

CARES PROJECT # 90

# FINAL REPORT



## Hot To Trot(spot) - Library Hotspot Lending

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## Introduction

The Utah State Library Division is pleased to provide this final report upon completion of the Hot to Trot(spot) project, generously funded by the Utah Education and Telehealth Network with appropriated CARES dollars. Participating libraries and patrons alike express gratitude for the support that made this project possible.

“I am so grateful for the opportunity to get hotspots in our community. I never realized how many people are living without the internet at home. We always had full computers at the library before the pandemic. Now I am hoping that we can provide a safe way for patrons to access from home. Thank you for this great funding opportunity.”

Over six months, 70 library locations in Utah introduced 688 hotspot devices to their communities. Libraries in every geographic region of the state participated.

“I feel this project is one of the best uses of CARES Act money that I have seen to date as far as impacting the people who truly need assistance during the pandemic.”

## Grant Activities

The Utah State Library Division was invited to assist the state's efforts to respond to COVID-19. In answer to the need for connectivity, the Hot to Trot(spot) project was designed to provide free, short-term, in-home internet access to individuals without home internet through coordination by local public libraries. This connectivity was intended to advance the state's response to COVID 19 by supporting online and blended schooling, remote work, telehealth, and virtual social participation.

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## Implementation

### Major Milestones

State Library staff announced the project and invited libraries to participate on August 18th 2020. Virtual Q&A sessions were held over the following days and 30 libraries initially applied to participate.

On **October 1st 2020**, the first participating library unveiled their new hotspot devices for circulation to the public. Another handful of libraries followed quickly after. Library systems quickest to begin circulating their new devices were those which already had policies and procedures in place for device circulation.

Two thirds of participating libraries launched their mobile hotspot circulation by the end of November 2020. This milestone was delayed from the initial expectation. All hotspot devices were deployed by January and are now in circulation at libraries across the state.

The final library reimbursement packet was submitted on January 12th 2021. This major milestone marked the end of the project.

### Early Successes

Public libraries were selected for participation based on their previously expressed interest in circulating technology and whether the library already had such a program in place. 94% of invited libraries jumped at the opportunity to add this high value program to their slate of services. This high percentage exceeded State Library expectations for participation and negated the need to solicit multiple rounds of applications.

As of January 2021, **76% of public libraries in Utah**—70 individual library locations—now circulate mobile hotspot devices. This is a major shift from 16% in 2019.

### Speed Bumps

The original project plan included an ambitious timeline with little room for delays and human error. It became clear by October 2020 that device deployment, reimbursement processing, and usage data would all be delayed.

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Additionally, vendors were experiencing high demand for devices and service during this period, especially from school districts and governments around the world looking to support remote learners. Problems with inventory and service model changes impacted libraries' ability to meet project milestones.

Delays in launching the devices encouraged libraries to advertise the new service in unique ways. Two libraries spoke of collaborations with their school districts to promote the service to students and families. Others used word of mouth:

**“All patrons that call the library inquiring about internet use for a time period greater than 30 minutes are informed of the opportunity to checkout a hotspot. This has created a lot of positive word-of-mouth promotion for the hotspots.”**

## **Partners**

The project was critically reliant on partnerships throughout the state. 27 Utah public libraries were core partners. Each library's project manager, often the library director, handled their own device purchasing and launched a unique circulation program designed to fit local needs. Between State Library staff and public library project managers, an estimated 1000 hours were spent on this project statewide. One library director and project manager shared an excellent summary of the hard work all library partners put forward:

**“[This was] the most difficult and time consuming project in my 9 months as Library Director but I am hopeful of the rewards that will come to our community as more patrons become aware of this valuable resource. This project was way out of my comfort zone and I had to really stretch beyond what I thought I could do. With devices available to the public, I am excited to see the fruits of our labor.”**

Additional partners included 8 private sector companies with mobile hotspot service or devices and an estimated 25 employees. 2 companies, Strata Networks and Cellular One, are locally owned and operated and provide service to underserved geographies. All these partners worked closely with libraries to offer consistent pricing and services, develop CIPA compliant filtering where not already available, and adjust their regular billing process to follow federal guidelines for CARES dollars.

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## Outcomes and Impact

Utah librarians recognize the critical role they play in connecting Utah's most vulnerable communities. 78% of participating libraries said their patrons would describe the library's public internet as a critical service. 69% rate their community's need for connectivity solutions as high. With this knowledge as the baseline, **72%** of project managers said the Hot to Trot(spot) project was **effective or highly effective** in meeting patron needs, and the remaining 18% reported it was moderately effective.

“We strive to serve the community in meeting their informational needs. We recognize that many people already have internet access, but there are those who do not. Whether they are lower income and cannot afford internet access, between homes, traveling, or whatever the reason, we can provide this valuable service to our patrons. It is not meant to be permanent, or even long term, but quick access to the internet that allows them to connect with the information they need. This project has helped improve our value to the community, and aid in maintaining connectivity of information while the world works through COVID restrictions and its impacts.”

Over and over again, libraries told stories of patrons sitting in their parking lots and huddled in doorways to complete job applications and catch up in school. These hotspots consistently found the patrons most in need and changed their day to day lives.

## Quantitative Results

### Circulation

Even with device deployment seriously delayed, libraries report **997 circulations** of hotspot devices by the end of the project period. 562 of those circulations are estimated to have occurred in December alone. Circulation periods varied, some as low as one week and most around two. One library reported their school district staff requested the hotspots be available for longer circulation periods for students in quarantine; the library happily accommodated the request.

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55% of libraries reported that once hotspots became available they were checked out all or most of the time. 6 libraries reported that when hotspots were returned there was already a hold for the next borrower all or most of the time. One library reported the opposite; this project doubled the number of hotspots previously available to their patrons, which reduced the hold list and enabled more patrons to use them on demand.

“The project has helped us move from 10 hotspots to 21. All of our hotspots were usually checked out before this program with a waiting list. Now it feels like we have enough to meet the demand. This service is critical, especially during Covid when our libraries have had to close. We are grateful to have this way to provide people with internet access if they can’t afford it on their own.”

In their final reports, libraries were asked to estimate hotspot circulation over the remainder of the school year based on circulation so far. An incredible **3,144 circulations** are expected, an average of 5 users per hotspot device during the semester. This number conveys the confidence libraries have that these devices will continue to find those in need.

## Data Usage

Only half of participating libraries could summarize total hotspot data used by their patrons. Those that could reported a total of **5,608 GB** in just a few months of usage.

Although these numbers are incomplete, it’s possible to estimate monthly data usage from January on will be around 6,400 GB. Cell phone carriers bill data overages at an average of \$15 for 1 GB. By those standards, the value of this service to patrons is around \$96,000 every month. That’s an estimated 400% return on investment, considering the cost of the project divided over 12 months.

Libraries are bound by core values to protect patron privacy, reports on patron activities are minimal and largely subject to self-report. However, two libraries provided categories of use by percent. Both featured **school and remote work** highest, 65% in one and 77% in the other. Anecdotal reports also overwhelmingly placed school and remote work at the top. Other categories consistently featured were entertainment and social networking.

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## Qualitative Results

### Response to Covid-19

Mobile hotspots also played a key role in helping libraries make responsible choices for public health and safety. Many of the participating libraries are not open to the public and only circulate hotspots through curbside pickup. This limited patrons' ability to use library wifi, a critical service. In many cases, hotspots became the safe alternative.

“As the library closure madness began [and] we started curbside pickup, there was a man parked in one of our ToGo stalls that was not there to pick up anything, but was trying to access our WiFi so that he could fill out a required government form. And after we did reopen, one of the first people through the door was someone who wanted access to the computers because they did not have internet. This grant opportunity...is a solution for those who can't afford the access on their own, or may be unable to use the library's computer lab. As a community partner, we can help them get access to those government forms, job postings/applications, educational information, and other access that they need to be valuable contributors within our community. Thank you for making this possible.”

Additionally, three libraries told about staff members testing positive for Covid-19 and being required to quarantine. These staff were able to check out a library hotspot and complete safe work from home to avoid economic strain. In a fourth library, the director and project manager contracted Covid-19. Without home broadband, the director checked out a hotspot and was able to keep the project on track despite illness to the benefit of the whole community.

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## Stories from Library Staff

“To date, the project has helped at least 15 families who would not have had internet access during quarantine, allowing those families to maintain educational services to their children as well as telecommuting for several of the adults.”

“Overall, I feel that this kind of technology is not only worthwhile within the library but necessary for us to remain relevant within our community. As the world becomes more dependent upon technology the library should also increase its digital offerings and remain current, if not ahead of the curve. By offering this hotspot program to our patrons we show the community we are committed to providing learning tools that meet their needs.”

“We have several families that do not have internet and in the month we have been checking out it has relieved their stress and worry over internet access. They have relied on Library hours to come in and use the computer to print and access school work. Now they can do school work at home.”

“This has allowed families to have internet at home for school and work needs. Several patrons had no internet access from home or limited data; the hotspots have given them a tool to work or school from home when necessary due to closures or public health mandates. Although we've had the hotspots circulating for barely a month, several families have been able to use them at home instead of having to park outside the library in the evening and using the free wifi access to do homework or work reports.”

## Quotes from Library Patrons

“To be able to borrow a mobile hotspot for free means opportunity, equality, and staying connected in this ever changing global world. This is an invaluable service our wonderful little library provides.”

“This would have absolutely changed my junior high [and] high school experience. The number of times teachers wouldn't believe I didn't have wifi at home is astounding. I was lucky the library was so close, but sitting outside after closing or going to Denny's with one of my parents until the middle of the night trying to do projects is awful.”

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“I’ve almost got my high school diploma finished and I couldn’t have done it without these.”

“The hotspot let me complete a couple of finals from my online college courses.”

“The hotspots have allowed me to effectively home school my child this year, they have allowed me to work from home, and to keep in touch with friends and family we have not been able to visit this year... the hotspots have allowed me to complete important online tasks such as enrolling in healthcare, job searching, and filling out paperwork for workforce services from home without having to take a small child into the library for long periods of time.”

## Challenges and Lessons Learned

### Timeline and Expectations

The following table shows the timeline in the project plan and the actual dates of completion. Overall, the original timeline proved to be unrealistic. State Library staff express appreciation to Utah Education and Telehealth Network for flexibility and understanding as the timeline continually changed to reflect library needs.

Milestone	Expected	Completed
Approve library vendor selection and device quantity	8/28/2020	9/25/2020
First hotspot lending is operational	9/7/2020	10/1/2020
75% of hotspot lending is operational	10/1/2020	11/30/2020
Any library not meeting requirements has funding reallocated to an alternate library	10/5/2020	N/A
Marketing materials are distributed to libraries	10/15/2020	1/8/2021
Library reporting and financial documentation due	10/30/2020	11/30/2020

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100% of hotspot lending is operational	11/20/2020	1/4/2021
All funds submitted to UEN for reimbursement	11/20/2020	1/12/2021

Additionally, the project would have benefited from clarified expectations at every stage of the process. With two state agencies involved, each following their own standards and procedures, the reimbursement process was a major challenge. Both agencies had to operate within their own policies, and the resulting challenges were passed directly to the library project managers who were already struggling to keep up.

“The timeline for the project felt rushed, and I was very slow in recognizing the urgency to “get the ball rolling” from day one. Details about the project, from commitments to the vendors, to purchasing requirements, seemed cleared at the beginning but changed once the project got started.”

74% of project managers said the project was harder than expected when asked about the time and effort required to complete the grant. State Library staff learned the importance of clearly articulating expectations so libraries can determine whether they have the capacity for time intensive projects such as this one.

## Vendors, Filtering, and Technology Problems

Libraries experienced a myriad of challenges navigating service providers, meeting CIPA requirements, and deploying the technology itself.

“My own IT knowledge was a hindrance but I learned quite a bit. Great growing experience for me.”

“Dealing with vendors was a nightmare. I spent a lot of time chasing my tail and being sent down the wrong path. Further, it took excruciatingly long to get the process moving and actually get the devices.”

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“The device management and reporting with vendors is definitely designed for business clients, not library/public services. It is tricky to get reports and to get vendor help (other than our main contact) who understand what we need. Generally, the folks who helped us set up our MDM seemed to be stuck on the business customer standpoint. Our questions did not make sense, so we are still working on getting helpful answers.”

“The vendor was confused regularly by the particular invoice and filter requirements of the grant. Documentation needed to be specific and multiple conversations had to occur to help them understand what was needed. Filtering is still being resolved. IT is short handed and trying to keep the county floating during COVID, and our vendor was uncertain of how to handle all the particulars, including our contact being out of the office for the hunt during some critical time frames. There have just been a lot of issues from different entities on our end that have made this project challenging.”

## **Frustrations from Partners**

The State Library deeply values its relationship with public libraries and their staff. The amount of frustration and stress project managers experienced was a source of real concern. Ultimately, most libraries were still happy to have participated and expressed the value this has in their communities. However, their frustrations were a large part of the project and should be considered as part of the whole.

“The amount of time that staff invested into the project was excessive. The number of hoops and paperwork involved made the process feel very bureaucratic.”

“The simpler the reimbursement process can be the better things will go. If a project takes too much staff time then the return on investment isn't worth it for us to go through to offer the service.”

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“I recognize that many projects supported with CARES Act funds, beyond USL and UEN, were rushed and not fully developed when they were launched. This project had good intentions, but Federal and/or State government fears of mismanagement created logistics nightmares that became overwhelmingly frustrating.”

“More time, better guidelines, more direct communication, would help in getting the information wanted by UETN/USL. I felt like I was always last minute juggling to get the information requested. I sometimes question whether or not we even should be part of this project, as we have dabbled in hotspots before, but the benefit is definitely worth the time investment.”

These comments will inform future projects and partnerships so State Library staff can better support libraries. Despite frustrations, 25 of the 28 originally participating libraries completed the project and met all reporting requirements. Two additional libraries did not complete the project but still launched hotspot lending programs. Even facing enormous difficulties, Utah’s extraordinary librarians brought 688 new mobile hotspot devices to their communities. The State Library is proud of the resilience and creativity each and every participating library showed.

## **Financial Information**

The Hot to Trot(spot) project utilized the allocated budget exclusively as described in the original project plan. Early budget estimates for this project were based on generic quotes from eight vendors. It was clear actual costs could change dramatically depending on vendor selection, which was left up to individual libraries. During the project, the budget continued to adjust as libraries changed vendors, added new devices, or found themselves paying for added filtering services. Unexpected complications continued to arise even in the final weeks of the project as libraries dealt with vendor relationships, filtering problems, and prorated service costs due to inventory delays in the first months of the program. At the close of the project, the budget followed its original allocation with a spending total of \$289,090.36. Funds totalling \$10,909.64 remain unspent.

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## Budget

Expense	Budgeted	Actual	Remaining
Ongoing charges (service)	\$218,200.00	\$236,036.08	- \$17,836.08
Ongoing charges (filtering)	\$18,000.00	\$17,865.00	\$135.00
One time costs (Devices & cases)	\$63,000.00	\$34,463.03	\$28,536.97
Marketing materials	\$800.00	\$726.25	\$73.75
<b>Total</b>	<b>\$300,000.00</b>	<b>\$289,090.36</b>	<b>\$10,909.64</b>

## Summary

Although the project did not use all available dollars, 27 unique hotspot lending programs were launched and 688 devices began circulating across the state. Libraries utilized the funds well and created new services with high impact. Great care and attention was given to proper procedure and compliance with all local, state, and federal laws. State Library staff express confidence that every dollar was spent appropriately, wisely, and with great benefit to Utahns.

## Moving Forward

Although 50% of libraries expressed a desire to circulate hotspots in a 2019 survey, recurring charges were the largest barrier. A key goal of the Hot to Trot(spot) project was to develop a sustainable model that maintained local control and reduced the burden on libraries. As a result, the State Library developed an ongoing cost sharing plan to ensure long-term viability.

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## **Sustainability**

The State Library has committed to paying 66% of libraries' service costs in the second year of the program to ensure libraries can continue to offer hotspot lending. The agency identified existing funds which will cover the committed percent of 2021-22 service. In 2022-23, the State Library will pay 33% of service costs. Libraries will be responsible for the remaining costs.

**“To offer more hotspots than our current budget allows for is very critical for equitable access to information during the pandemic and library closures.”**

Ideally, high use of these devices will help build the case locally for increasing funding over the coming years. If libraries cannot afford these charges, the State Library is considering avenues to increase support based on need. These options include innovative partnerships with nonprofits, private sector organizations, and other government agencies. Should this ongoing work result in additional funding being available, the State Library's first priority will be to fund the second year of this program at 100%, removing any financial burden from local libraries. The established cost sharing plan would then continue as planned beginning in 2022. Committing to this budget item years from now is intended as a show of support for the participating libraries and an indication of State Library Division pride in this project and the work public libraries are doing to connect Utahns.

## **Future Iterations**

Responses from libraries and problems faced during this project can direct streamlined, far-reaching future programs. While local control was a key piece of the original project plan, it was also one of the biggest sources of complications. A more effective approach would utilize state resources to purchase hotspots at an agency level, then distribute them to local libraries for circulation to patrons. The managing state agency would be responsible for following all state and federal procurement rules, especially those particular to CARES funds or other one-time funding. Most vendors offer devices at reduced rates or even for free when purchased in bulk, and some vendors offer lower recurring charges for larger contracts. This would be a massive undertaking with many players; however, state

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resources such as existing contracts, relationships with vendors, and innovative employees with strong problem solving skills would likely pay off.

Once devices are procured at a state level, allocations can be made to individual libraries based on community need and library capacity. Circulation policies and procedures can still be managed locally, and the burdensome process of managing service contracts and billing would not interfere with direct service. Instead, libraries could focus on meeting community needs.

## **Next Steps**

The sheer number of moving pieces made Hot to Trot(spot) an ambitious undertaking. Many public libraries throughout the nation circulate hotspots, and many state library agencies offer one-time or limited funding to support these programs. What made this project unique is the careful focus on sustainability. From the project design to the implementation model to the cost sharing plan, Hot to Trot(spot) made waves nationally and impacted the way other state library agencies approach these types of projects.

**“We are excited to help promote digital inclusion in our community! For our small rural library, this has been a big leap in the services we provide.”**

Librarians across the state worked hard to make this project happen, and it is critical that this momentum is not lost. State Library staff and local libraries will work together to ensure the broad commitment to equal access and digital inclusion that launched this project will endure. The long-term results of this project will continue to inform libraries' approaches to connectivity. Utah has an opportunity to lead, and with the foundation laid here, it surely will.