

## Emergency Connectivity Fund Solution: Long-Term Hotspot Lending

While many libraries are loaning hotspots for short periods of time (e.g., 1-3 weeks), this may not be long enough for all users. Libraries may want to leverage new funding available through the Emergency Connectivity Fund (ECF) program to purchase and lend hotspots for a longer period, such as three months, a semester, or even one year.

This guide is meant to help libraries design, plan, and implement a long-term hotspot lending program—although much of the information and resources also are relevant for shorter-term lending programs. The guide also includes an overview of what libraries need to consider when requesting funding through the FCC’s ECF program. More ECF-eligible programming scenarios are available at [www.ala.org/advocacy/ECF](http://www.ala.org/advocacy/ECF).

### Goals

To support the activities of community members who do not have access to affordable high-speed internet access in their home, the hotspot will:

- Increase internet access in homes for families that can’t afford the service.
- Enable students with devices to participate in distance learning from their home and complete research and homework when it is convenient for them and their household.
- Increase community members' participation in activities related to our society, democracy, and the economy.
- Provide internet access to community members when it is convenient for them.
- Build digital skills.

### Pros

- Fairly easy to set up and support the end user.
- Staff spend less time managing hotspots when they are loaned long term.
- Multiple Wi-Fi enabled devices can use the hotspot connection at the same time as long as all devices are within about 30 feet of the hotspot.
- Hotspot is mobile so the user can take it with them wherever they go.
- Because the solution is mobile, it is a good solution for individuals who are home insecure but need access to the internet regularly.

## Cons

- Hotspot can only be used in a location that is covered by the hotspot service provider. If cellular coverage is weak, this solution will not work.
- Some service providers throttle internet speeds once a certain amount of data has been used in a billing cycle. When this happens, internet speeds become slower and can take longer to complete online tasks. (Libraries are encouraged to try and find an internet provider that has no data limits.)
- Library may lose contact with the patron because they do not need to frequently renew the hotspot for long-term use.
- Because users keep the hotspot long-term, one hotspot will serve fewer people.
- Hotspots wear out with regular use, so a replacement plan is recommended to maintain service levels over time.

## Staff Skill Level Needed to Set Up and Support the Solution

Staff who select the hotspot service provider will need to be familiar with specific terminology to select the plan and service provider(s) that best meets the programmatic goals. When selecting a provider, these terms will be used in describing the terms of services of a cellular agreement: data limits, throttling, bandwidth, roaming, 5 GHz, 2.4 GHz, and LTE. The selector should also understand the basics of how cellular technology works and what physical barriers (e.g. tall buildings, thick walls, dense vegetation, rough terrain) can impact cellular signal coverage and strength.

After the contract is signed, additional terminology will be used that aids in tracking and troubleshooting hotspot issues, including: MEID (Mobile Equipment Identifier), MDN (Mobile Directory Number), and SIM (Subscriber Identity Module).

To assist end users with hotspots, staff will need to have some training and familiarity with hotspots. If possible, have at least one hotspot of each type available for staff to use when assisting the end user with hotspot problems. Some common issues include:

- Data limit is incorrectly set.
- Has the data limit been reached for the service period and therefore the data is throttled, slowing the internet speed or blocking some services (e.g., library streaming media, Zoom, etc.)?
- Incorrect hotspot settings slowing down the internet connection.
- Physical barriers and/or weak cell signals are impeding internet speeds or access.
- Software update is needed.
- Hotspot hardware is defective.

Most service providers include direct end user support via a toll-free number or web chat service, as well. (Support should be a key factor when evaluating providers.)

## Equipment Needed

- Hotspot hardware, including the charging cable.
- Mobile broadband internet access services (i.e., data plan) for the hotspot.
- User manual
- Case that holds hotspot, cable and user manual

Note: Many libraries also bundle a hotspot with mobile devices (e.g., tablet or laptop) for circulation. The ECF program may also be used to reimburse up to \$400 per mobile device. See [Laptop or Tablet Lending](#) solution for more information.

## ECF Program Requirements

The Universal Service Administrative Company (USAC) is administering the ECF program. Listed below are some of the requirements library staff should be aware of as they develop a device lending program. An [ALA summary of the FCC's ECF Order](#) also provides direct references to key provisions referenced below.

### Eligible Expenses

Applicants should review the program's [Eligible Services List](#) to ensure their request is compliant with program rules. The list below highlights eligible expenses of interest:

- Hotspot hardware (reimbursable up to \$250 per hotspot).
  - Includes any component from the manufacturer necessary for the equipment to operate, such as cords and chargers.
  - A manufacturer's multi-year warranty for a period of up to three years that is provided as an integral part of an eligible component, without a separately identifiable cost.
- Mobile broadband Internet access services (i.e., data plan) for the hotspot.

Installation, activation, and initial configuration costs, taxes, shipping charges, and other reasonable fees incurred with the purchase of the eligible equipment and services are eligible for support under the ECF Program.

## CIPA Compliance

The American Library Association created [The Emergency Connectivity Fund, E-rate, and CIPA Compliance](#) scenarios to help libraries determine if their ECF request needs to be CIPA compliant to meet the program requirements.

## Inventory Requirements

The ECF program requires recipients document eligible services and equipment. Applicants should review the program's [Device and Service Inventory Requirements](#) to ensure documentation is compliant with program rules.

Libraries must retain their records to demonstrate compliance with all the ECF rules for at least 10 years from the last date of service or delivery of equipment.

## Certification of Need

The ECF requires that the user sign an acceptable use policy (AUP), which explains that the ECF equipment or service is intended only for patrons who do not have internet access sufficient to meet their needs.

## How to Set Up the Long-Term Hotspot Lending Program

For assistance in selecting a service provider see the guide [Selecting the Right Cellular Service Provider](#).

Determine who is eligible for the program.

How many devices will the library procure for the program? If the number requested exceeds number available, how will the library determine or prioritize who will receive hotspots? The library may want to collaborate or partner with local community organizations (e.g., those working with immigrants or refugees or people formerly incarcerated) that may provide additional expertise, experience, and connections to promote the service, identify eligibility requirements, and manage the application and selection process. Potential users the library may consider targeting or prioritizing include:

- Must be a K-12 student enrolled in the local school district (Note: K12 schools also are eligible to participate in the ECF program, so these students may be served in this way.)
- Anyone enrolled in a specific library or partner program (e.g., summer learning program or literacy class).
- Unemployed job seekers.

- Students enrolled in a local community college.
- Someone who is currently unhoused.
- Individuals eligible for the Supplemental Security Income program (SSI).

## Program Terms

The library needs to determine how long users will have the hotspot. Many hotspot service contracts are one year but some go month to month. Decide which service best meets program goals.

## Hotspots Preparation

Considerations when preparing the hotspot for distribution include:

- Managing the hotspots
  - How will you track the hotspot inventory: unique telephone number assigned to the hotspot or a barcode? If purchasing a large number of hotspots, ask the service provider for a spreadsheet with pertinent data including the cell phone number, MEID and MDM number assigned to each device. This information is used to manage devices and work with the service provider to resolve issues with an individual device. Note: tracking devices is a requirement of the ECF.
  - It is recommended libraries add the cell phone number, MEID and MDM number to the physical device for tracking and troubleshooting issues with the vendor.
  - The hotspot default is to allow the user to change any setting they want, including the password. The service provider may be able to provide a solution that locks down the hotspot administrative features. This may incur an extra fee. Library staff may want to lock down settings so hotspots can be repurposed quickly. Consider this option when comparing service providers.
- Documentation
  - What information will the patron need when using the hotspot?
  - Documentation should be available in the languages used in the community.
  - Many hotspots come with a manual (usually in English and Spanish). The manual may include features are not available as part of your library program, especially if administrative functions are restricted. Consider creating a short how-to guide introducing the user to the hotspot, where to find the username and password, how to connect their device to the hotspot, and other FAQs. An example:
    - San Jose Public Library Setup Guide and videos  
[https://www.sjpl.org/sites/default/files/2020-07/hotspot\\_setup\\_guide\\_students.pdf](https://www.sjpl.org/sites/default/files/2020-07/hotspot_setup_guide_students.pdf) and

[https://www.youtube.com/playlist?list=PLK55Ijc\\_T5icoVxNNe7i5tliTMRd4wHsT](https://www.youtube.com/playlist?list=PLK55Ijc_T5icoVxNNe7i5tliTMRd4wHsT)

- Include information with the hotspot about digital skills training or coaching services offered by the library or partner organizations.
- Staff training
  - Staff who support the end user should be offered the opportunity to use the device.
  - If possible, keep one hotspot on site to assist staff in troubleshooting issues. Each hotspot model is unique, and menu and display choices will vary.

### Hotspots distribution

Questions to consider when distributing the hotspots include:

- Where will the person pick up the hotspot? Will the pickup be at a specific library branch, with the partner organization, etc?
- Can the user pick it up at any time the location is open or by appointment only?
- What information (if any) will the user need to bring when picking up the hotspot? For instance, their library card or state ID, documents related to any eligibility requirements the library or partner is using to target high-need communities?
- Will the user need to fill out a user agreement? To be ECF-compliant, the user will need to sign an agreement. Examples include:
  - Norfolk Public Library <https://www.slideshare.net/nebraskaccess/hotspot-checkout-agreement>
  - Texas State Library and Archives Commission User Agreement <https://onlinetraining.tsl.texas.gov/course/view.php?id=311&section=3>
  - Maryville City Schools [https://resources.finalsite.net/images/v1533567055/maryvilleschoolsorg/qia0sc21hes16egy3kpa/HotspotUserApplicationandAgreement\\_June2018.pdf](https://resources.finalsite.net/images/v1533567055/maryvilleschoolsorg/qia0sc21hes16egy3kpa/HotspotUserApplicationandAgreement_June2018.pdf)
- If a user brings their personal device, such as their phone, tablet or laptop, will staff assist them in connecting their device to the hotspot?
- If available, will staff highlight and encourage the user to sign up for digital skills training or coaching services available from the library and local partners?

### Lost or Broken Hotspots

Before the program begins, create the policy for lost or broken hotspots. Understand what recourse you have with the hotspot service provider.

- How much will it cost to replace a lost hotspot or charging cable?
- Who will pay for the replacement?

- Can the battery, charging cord, or other components be replaced after the warranty ends but before the service contract expires?
- Can replacement peripheral items be purchased through existing contracts?

### End User Support

End users will need to know how to resolve technical issues with their hotspot device and their personal devices. In most cases, service providers will provide some technical assistance.

- Libraries should have a plan in place to assist users if a question is not answered by the service provider.
- Provide resources and phone numbers needed to resolve technical issues to users. Provide documents in the users' preferred language. Share this information with library staff so they can assist users who come to the library.
- Will you check-in with the user periodically?
- Will you reach out to the user if several months of no data use is reported in the usage statistics?

### Returning the Hotspot

When the loan period ends, what will the library do with the hotspot? If time remains on the service contract or service can be extended, ensure the hotspot is returned, test that it still works and prepare it for the next users. Before loaning the device again, update the inventory information to reflect the hotspot was returned and document who now has the hotspot.

As the end of the loan period approaches, the library or partner should share with the user options for securing internet in the home. That can include:

- Providing them a list of service providers in their area.
- Outline programs that exist that could reduce their monthly fee, such as the [Emergency Broadband Benefit](#) program, [Lifeline](#), and low-cost programs through broadband providers, such as those shared at [EveryoneOn.org](#).
- Provide a guide or personal assistance to help users select the right plan for their needs.

### Assessment

How can you assess this service to ensure you are meeting your project goals, as well as use data to advocate and secure additional funding? When launching a new service, you should identify both quantitative and qualitative data to gather. Examples include:

- Number of users
- # of sessions

- Data usage statistics, such as overall amount of data used, max data used, average data used, number of users who have used no data.
- Program Assessment
  - Pre- and post surveys to measure if any behaviors, skills, perceptions or comfort level changed after long term access to the internet. Questions should support the goals of the project.
  - Track and analyze data usage: over time, on average # of days used per month, # of unique devices connected.

Additional evaluation resources available in the [Public Library Association Hotspot Playbook](#).

## Possible Funding Sources

In addition to the ECF program, other funding may be available to support and sustain your long-term hotspot lending program, including:

- IMLS
- State Library grants
- State or local funding provided to government entities through the American Recovery Act Plan
- Private funding sources such as grants and foundations
- Library's operational budget
- Library Friends group or Foundation

## Other Considerations

Patrons may need additional services or support when they use the hotspot. As you develop the hotspot program look for ways to promote and integrate these services:

- Homework help both in person and online
- Digital skills coaching
- Job searching
- Entrepreneurship and small business development opportunities

## Library Examples

- Broward County Library Veterans Connect Hot Spot  
<https://www.broward.org/Library/Services/Pages/GearToGo.aspx>
- Irondequoit Public Library <https://www.irondequoitlibrary.org/irondequoit-library-prepares-200-hotspots-for-student-and-resident-internet-access/#more-17054>

- San Jose Public Library: Wi-Fi Hotspots for San Jose Students  
<https://www.sjpl.org/hotspot-schools>

## Additional Resources

- Public Library Association Hotspot Playbook  
<http://www.ala.org/pla/initiatives/digitallead/hotspot-playbook>
- Mobile Beacon offers mobile hotspots to libraries. Learn more about their program.  
<http://www.techsoup.org/mobile-beacon>
- NDIA Questions Asked When Trying to Start a Hotspot Lending Program  
<https://www.digitalinclusion.org/blog/2017/06/15/questions-asked-when-trying-to-start-a-hotspot-lending-program/>
- Starting a Mobile Hotspot Lending Program (UT-Austin)  
<https://sites.utexas.edu/imlsedgesgrant/files/2018/06/How-to-Hotspot.pdf>