and ZoomText 10 Magnifier/Reader Software with a ZoomText camera and stand. Many libraries chose to add a Bierley magnification mouse.

In addition to these updates, Glasgow Public Library and Ronan City Library were able to install handicap accessible doors with BTOP funding and Eureka Branch of Lincoln County Library renovated their bathroom facility to be wheelchair accessible.



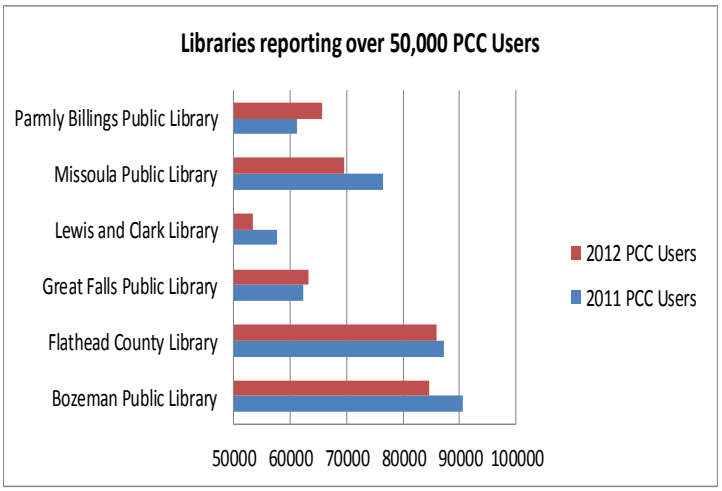
Public Computer Center Usage vs. Wireless Users

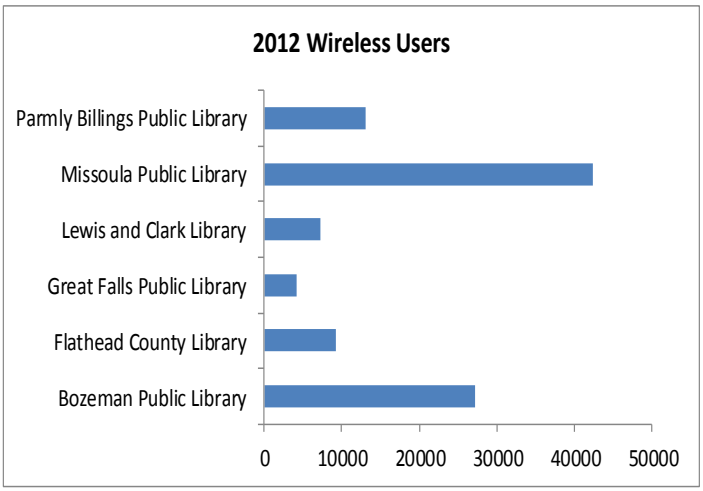
Statistics have been recorded officially since January of 2011 with regards to the number patrons using library public computer centers (PCC). These numbers have been very interesting to watch.

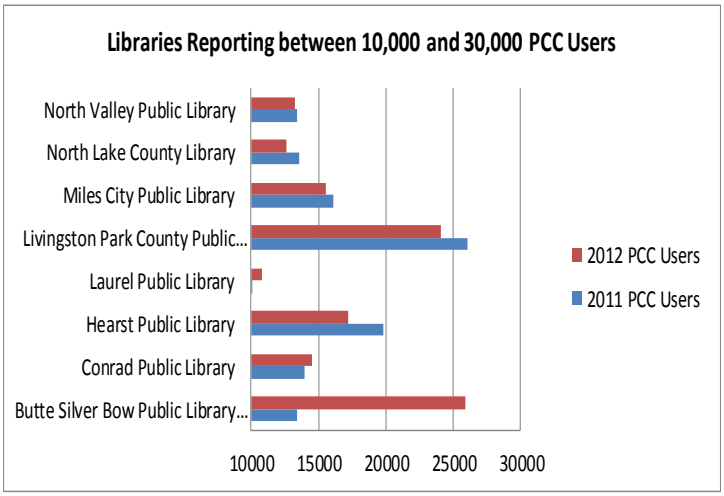
Some libraries saw growth in usage from 2011 to 2012; however many saw decreases. At first this was puzzling. Libraries were offering more technology training and it was well attended. They were reporting being busy in general, but their PCC users were dropping.

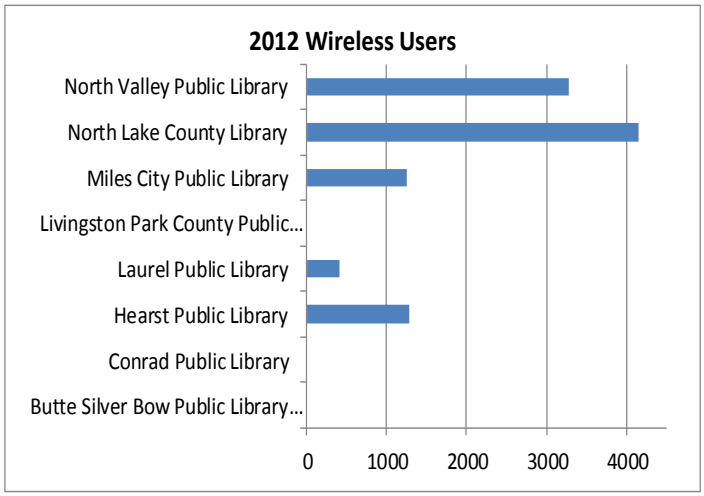
Many libraries began reporting their wireless users about the 3rd quarter of 2011. Not all libraries have the capability to count their wireless users, but the trend is obvious with those who are able to report. Most libraries were reporting huge increases in the numbers of wireless users. More people are using mobile devices with Internet capability than ever before.

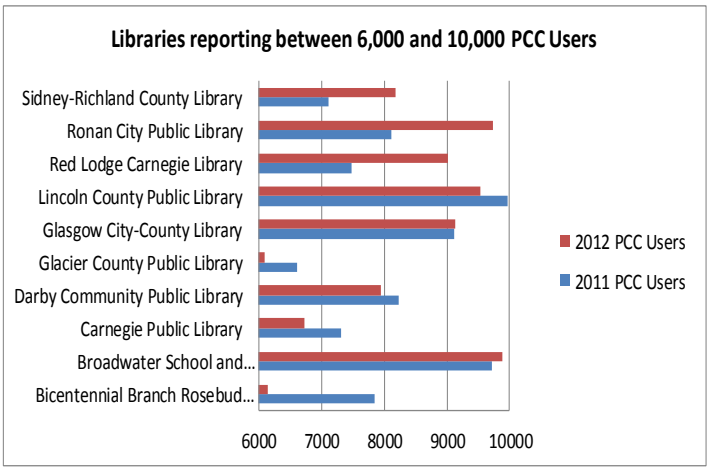
It stands to reason that patrons are using the library hot spot with their personal devices, instead of using the public computers in the library.

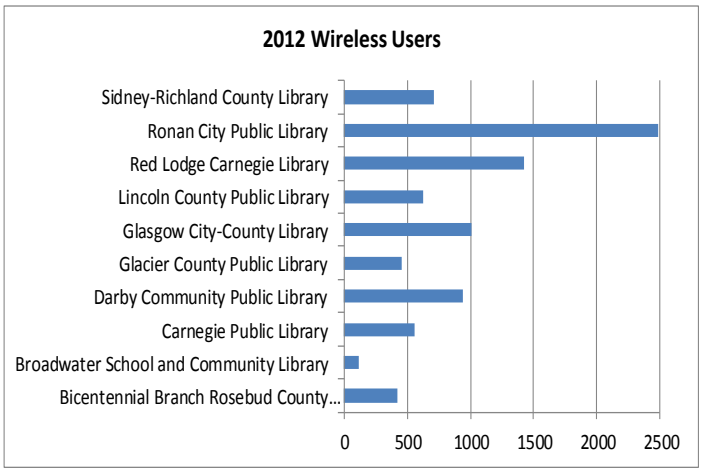


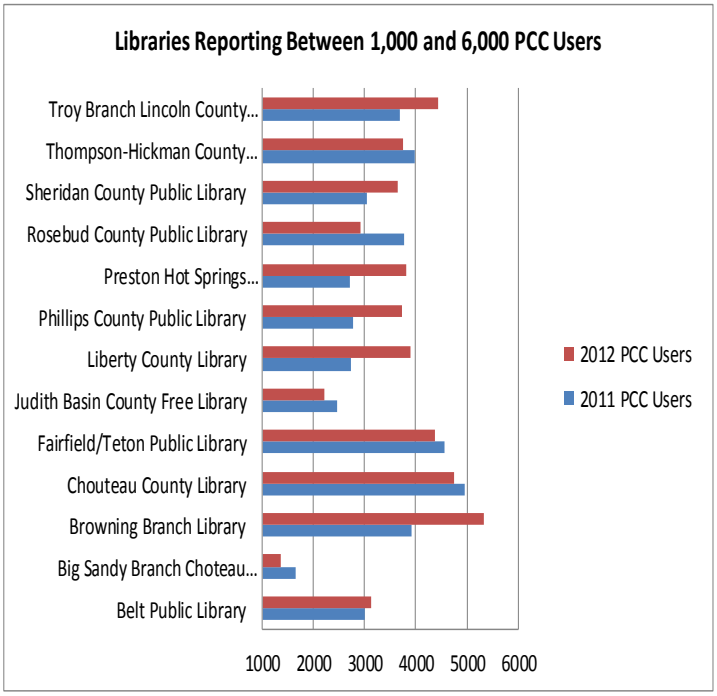


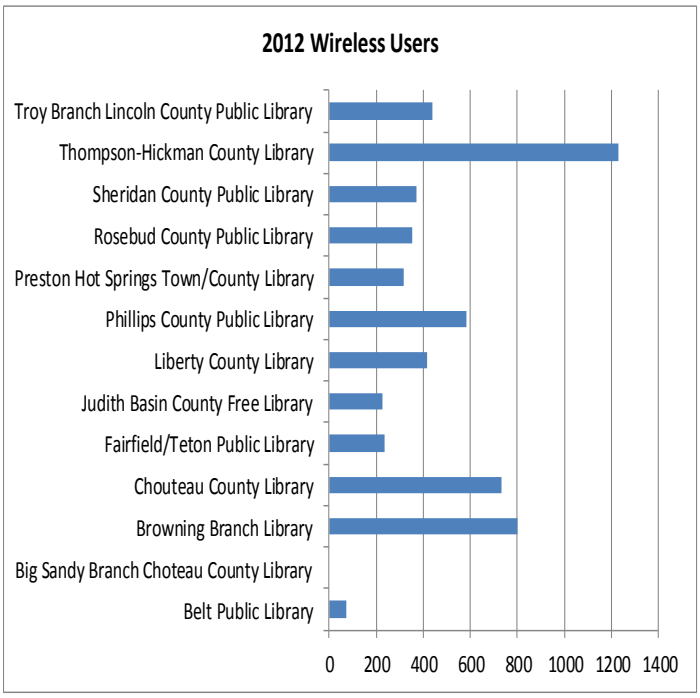


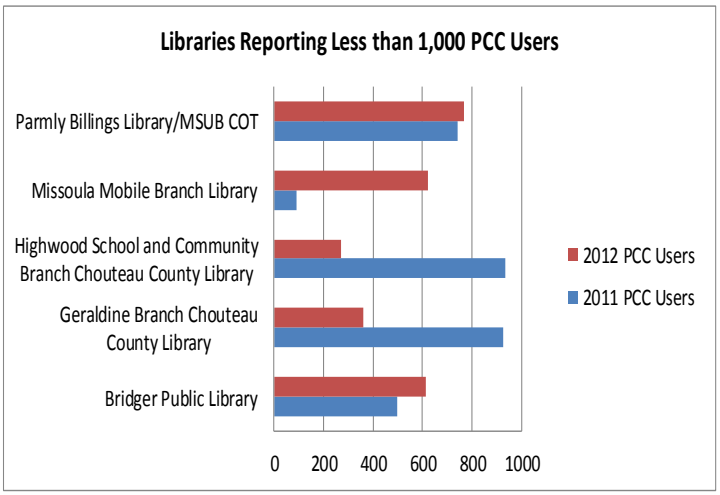












No Significant Wireless Data Reported

Web on Wheels

The Missoula Public Library wanted to offer a modern version of the bookmobile. One of the largest funding projects supported by BTOP was the new Web on Wheels or W.O.W. bus in Missoula County. Instead of delivering books, the bus delivers high quality computers with internet capabilities to communities that do not have public computer centers.

The W.O.W. bus was completely and beautifully retrofitted to support eight laptop computers with an additional eight training screens. The bus is handicap accessible and fully wired to make a comfortable public computing center and training space.

The bus staff can present training sessions to patrons right on the bus. Patrons can see what the trainer is doing on his/her own training monitor and emulate the steps on the laptop.

The bus travels the area making stops in rural communities, retirements centers, community centers, rural schools, local missions, and underserved communities throughout the county.

Two staff members travel with the bus offering reference services, technology training and one-on-one support. When classes are not in session patrons can use the laptops for document creation or web services. Patrons love the convenience

Reaching Out

In order to help libraries spread the word in their communities about the many resources available at the local library, the BTOP team developed an outreach campaign. The campaign had the following objectives:

- To increase awareness of computer and Internet resources available at local libraries as well as positioning library Internet access as vital to residents and communities.
- To re-establish the important role libraries play within a community.

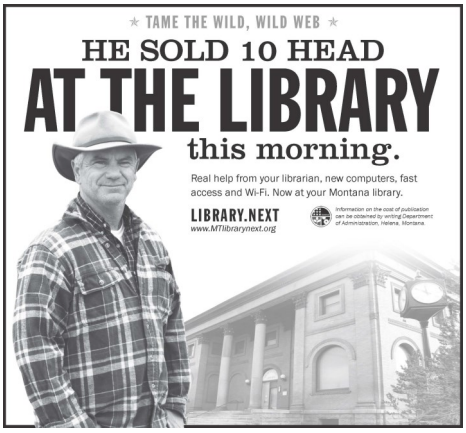
The target audience was Montana residents of all ages, incomes, races, geographic location and levels of education.

A Marketing firm out of Missoula, Partners Creative, was hired to create the materials. The firm used the theme Montana Library.Next. Traditional print materials were created including bookmarks, palm cards, table toppers, posters, and banners. Thumb drives were preloaded with library specific materials and branded with the campaign name for distribution as well.

Two 30 second TV Public Service Announcements (PSAs) were also filmed and distributed to all Montana TV stations. In addition, one 30 second radio PSA was produced and distributed to Montana stations. These PSAs were broadcast for eighteen months.

Media kits were created and sent to the libraries to help launch the campaign. A webinar was presented explaining how to use the materials as well as to encourage libraries to host open houses and events.

Finally, a website (www.MTlibrarynext.org) was created to help with the campaign launch. It featured a map showing all of the libraries in the state. Each dot on the map next to the city name is a clickable link to a



page with contact information for the library and specifics about what the public computing center offers. YouTube versions of the PSAs can be viewed from the site and there is a link to a Montana broadband speed test.

Community Partners

BTOP staff worked hard to develop partnerships with many state agencies and organizations. We wanted to make library staff aware of the many resources that are available online so they could in turn share the resources with their patrons.

We know that patrons are using library computer centers for checking email and social networking, but they are also performing online banking tasks, applying for jobs, and seeking out additional online applications and resources.

We formally partnered with many government agencies to help provide information to library staff about the types of services offered on line and how to best support patrons using those services. Formal partners included:

- Montana Department of Public Health and Human Services
- Montana Department of Labor and Industry, Workforce Services Division
- The Supreme Court of Montana Self-Help Law Program
- Montana Legal Services Association
- State Law Library of Montana
- Census and Economic Information Center of the Montana Department of Commerce

We also developed formal relationships with AARP to offer support to seniors and with the Montana Digital Academy to support students who are obtaining high school academic credits online.

We worked with these various groups to offer webinars demonstrating how to navigate their websites and to make library staff aware of the many resources available on the Internet. The webinars also demonstrated how to access and fill out online forms.

As the grant progressed, we worked with more groups and developed informal relationships particularly with groups that support the Americans with Disabilities Act. The following groups made suggestions of technologies that libraries may want to offer to patrons to improve accessibility.

- Montana Talking Book Library
- Montana Telecommunications Access Program
- Blind and Low Vision Services
- University o f Montana Rural Institute—MonTECH

The Montana State Library hopes to continue cultivating all of these partnerships and to offer additional trainings relating to the service they offer. Libraries have also been encouraged to develop relationships with local agencies and organizations.

E-Rate

As part of the Telecommunications Act of 1996, E-rate was enacted to help provide discounts on telecommunications, Internet access and internal networking to schools and libraries.

One of the goals of BTOP was to help libraries participate in the E-rate program if they chose to do so. We realized E-rate funding could help libraries sustain their improved levels of broadband service following the grant.

The filing process to participate is lengthy and requires some planning. This was a barrier, particularly for libraries with limited staff members.

Consulting services were contracted from E-rate Elite to conduct research on compliance of MSL to supplement local library broadband costs; identification of compliance issues and recommendation of corrective actions; and, guidance on local library concerns, best practices and emerging issues relating to E-rate.

E-rate Elite completed an analysis of each BTOP library to determine opportunities for the getting the most out of E-rate funding and published white papers with their findings.

MSL contracted with E-rate Elite for web-based E-rate training. Webinars were offered sharing pertinent documents needed to file and demonstrating how to fill out the necessary forms at each filing window.

From 2011 to 2012 twelve additional Montana libraries applied for and received E-rate funding. Nine of those libraries were BTOP libraries.

For libraries needing a greater level of assistance, MSL executed a second contract with E-Rate Central to assist local public libraries with their E-rate applications and related activities such as procurement. This service continued to the close of the grant. Twenty-one of 27 BTOP libraries who applied for E-rate took advantage of these services.

Statewide Consultant, Suzanne Reymer, was involved in these trainings and has assisted libraries for many years with their E-rate questions. She will continue to offer this support to all Montana public libraries.

Technology Petting Zoos

With the increased use of the library as a mobile hotspot, our libraries also reported they were continually being asked for device help.

Most library staff did not have access to the specific devices and therefore did not have a way to learn how to use the device well enough to train others. For liability reasons, many libraries did not want their staff members touching patron devices.

To mitigate these issues, we purchased a *Technology Petting Zoo* kit for each BTOP library. The kit consisted of an iPad, Kindle Keyboard, Kindle Fire, and a Nook Tablet. These items were intended for staff use for learning and training, not for circulation.

The technology trainer created support documents on how to use the devices and on how to use the Montana Library 2 Go check-out system with each device. The documents were posted online. In addition, the state technology trainer traveled the state offering regional trainings in ten libraries. These trainings covered the full use of each device.

Not everyone who wanted to attend a live training could make it. So the technology trainer added short tutorial videos to WebJunction that demonstrated the use of the devices.

Based on recommendations from library staff, a Samsung Galaxy II tablet and a Google Nexus were added to the kits before the end of the grant.

Feasibility Study

The Montana State Library, with support from BTOP, contracted with Montana State University Professors, Dr. Anton Bekkerman and Dr. Gregory Gilpin, to conduct a study to help us *Understand Cost-Effective Strategies for Increasing Technology & Internet Access in Montana Public Libraries*.

The study resulted in a 184 page document outlining the professors' research and the support behind their findings. These findings were published on the BTOP webpage.

In short, the findings revealed four ideas for the Montana State Library to take into consideration.

1. Creating centralized information and service resources.
2. Creating a consortia E-rate structure.
3. Developing and implementing a regional IT Service Structure.
4. Developing a fully centralized network for Internet access and support.

The results were presented by the researchers to the State Library Commission, the Network Advisory Council, and to library directors in live sessions and a webinar.

The study is one of many resources the State Library will use in future dialogues with library directors, local governments, and state leadership to determine how we may better meet our communities' information technology needs with limited financial resources.

Network Health Check-ups

One of the insights from the MSU Internet feasibility study was that it would be easier to mitigate network problems if library networks across the state were of similar design.

Because libraries are under the direction of their city or county offices in most cases, they do not always have control of their network setup. Therefore this suggestion was not one that could be immediately addressed. However, it did instigate the idea to pursue a Network Health check-up to be performed by a qualified third party.

Morrison and Maierle, an IT consulting firm, was hired to conduct the check-ups. Thirty-four of the 42 BTOP libraries opted to participate in the check-up. The goal was to monitor each network for efficiency, gather data, and mitigate any major problems.

Mitigation commonly included: installing firewalls, updating wiring, downloading lock-down software, virtually or physically creating sub-networks to separate public from administrative, and running updates to minimize security threats.

Maps of the Network and a report of any remediation performed were created for each participating library. A webinar was conducted with small groups of directors to go over their individual reports and to respond to any questions.

Making a Difference— Impact videos

In May of 2012, the Bill and Melinda Gates Foundation published videos that poignantly tell the stories of how libraries impact people's lives. Inspired by these videos the Montana BTOP team set out to create our own videos that demonstrate the impact libraries have with support from the Bill and Melinda Gates Foundation

Partners Creative worked with us on the project and helped produce three videos at three very different library systems across our state, including Sidney, Missoula, and Polson. Each of the videos highlighted unique ways that libraries assist their communities.

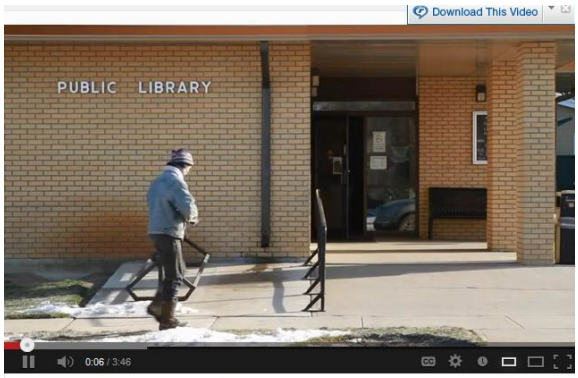
1. Bringing Technology to Montanans: http://www.youtube.com/watch?v=mS-l4p7-_iU
2. Providing a Foundation for Businesses and Families: http://www.youtube.com/watch?v=oCngmQtgCR0
3. Supporting our Communities through Change and Challenge: http://www.youtube.com/watch?v=eCtM6z6Gtno

The videos were formally launched during the Library Legislative Night during the 2013 legislative session. The videos played on a continuous feed during the event for people to view and discuss. They were well received.

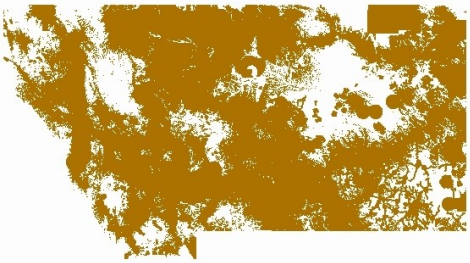
To support the videos, a toolkit was released at the same time as the videos. The toolkit was designed to help libraries share the videos with community stakeholders and to emphasize the importance of libraries in our state. The toolkit explained the creation process, possible audiences with whom to share the videos, and important talking points for presentations.

We asked libraries to help us get the word out about the videos through social media and explained how to do so in the toolkit.

Finally, we encouraged libraries to consider sharing their own library's impact stories. The toolkit included suggestions for getting started including grant opportunities, video making recommendations, and ways to create videos on a shoestring budget.



Bringing Technology to Montanans



Life after BTOP

Mission

The Montana BTOP Project will improve Internet access for Montana communities by expanding technology related capabilities at public libraries across the state, so that Montanans will be able to recognize and use opportunities and resources available to them on the Internet. As resources to public libraries in Montana, Montana BTOP staff aims to provide accurate, timely guidance and direction on implementation and compliance to assist libraries in achieving the goals of the project without undue burden to library staff.

Vision

By 2013, communities across the State of Montana will have improved Internet access at public libraries and the knowledge to use Internet-based resources more efficiently and effectively. A more diverse population and greater number of Montanans will be able to surf the web at higher speeds to access employment opportunities, education, public assistance, social networking, and many other applications of this technology free of charge. Libraries will have the tools to sustain their patrons' free access to the Internet through expanded partnerships, E-rate assistance, and communication resources that build recognition and understanding of the value of these services.

Sustainability

Montana State Library does not want to lose momentum with the end of the BTOP grant. Great strides were made in improving 42 ublic computing centers (PCCs). We have taken steps to ensure that these libraries will continue to keep their PCCs running at an optimum level. In addition we have taken steps to help those libraries who did not participate in BTOP.

Donci Bardash, the project director, created videos on how to take advantage of the State purchasing contracts. These videos were published on the Montana State Library's Vimeo channel. The videos include screen casts of various vendor websites and the process to place orders for premium savings packages. This will enable libraries to purchase high-quality, robust computers and accessories for pre-negotiated prices. These products also typically have extended warranties and on-site support.

Morrison and Maierle was hired to conduct Network health checkups in those BTOP libraries who opted to participate. These checkups were followed up with training for four Montana State Library staff members on how to conduct basic network assessments. Morrison and Maierle demonstrated how to evaluate a library network. MSL staff members were able to go on-site at two libraries for these demonstrations, participate in the evaluations, and ask questions. These staff members will be able to make suggestions to improve public computing centers.

The outgoing project director created a draft of a document outlining best practices for Public Computing Centers using the Edge Benchmarks as a guiding tool. This document presents a list of PCC standards for libraries to achieve. It was completed and revised by MSL staff and will be introduced with supporting training to help all Montana libraries maintain the best PCCs possible.

To support BTOP libraries, a fact sheet was created for each participating library outlining their specific major accomplishments during the grant period. These were designed to be shared with major stakeholders in the community.

Following the grant, the Montana State Library will maintain a webpage with all the pertinent grant information. Vendor contact information, warranty information, and contract expiration dates will be readily accessible. The individual library fact sheets and an overall review of the grant will also be available.

The Montana State Library will continue to offer quality technology training through their existing staff members. This training will be made available online and in person whenever possible. MSL will also continue to offer support to those libraries seeking E-rate assistance.