



Starting a Mobile Hotspot Lending Program

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Why Hotspots?

Implementing a Mobile Hotspot Lending Program at your library offers up a world of possibilities for your patrons. Enabling patrons to take the Internet home offers a number of unique benefits such as:

- Bridging the Digital Divide
- Lessening the homework gap for children
- Providing internet options to rural areas with poor or no coverage
- Offering connectivity to financially disadvantaged patrons
- Helping individuals with employment opportunities

- Accessing health information, especially for seniors
- Offering connectivity at community wide events
- Allowing individuals living with disabilities the option to access the Internet from the comfort of home¹

By loaning out the Internet, just like a book, your Library can provide its patrons with 24/7 access to Internet. In an increasingly interconnected world, the Internet is vital in day to day life. Offering mobile hotspot devices to your patrons will help meet their information needs in new and exciting ways.

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What is a Hotspot?

A hotspot is an area where a user can access the Internet via Wi-Fi. A mobile hotspot device enables users to connect to the Internet using a small box with a cell phone data plan that they can bring with them wherever they go. Similar to a data plan for a cell phone as long as the device can connect to the cell tower, users can access the Internet.

The device itself emits a Wi-Fi signal that users can connect their personal devices to, like a laptop, tablet, or smart phone, in order to use the Internet.

Examples of Mobile Hotspot Devices



Questions to Consider:

This section hopes to raise some of the issues you may want to tackle before beginning your own mobile hotspot lending program. Being creative with how potential answers might best fit your library can result in a very successful program. The remainder of this guide does not necessarily answer these questions but hopefully raises points that will assist in implementing the program at your library.

- How many devices will meet the needs of my patrons?
- How will my library fund this program? Internal budget? Grants?
- How long should the lending period for the devices last? (i.e. 3 days? 1 week? 1 month? 1 year? Multiple options?)
- How can I best keep track of the devices? How can they be effectively integrated as inventory in my circulation system?
- Will patrons need to sign a user agreement? An internet use agreement?
- How can success be defined for my program? What to do if the program does not seem particularly successful?
- Is there a need for dedicated staff to handle the devices?
- Does my service provider offer adequate cell service? Are there issues with cellular service coverage in my community?

Your Monthly Bill

Like a cell phone data plan, there are limits to the data of a mobile hotspot device based on monthly service plans. These plans vary based on the service provider and the available technologies in your service area. A company like Sprint, T-Mobile, or any wireless cell phone service provider, may offer different monthly rates for different amounts of data. See the chart below for example pricing plans from libraries that have already adopted hotspot programs.

Provider	Library Location	Number of Devices	Data Cap (per month per device)	Baseline Price (per month per device)
Sprint	New York City	10,000	Unlimited (throttled at 6 GB)	N/A
US Cellular	Washington County, Maine	80	2 GB (Service stopped at 2 GB)	\$40
Verizon	Kansas	95	5 GB / Unlimited (as of 2017)	\$40
Mobile Beacon	Texas	11	Unlimited	\$10

The key to planning a budget for your hotspot program is to ask your provider how they deal with different costs, especially in terms of data usage, throttling, and any miscellaneous charges, in order to best calculate your monthly bill.

Data Usage

In general, the more data, the more expensive the plan will be. Some service providers offer unlimited data plans (usually the most expensive option), or as much as 12GB to as low as 300MB (megabytes, or 0.3GB). A recent Ericsson Mobility Report found that in 2015 the average monthly data used per smartphone was 1.4GB, for a laptop it was 5.8GB, and for a tablet it was 2.6GB.² The needs of your library patrons will vary, but balancing costs against data can contribute to the success of your program.

Throttling

If a device reaches, or exceeds, its monthly data cap your provider may throttle speeds. For example, if a device has used all of its available data for that month but the billing cycle has not yet restarted, your wireless provider can take one of two approaches.

1. Slow the data speed (e.g. from 4G to 2G speeds, or to inoperable speeds) for the remainder of the month
2. Allow the device to access the network but charge for data overages (which can be costly).

Miscellaneous

Roaming: this refers to leaving your service provider's network and using a different provider to maintain access, which can be costly. Since the devices are mobile, users can bring them wherever they go: traveling to and from work— or take it on a cross-country road trip, which may result in the device accessing other networks

The cost of the device: depends on your service provider. The cost of the device might be a nominal one-time payment, but can vary by provider. Some providers may waive the price of the device up to a certain number of devices.

EXAMPLES OF PROMOTIONAL MATERIALS

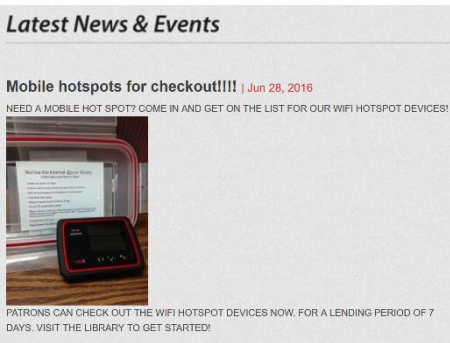


Washington County Library Initiative Allows Students to Bring Home Portable Wi-Fi!

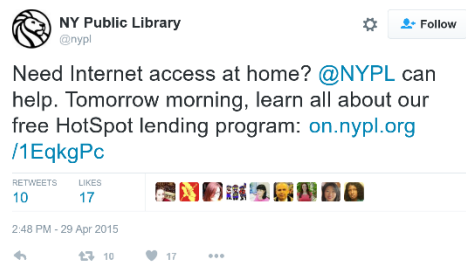
High speed wireless internet just became a lot more accessible to students in parts of rural Washington County thanks to the launch of the "Check-out the Internet" project at Peabody Memorial Library in Jonesport.

The program allows eligible students to borrow a portable Wi-Fi device providing high-speed internet ... [See More](#)

Facebook post from the Peabody Memorial Library in Jonesport, ME



Website announcement from the Goodland Public Library in Goodland, KS



Tweet from the New York Public Library's Twitter account

Implementation Strategies

A number of resources and strategies can help you successfully implement a mobile hotspot lending program. The following pages deal more in-depth with issues of peripheral costs, challenges, and community outreach, but these bullets highlight a few important considerations:

- If connectivity and coverage issues plague cell phone service in your community, then a mobile hotspot lending program might not be successful until cellular service infrastructure and towers are improved. Actively work with your community to figure out the best solution available
- Working with your state library or regional consortia can offer opportunities of scale and community that can lead to successful implementation. Or, networking with other libraries can be a wonderful resource to share challenges and solutions that your particular community encounters
- Partnering with non-profits, schools, local government, local businesses, and community organizations can increase the popularity and success of your program as well as help target patrons who might benefit the most from your mobile hotspot program
- Awareness of competitive pricing options can have cost saving potential. One successful library was approached by a competing service provider with cheaper rates for comparable service, so keeping your options open can lead to the best service available to your patrons. However, being cautious of changes to service area coverage, data limits, and incidental costs is vital when considering switching providers
- Understand the effect of different content on data caps. Emailing for example takes up very little data. Yet, streaming video online can use all of the month's data allotment in a very short amount of time. It may be helpful to caution patrons against streaming especially if your devices have a low data cap so that all patrons who check out the device that month still have data to use

Peripheral Costs

Besides the monthly bill for the device there are tangential costs, particularly of staff time, and training that could potentially affect the success of your mobile hotspot program. In particular, implementing the program can take up considerable staff time as well as crafting the specific policies of your program.

- **Staff Training:** The training is generally not onerous as the devices themselves tend to be very user friendly. However, training staff in the use of the devices tends to aid in a speedier checkout process for your patrons who may also need training.
- **Patron Training:** Checking out the devices, at least to first time users, may take up more staff time than lending out a book; however, walking patrons through how to turn the device on, recharging the battery, gaining access to the device's password, and the role of data usage limits for the device, are just some of the important aspects of use that librarians should share with first time patrons. It may be helpful to have a handout with this type of information available to patrons.



- **Additional Staff Time:** Staff may have to troubleshoot devices. This may require contacting the provider and sending the device to be fixed. Promoting the program, outlined in Community Outreach, will take staff time. Any time spent by staff in implementing or running the program should be considered early on.
- Another cost you may incur is investing in a case for the devices. Many libraries relied on pencil cases or plastic storage containers.

Challenges

Waiting Lists

Some libraries that have already implemented hotspot programs had to deal with waiting lists. One librarian said that she had not seen waiting lists like this since Harry Potter! If adding more devices is not possible for your budget some solutions to manage lists include:

- Adapting the process for book waiting lists
- Preventing renewals, once returned patrons can be added to list
- Using a shareable calendar to keep track or to allow specific check out dates
- Varying checkout lengths of some devices

Damage, Loss and Theft

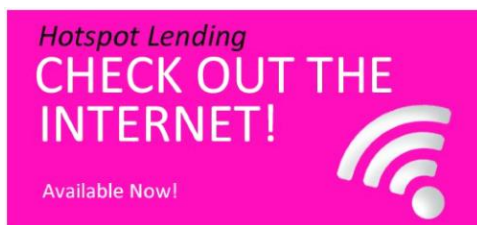
Damage to, or loss/theft of, the device can be a burden to the program. Besides figuring out a plan with your provider in the event of damage, loss, or theft, some libraries adopted the following policies:

- Requiring patrons to fill out a user agreement before checking out that outlines library policies
- Charging a replacement fee (some asked for the cost of the device or up to \$100)
- Figuring out if staff can fix devices or need to send out to be fixed
- Determining if/when it is appropriate to contact police

Defective Devices

Defective devices can be frustrating for both librarians and patrons. Troubleshooting can be a burden on staff time. One challenge can be that your patrons may live outside of your service provider's coverage – and the device will not work. Or, one patron may have used all of the data for that month and when a second patron checks out the device it cannot connect until the billing cycle resets. Determining if the device is actually defective or just out of data can be difficult. Having a contingency or back up plan to these challenges can be helpful, as well as being flexible in changing policies as needed.

EXAMPLES OF PROMOTIONAL MATERIALS



Used by the Chester County and Henrietta Hankin Branch Libraries in Pennsylvania



Used by the New York Public Library



Used by the Ferndale Area District Library in Michigan



Used by the Oak Park Public Library in Illinois

Community Outreach

Making sure your community is aware of the programs your library has to offer is an important facet of being successful. Having multiple outlets to share this new program will help ensure that your target demographic learns of the program.

That means identifying who your target demographic is. Libraries that have already implemented similar programs have taken a variety of approaches. The first is to lend the devices to any and all patrons with a library card. This requires the broadest community outreach possible – it also may have the added benefit of encouraging first time library visitors. Another approach is to target those patrons that meet certain socio-economic levels and/or do not have home-based Internet. Yet another is to target just school aged children who do not have home based Internet. Targeting this demographic usually accompanies some mission to alleviate the homework gap in your community. A ready opportunity is to connect with the local schools to help promote the program and ensure that the children who need the devices are reached.

Any of these approaches can lead to a successful program, especially when combined with effective advertising of the program. Advertising across a number of outlets can lead to the best possible community outreach. Such outlets may include:

- An announcement on the library's website
- Hosting a community wide hotspot lending event
- Circulating a flyer throughout your community
- Sharing details of the program across social media (Facebook, Twitter, etc.)
- An article in your local newspaper
- A spot on your local radio station
- Word of mouth
- Connecting with local government for circulating information

Another tactic is to combine any current popular library programs that may fit with the lending program, such as a laptop lending program, computer skills classes, or any online, digital resources that your library already offers.

Links and References

- For an online version of this document, as well as a continuously updating list of libraries participating in mobile hotspot lending programs, please visit:
<http://sites.utexas.edu/imlsedgesgrant/>
- To learn more about the non-profit Mobile Beacon and Tech Soup and how they help eligible libraries provide mobile hotspot programs to their patrons please visit:
<http://www.techsoup.org/mobile-beacon>
- The American Library Association and the Public Library Association have information about mobile hotspots available at:
<http://www.ala.org/pla/tools/circulation-technical-services/nontraditional-circulating-materials>
- The following links let you see what cellular networks are operating in your area, but be sure to check with the provider firsthand:
<https://opensignal.com/>
www.broadbandmap.gov
- More information from The Institute for Museum and Library Sciences about research and funding for this project is available at:
<https://www.imls.gov/grants/awarded/re-31-16-0014-16>
- For any follow-up questions or inquiries, please contact: richelle.crotty@utexas.edu



Examples of locations with successful mobile hotspot lending programs: The Goodland Public Library in Goodland, KS; The Peabody Memorial Library in Jonesport, ME; The Stanton County Library in Johnson City, KS

¹ MobileBeacon.org. (2016) Expand Access with Wi-Fi to Go for Libraries | Mobile Beacon. Retrieved September 07, 2016, from <http://www.mobilebeacon.org/wifi-to-go/>

² Ericsson.com. (2016) Ericsson mobility report: On the pulse of the networked society. Retrieved September 07, 2016, from <http://www.ericsson.com/res/docs/2016/ericsson-mobility-report-2016.pdf>