

Mobile Broadband Hotspots

Ottawa County Library Lending Initiative Evaluation

Introduction

Ottawa County libraries were awarded a Library of Michigan Library Services and Technology Act (LSTA) grant, which is administered at the federal level by the Institute of Museum and Library Services, to go toward providing mobile broadband hotspots for patrons to check-out. Mobile hotspots are small, portable devices that provide wireless Internet access for any device that can connect to a wireless signal, such as a laptop, smartphone, tablet, or gaming device. The grant allowed area libraries to acquire 100 T-Mobile hotspots in October 2019 to help fill the void in internet accessibility and affordability. This evaluation assesses the impact of the 2-year pilot program.



COVID-19

Like many programs, the mobile broadband hotspot lending initiative was impacted by COVID-19. There was a 3-month gap from mid-March until mid-June 2020 when the hotspot device

initiative was put on-hold. There were other instances where local libraries

were closed due to COVID-19.

At the same, the initiative was a "timely blessing" as noted by several library directors. The hotspots provided a much needed internet connection in the home that increased when school children, teachers, and many other county residents were learning, teaching, and working from home during the pandemic.

"We had teachers
who live in Robinson
Township ask if they could
continue using the hotspot
devices they needed to
effectively teach school
remotely."

Evaluation

The Ottawa County Department of Strategic Impact (DSI) collaborated with the Ottawa County libraries to design a data collection system and evaluate this initiative. Data to complete the evaluation was collected using:

1. The survey.

When a library patron checks-out a mobile hotspot device, they are asked to complete a short survey. Patrons who check-out a device multiple times only need to complete the survey once.

2. The card.

To obtain data about "trouble" high-speed broadband areas in the county and/or issues with the mobile hotspot devices, a card is included in each mobile hotspot device case.

3. Circulation statistics.

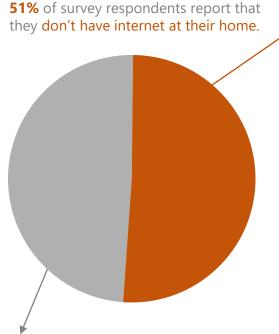
Each library reports circulation statistics for their mobile hotspot devices to show total check-outs and renewals.

4. Hotspot stories.

Personal stories about how patrons use the hotspot devices are collected as libraries are able to do so.

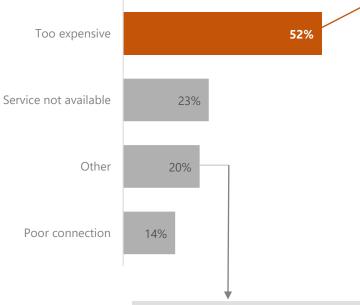
During the 2-year pilot project, 797 survey responses were collected and shared with DSI for evaluation purposes, along with several stories from library patrons who used the devices.

Results - Internet Accessibility and Affordability

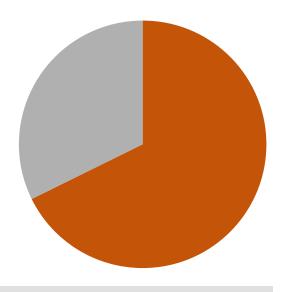


6% of survey respondents who report having internet at their home report that it is slow.

52% of survey respondents who don't have internet at their home report the reason is because it's **too** expensive.



68% of survey respondents who report not having internet at their home because it's too expensive report having an annual household income under \$50,000.



Other reasons include:

- Young kids at home, want to stay unplugged and encourage our kids to read and play outside (7 similar comments)
- Recently moved here (6 similar comments)
- Currently out (3 similar comment)
- Budgeting purposes (2 similar comments)
- Seasonal home (2 similar comments)
- Don't use enough (1 similar comment)
- Haven't decided to yet (1 similar comment)
- Not home much (1 similar comment)
- Use phone for internet (1 similar comment)
- Back pay of phone bill
- Between services
- Dissatisfied with option
- Don't wish to pay for constant service
- Got shut off

- Have a Verizon Wi-Fi hotspot but only gives very limited amount per month + is used up 1st week of each month
- Home for vacation this week
- I don't think I'd budget my time very well
- Limited service options in my area all are costly
- Looking for provider
- Need portable
- Preference at this time
- Security issue
- Waiting for line to be ran to our house so we can get internet
- We want to have internet access occasionally

Notes:

Total responses by question: 797 – internet access; 372 – reasons for not having internet access; 192 – income for those who don't have internet because it's too expensive. Respondents could provide multiple answers for why they don't have internet access.

39%

35%

32%

30%

29%

19%

17%

15%

11%

8%

Results - Use of Hotspot Devices

Library patrons report using the mobile hotspot devices for various reasons, with School work, Social media, Watching TV, Work projects, and News being in the Top 5.

School work

Social media

Work projects

Other

Gaming

Travel

Watching television

Staying current on the news

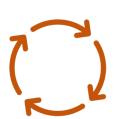
Accessing medical information

Searching for employment

Expanding educational opportunities

"A patron had internet, but her ISP was having outages in the area. Her kids needed to be able to get online and do schoolwork with their Chromebooks. Securing a hotspot let her kids get their homework done on time."

Results - Circulation of Hotspot Devices



The hotspots purchased through the initiative circulated nearly 3,000 times during fiscal year 2021.

By applying the survey data collected from patrons to the circulation data from the past year, over 1,400

circulations were to households who do not have internet because it is too expensive, not available at their homes, or they have poor internet connection.



- Email (21 similar comments)
- Streaming media (7 similar comments)
- Church (4 similar comments)
- Banking, bills (3 similar comments)
- Phone contact/updates (3 similar comments)
- Save on phone data (3 similar comments)
- Taxes (3 similar comments)
- Uploading photos/creating photo book (3 similar comments)
- Zoo (3 similar comments)
- At cottage where we don't have service (2 similar comments)
- Camping reservations (2 similar comments)
- Reading downloads (2 similar comments)
- Research (2 similar comments)
- Working from home (2 similar comments)
- Google questions (1 similar comment)
- Mobile in vehicle (1 similar comment)
- News, education (1 similar comment)
- Real estate searches (1 similar comment)
- Relatives (1 similar comment)
- Shopping (1 similar comment)
- Take burden off home internet (1 similar comment)
- Zoom meeting with friends (1 similar comment)
- AA meetings online for probation
- Basic internet access
- Business work
- Camping
- Car shop
- Christmas zoom

- Download movie to iPad
- Educational videos
- GRC
- Helps my husband have service at the hunting cabin
- Home based business
- Internet access while visiting relatives who don't have it
- Keeping up with what the library has to offer
- Live stream bowling event
- Music/lessons
- Need it for working at home while recovering from surgery
- Needed better bandwidth
- News/Navigation
- Parent-teacher conferences
- Photos
- POS system usage for our pop-up shop
- Product manual
- Sports
- Staff retreat in remote location
- Tab access in car
- Teaching virtual school
- Testin
- To allow a shut-in relative to use for a few days
- Update my GPS
- Using a road map
- Video chat with relatives
- Volunteer communication
- Wi-Fi based phone calls, get faster internet at home
- YouTube video for cutting hair

Notes:

Total responses by question: 796 – reason for using mobile hotspots. Respondents could provide multiple answers to this question.

Results - Feedback from patrons and library directors



"So nice to not sit in parking lots for kids to do homework and great to get caught up from home on email."

"A patron living in Robinson Township is unable to get internet access because the ISPs haven't really entered her area yet. The hotspot has given her access to the internet in her rural home."

"A patron was attending a court-ordered AA meeting, which required her to sign in and interact online. She had fallen on hard times, and her internet was shut off. The hotspot was able to help her continue to follow her court orders."

"One of our patrons regularly uses a mobile hotspot to allow her to work. She has limited data on her cell phone and works as a Shipt shopper. By having access to the hotspot, this patron is able to accept more jobs without worrying about running out of data on her cell phone plan. She is very grateful to be able to "borrow the internet" as she works hard to support her family."

"Families REALLY appreciated the hotspot devices while their kids were doing school virtually and we cannot keep them on the shelves...we have applied for federal funds for more because they are always gone."

"We had a patron tell us that he doesn't have any access to the internet at home and needs it for both work and leisure so he would rather pay a late fine than not have it at all."

"There was a family who was doing some digging in their back yard and did not check to see where their lines were. They hit a Charter line and lost needed internet for work and for weekend entertainment on a Saturday morning. The mom was like, "what are we going to do" and the 12-year-old daughter was like, "you can check out a hotspot from the library." So mom hesitantly came into the library and asked if we had hotspots to check out, and sure enough, we did. She was able to check one out to get them along for the few days they didn't have internet access."

Summary of Findings

The hotspots are helping to fill the void in internet accessibility and affordability throughout Ottawa County based on the data collected as part of the 2-year pilot project:



57% of survey respondents don't have internet or have slow internet at their home.



68% of survey respondents who don't have internet at their home because it's too expensive report having an annual household income under \$50,000.



Over 1,400 circulations of the hotspot devices in the past year were to households who do not have internet because it is too expensive, not available at their homes, or they have poor internet connection.

An additional unforeseen benefit of the pilot project is the timely blessing it provided to the community when students, teachers, and county residents were sent home during COVID-19 and required internet connectivity more than ever before.