

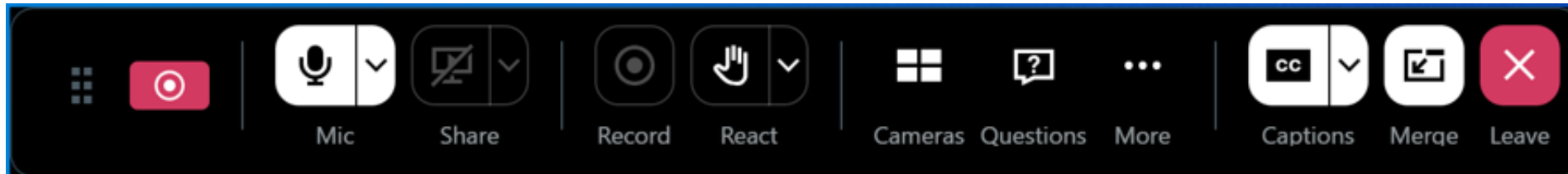
Tribal Library E-Rate Advocacy Program (T-LEAP)

Summer Kick-Off and Information Session

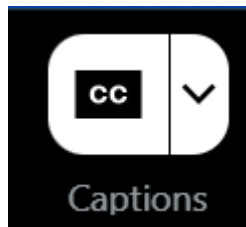
June 24, 2025

Housekeeping – Closed Captioning (CC)

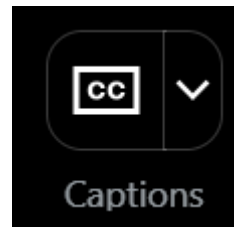
- Attendees control their own captioning.



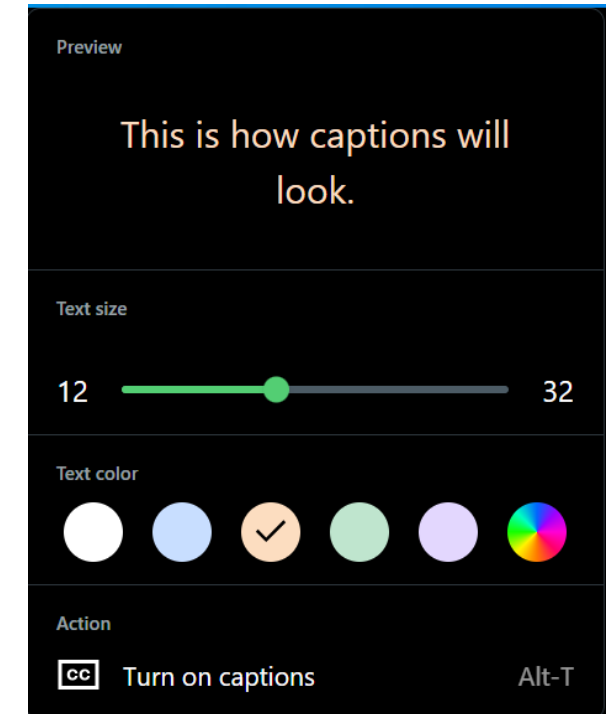
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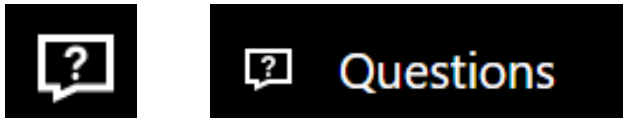


Housekeeping – Materials & Questions

- A copy of the slide deck is in the **Materials** section of the webinar panel.



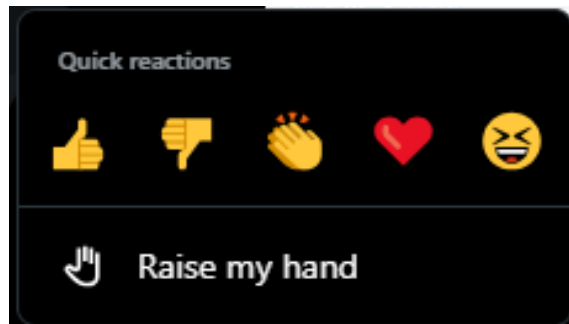
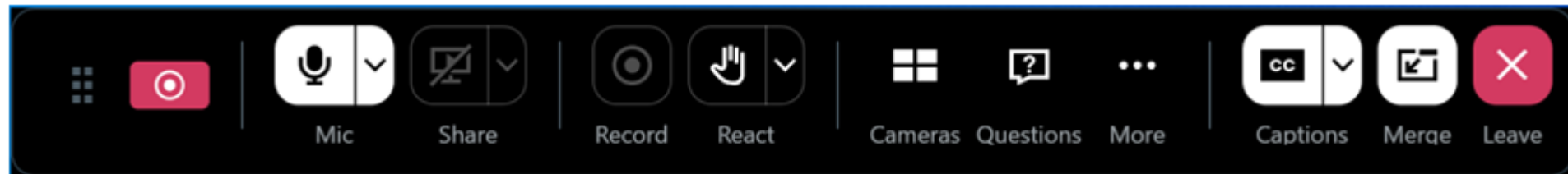
- Enter questions at any time using the **Questions** box.



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Housekeeping – Raise Your Hand

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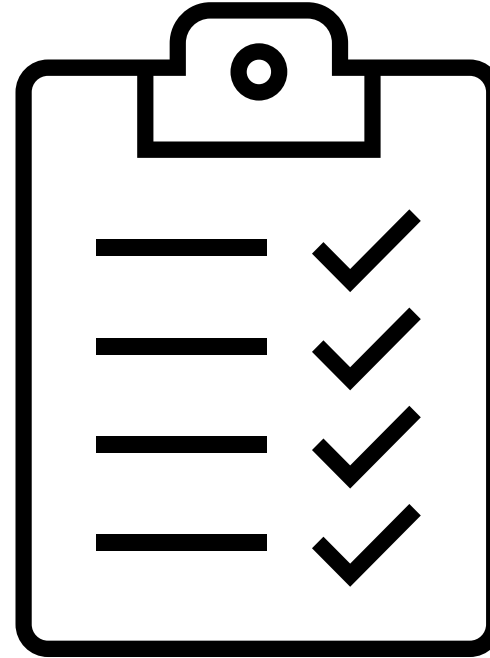
Disclaimer

To accommodate all attendees, real-time closed captions will be present during this presentation. We apologize in advance for any transcription errors or distractions and appreciate your understanding.

Please be aware that this webinar is being recorded.

Agenda

- Introductions & Welcome
- E-Rate Overview
- Tribal Library E-Rate Advocacy Program (T-LEAP)
- Identifying Your Library's IT Needs – Carson Block
- Resources



Introductions and Welcome

Meet Our Team



Cedric Watkins

Tribal Library Advocate and Analyst | E-Rate

Communicates the E-Rate program's objectives and policies with stakeholders.

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Gem Shandiin Labarta

Tribal Liaison | Shared Services

Provides clear, accurate, real-time support to Tribal stakeholders.

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Nancy Rivera

SME & Tribal Library Advocate | E-Rate

Provides guidance to Tribal library applicants throughout the E-Rate application process.

Nancy.Rivera@usac.org

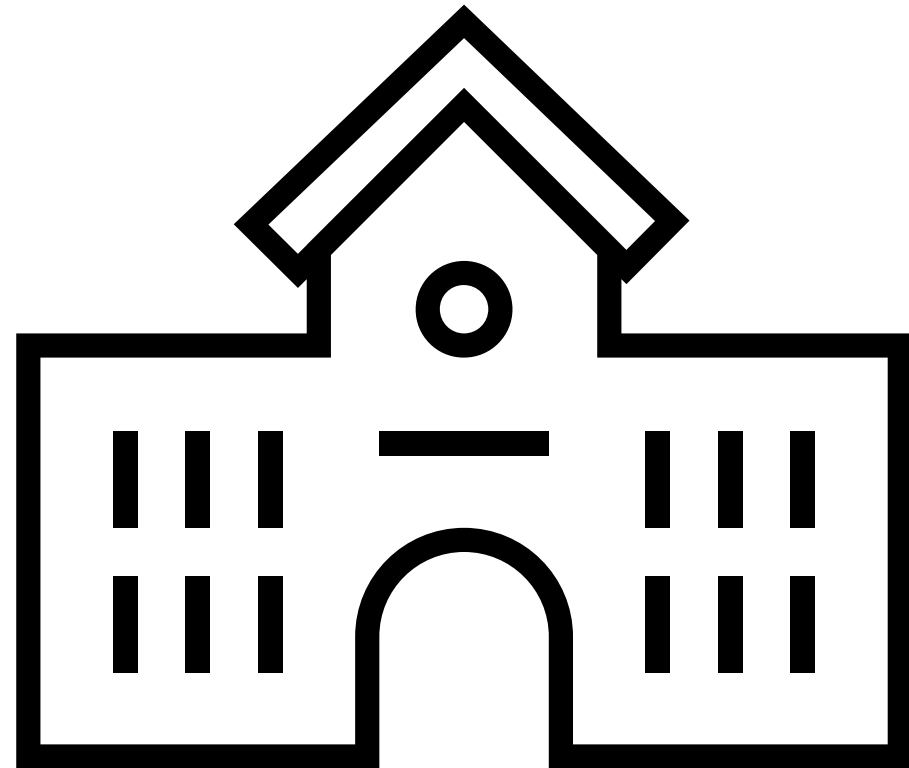
What is E-Rate?

Glossary

Acronym	Definition
FCC	Federal Communications Commission
EPC	E-Rate Productivity Center
T-LEAP	Tribal Library E-Rate Advocacy Program
TLA	Tribal Library Advocate
BEN	Billed Entity Number
C1	Category One Services
C2	Category Two Services

What is E-Rate?

- The E-Rate program provides support to schools and libraries across the nation to obtain affordable, high-speed broadband services and internal connections to connect students and library patrons with learning opportunities and services.



Why Participate in E-Rate?

- The E-Rate program provides discounts of up to **90 percent** to K-12 eligible schools, libraries, and groups of schools and libraries, including Tribal libraries and Tribal college and universities (TCU) libraries also serving as the local public library, for eligible internet access, data transmission services, and internal connections that are competitively bid and approved on the application.
- These discounts result in a reduction in the costs of the equipment and services to the schools or libraries requesting funding through the E-Rate program.

E-Rate Program Overview

- Eligible Applicants
 - Public and private K-12 schools, libraries, and groups of schools and libraries (e.g., consortia, school districts, library systems), as well as Tribal schools, **Tribal libraries, and Tribal college and university (TCU) libraries that also service as a public library.**
- Eligible Services
 - Schools and libraries are eligible for discounts between 20 and 90 percent of the costs of eligible equipment and services. The applicant pays the remaining share (e.g., a 90 percent applicant pays \$100 on a \$1,000 request).
 - Discount varies based on the school or library's level of poverty, urban/rural status, and the type of services.

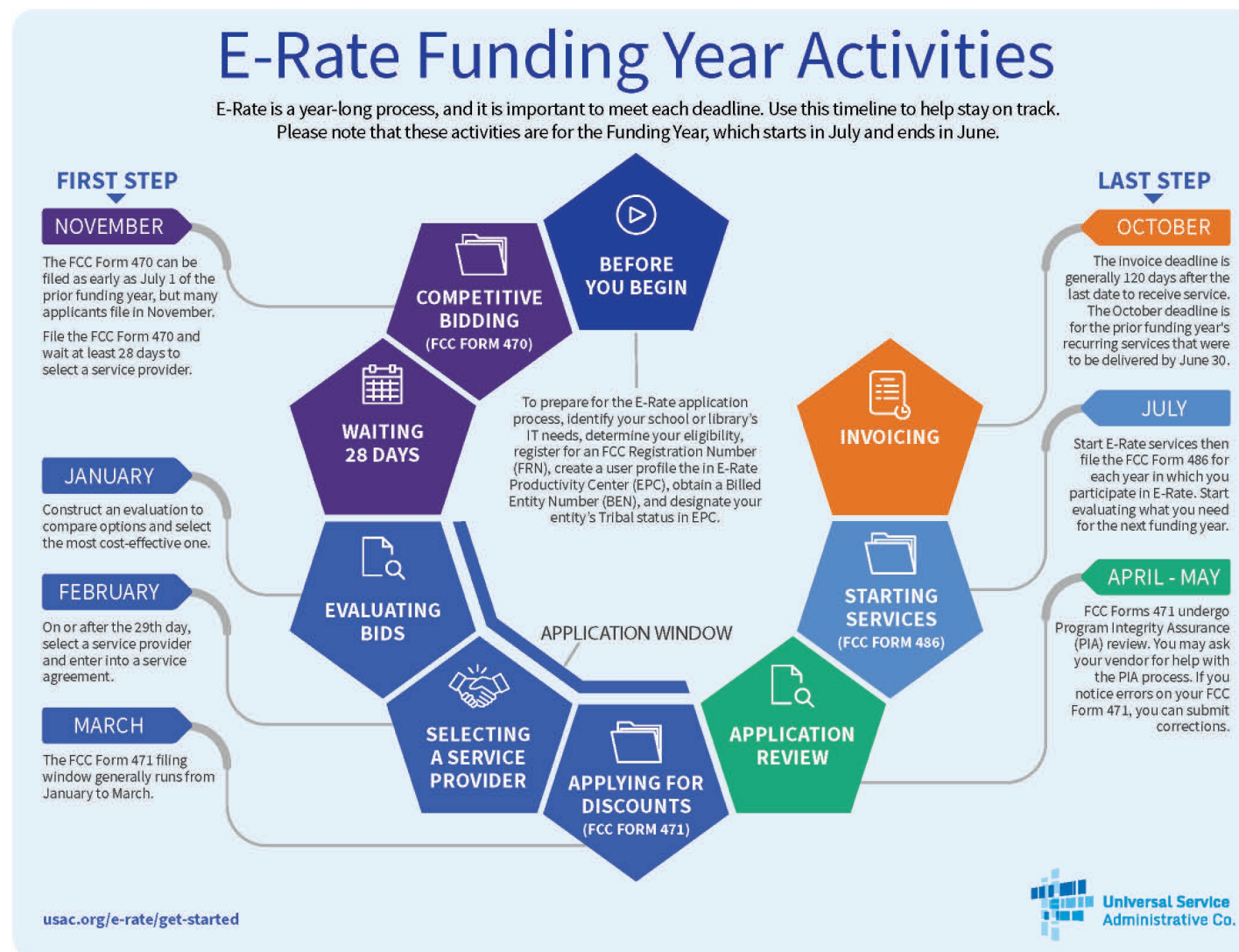
E-Rate Program Overview (Continued)

Eligible Services cont.

- Category One (C1) are services that support connectivity to schools and libraries.
 - Data transmission and/or internet access
- Category Two (C2) are services that support connectivity within schools and libraries.
 - Internal connections (e.g., routers, cabling, switch, firewall, or other equipment needed for a Wi-Fi network)
 - Managed Internal Broadband Services (MIBS)
 - Basic Maintenance of Internal Connections (BMIC)
 - See [Category Two Budgets](#) page
- Please visit the [Eligible Services List](#) page to learn more about eligible equipment and/or services.

E-Rate Program Cycle

Application – Funding Year Activities



Before you Begin

Before You Begin: New Schools and Libraries

Follow the steps below to prepare your E-Rate program application:

1. Obtain an [FCC Registration Number](#).
2. Obtain a [Billed Entity Number \(BEN\)](#) and create a user profile in the [E-Rate Productivity Center \(EPC\)](#).

Special Information for Tribal Governments

- A Tribal government can create a consortium for its Tribally-controlled schools and libraries, and a Tribal government employee can act as the consortium leader. The consortium as an entity is not eligible for discounted services, but they can run competitive bidding processes and/or apply for discounted services on behalf of their eligible member entities. Any schools or libraries can come together to form a consortium.

Document Retention

- **Applicants and service providers** are required to [retain documentation](#) that demonstrates compliance with the statutory or regulatory requirements for all E-Rate program purchases of equipment and services **for a period of 10 years** after the latter of the last day of the applicable funding year or the service delivery deadline for the funding request.
- Winning **service providers** must retain records related to the purchase and delivery of E-Rate eligible equipment, signed and executed contracts, bidding information, invoices, provision of services, and other matters relating to equipment and services.
- For example, for **recurring internet access service** for FY 2025, both the **applicant and the service provider** must retain all records until **at least** June 30, 2036.

Questions?

Tribal Library E-Rate Advocacy Program (T-LEAP)

T-LEAP Video

☰ What is T-LEAP?



Eligibility for Tribal Entities

- In 2022, the FCC amended its E-Rate rules to include Tribal libraries in its definition of library and clarify that Tribal libraries are eligible for support.
- In 2023, the FCC further amended its E-Rate rules to make Tribal College or University (TCU) libraries eligible for support.
- A library may be designated as a Tribal library by a Tribal Government (e.g., pursuant to a Tribal Resolution).
- A Tribal library may also work with the state library administrative agency where it is located.
- Tribal libraries should demonstrate three characteristics commonly associated with Institute of Museum and Library Services (IMLS) grants to Native American libraries:
 - Regularly scheduled hours
 - Staff
 - Materials available for library users

Tribal Entity Definition

- The definition was updated for FY 2024 in the [FCC 23-56](#) and the Federal Register:
 - An entity is “Tribal” for purposes of E-Rate funding if it is a school operated by or receiving funding from the Bureau of Indian Education (BIE), or
 - If it is a school or library operated by any Tribe, Band, Nation, or other organized group or community, including any Alaska native village, regional corporation, or village corporation (as defined in, or established pursuant to, the Alaska Native Claims Settlement Act ([43 U.S.C. 1601](#) et seq.)) that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.
- Check the Tribal box in your entity’s profile in the E-Rate Productivity Center (EPC) during the administrative window (typically October – January). You will also be asked to provide your Tribal affiliation. Designation provides Tribal libraries with:
 - Access to higher discount rates for Tribal libraries at the 85-90 percent discount rate for C2 (services and equipment providing connections within the library).
 - Access to a higher C2 funding floor for Tribal libraries (over \$36k in additional funding, \$66k vs. \$30k for the five-year period).

Improving E-Rate for Tribal Applicants

The [Report and Order](#) adopted on July 20, 2023, amended program rules to enhance Tribal applicants' access to the E-Rate program to encourage wider program participation.

- Granted E-Rate eligibility to Tribal higher education libraries also serving as the local public library
- Created a new competitive bidding exemption for libraries seeking C2 services and equipment that costs \$3,600 or less per year, per library
- Increased the maximum C2 discount rate to from 85 percent to 90 percent and increased the C2 funding floor for Tribal libraries
- Provided guidance on cost allocation issues experienced by applicants
- Adopted a formal definition of “Tribal” for the E-Rate program
- Expanded USAC Board of Directors to add a Tribal community representative
- Increased USAC outreach and training on E-Rate and the USF programs for Tribal applicants
- Sought comments on simplification of other program rules for all E-Rate applicants

Tribal Library E-Rate Advocacy Program (T-LEAP) Overview

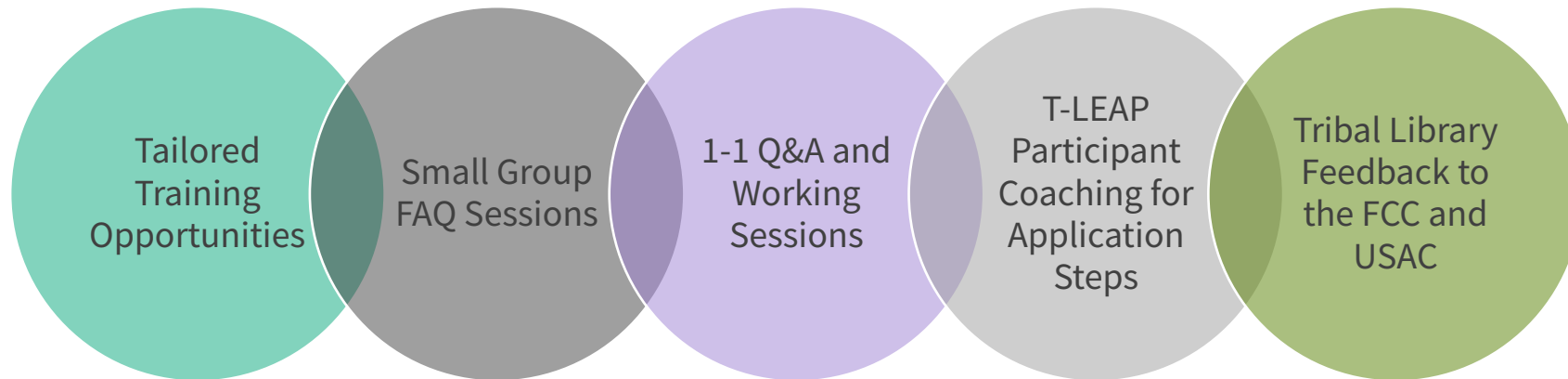
- One-on-one assistance in all aspects of preparing, applying, and receiving E-Rate support during the upcoming funding year.
- Trainings designed to help you apply for funding, including:
 - [E-Rate Productivity Center \(EPC\) Administrative Window](#).
 - Walkthroughs of the [Competitive Bidding](#) and [Application Processes](#), including timelines and information needed to complete competitive bidding and the application.
- Hands-on support while completing the different E-Rate forms and processes needed to apply for and receive E-Rate funding.
- [T-LEAP Applications](#) accepted year-round with three focused trainings yearly.

T-LEAP Plan

- Partner with a Tribal Library Advocate (TLA) who will meet with your team one-on-one, provide resources, and walk you through E-Rate processes.
- Sessions will be led by your TLA and planned according to your schedules and the funding cycle.
 - The number of sessions may depend on your needs, but you can expect both individual and group sessions each month.
- Receive resources and guidance to complete tasks like assessing your library's IT technology needs, determining your library's discount rate, and completing any other necessary registrations.
- Provide feedback so that we can continue to simplify and enhance the E-Rate experience for all Tribal school and library participants.

T-LEAP Plan

- You can expect a cohort-based learning/support model
 - A mix of one-on-one assistance combined with group sessions to collaborate with fellow Tribal library participants.



T-LEAP – Tips for Success

- Tribal libraries that have support and participation from Tribal leadership, library staff, and IT staff are more likely to complete the E-Rate funding process.
- The beginning of T-LEAP is the busiest – identifying IT needs, completing the competitive bidding process, and completing the application process.
- USAC offers an [E-Rate Fall Training](#) series. We recommend joining these sessions to learn more about the program.
- Most E-Rate applicants must perform a minimum 28-day competitive bidding process before completing the application process.

Questions?

Question:
What is your current technology/IT support like?

Identifying Your Library's IT Needs

Carson Block

Carson Block Consulting

Assessing Your Technology Environment

—

Without IT Staff



Carson Block

<http://www.carsonblock.com> librarylandtech@gmail.com

Download the Toward Gigabit Libraries Toolkit

Watch this fun, short video for a great overview of the TGL toolkit:

<https://youtu.be/PXWv3-HYm-I>



Download the latest version of the Toward Gigabit Libraries Toolkit:

<https://internet2.edu/tgl>

QR code to download toolkit



About the Toward Gigabit Libraries Toolkit



The **Toward Gigabit Libraries (TGL) Toolkit and Broadband Improvement Plan** is a powerful, FREE tool to help libraries learn about and improve their current broadband infrastructure and internal information technology (IT) environment.

Using the TGL Toolkit and Broadband Improvement Plan, librarians will be better equipped to improve their broadband services and become stronger advocates for their libraries' broadband infrastructure needs.

<https://internet2.edu/tgl>

Institute of Museum and Library Services (IMLS)

Grants that Made the TGL Toolkit Possible



QR code to download toolkit

2015 Toward Gigabit Libraries (TGL) IMLS grant (RE-00-15-0110-15)

- 2-year grant to develop initial toolkit; targeted 60 rural and tribal libraries
- Partners included State Library offices and Research & Education Networks

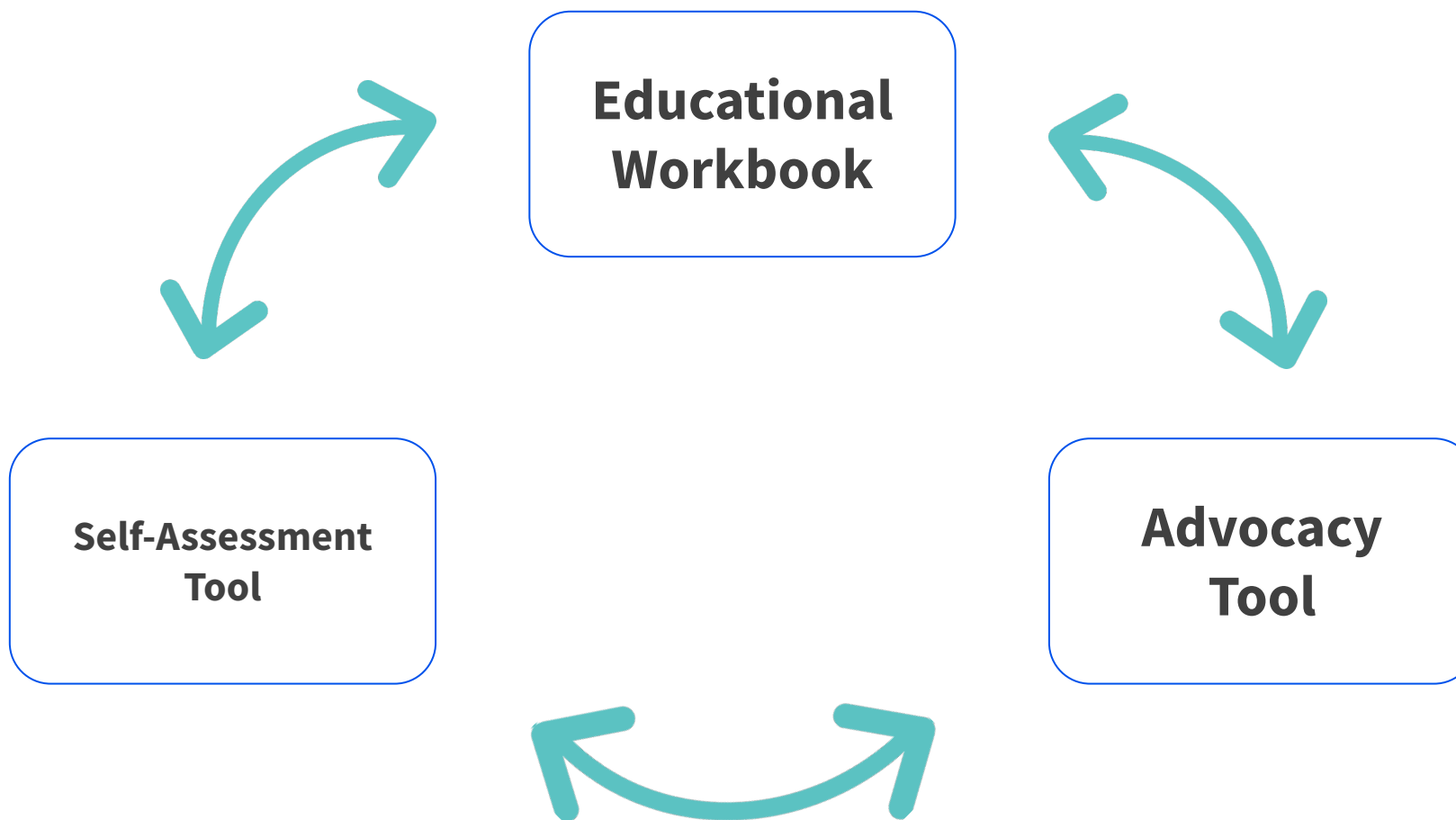
2020 Gigabit Libraries and Beyond (GLB) grant (RE-246219-OLS-20)

- 2-year grant to improve upon the toolkit and expand its reach throughout the United States; extensive updates, 2 new sections, and we doubled the length of the toolkit!

2024 Toward Gigabit Libraries for Tribal, Native Hawaiian, and Native Alaskan Libraries (RE-256732-OLS-24) (Defunded in 2025)

- 2-year grant to partner with communities to scale the adoption of the toolkit to support Tribal, Native Hawaiian, and Native Alaskan library staff as informed consumers, advocates, and providers of technology, Internet access, and digital services.
- Using the toolkit, the project would provide free, accessible tech training/professional development for all Indigenous library staff.

What is the Toward Gigabit Libraries Toolkit?



Toolkit Approach

Questions are presented first → Additional information and resources follow in text boxes to help you answer all the questions

Ex: “How many hubs do you have?”

- What the heck is a hub?
- Wait, what’s the difference between a hub, a switch, and a router?
- How do I tell which one I have?
- What do I do with this info?

10. Does your library network have any hubs?

- ☐ Yes
- ☐ No

If yes, number of hubs? _____

On a network, a hub (which is different from a switch, even though they often look identical) is a device connecting multiple segments of a local area network (LAN) and containing multiple ports. When a hub receives information (in the form of a packet) in one port, it copies that information to all of the other ports.

Since they look the same from the outside, the only way to tell is by either reading any text on the device (specifying “hub” or “switch”) or looking up the make and model number online to find more information.

For a great explanation of the differences between a hub, a switch, and a router, see: http://www.webopedia.com/DidYouKnow/Hardware/Software/router_switch_hub.asp

Network “hubs” are obsolete networking technologies that perform poorly in modern data networks. If you have any “hubs” in your network you should consider replacing them with a network switch or switches.



Hubs and switches can look the same on the outside. But they are very different on the inside!

Toward Gigabit Libraries Toolkit Sections

Toolkit Chapters and Development Process

- *Technology Inventory*
- *Broadband Connection*
- *Wired Network*
- *Network Devices*
- *Wireless/WiFi Network*
- *Computer/End User Devices*
- *Broadband Services and Activities*
- *Broadband Services and Activities*
- *Broadband Technology and Operations Support*
- *Building a Network of Support & Advocating for Your Library*
- *Broadband and IT Funding Opportunities*
- *Additional Resources and Best Practices*
- *Glossary*

Pilot Site

Intake
Survey

Pilot Visit/
Toolkit

Broadband
Improvement
Plan

Periodically
Reassess

Technology Inventory

In this section, you will inventory some of the key pieces of the technology inside your library, including your network, computers, and other important technology components.

This inventory will help you understand what sort of equipment you have now and determine if you need different or additional equipment for the future.

- Broadband Connection
- Network Devices
- Wired Network and Power
- Wireless Network and Power
- Computer and End User Devices

4. TECHNOLOGY INVENTORY—YOUR LIBRARY

In this section, you will inventory some of the key pieces of the technology inside your library, including your computers, network, and other important technology components. This inventory will help you understand what sort of equipment you have now, and provides a basis to determine if you need different or additional equipment for the future.

4A. BROADBAND CONNECTION

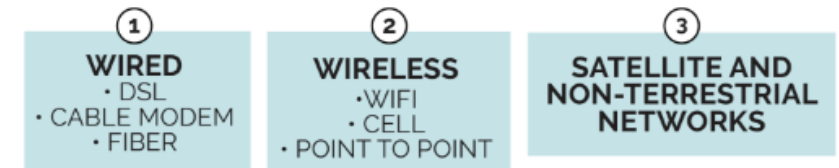
If you have more than one broadband connection, i.e., two different types of technologies or service providers, answer the following questions in this "Broadband Connection" question for each connection.

1. What type of internet connection does your library currently have? Choose all that apply.

- ☐ Cable Modem
- ☐ Digital Subscriber Line (DSL)
- ☐ Fiber Optic
- ☐ Satellite or other "Non Terrestrial" option
- ☐ Wireless
- ☐ Other _____

There are three primary types of broadband—wired (DSL, cable modem, and fiber), wireless, and satellite. Definitions for the types of Internet connections listed here are available at the FCC website: <https://www.fcc.gov/general/types-broadband-connections>

THREE TYPES OF BROADBAND



Broadband Services and Activities

This section covers the types of broadband services and applications.

The goal is to ensure that the library has sufficient bandwidth to support patron and staff use of various devices and applications both today and in the future.

- Bandwidth Needs
- Hot-Spot Lending
- Internet Filtering
- Offered Services

5. BROADBAND SERVICES AND ACTIVITIES

In this section, the types of broadband services and applications are discussed in order to ensure that the library has sufficient bandwidth to support patron and staff use of various devices and applications both today and in the future.

1. How much bandwidth do you need? This can be tricky to estimate, with download speed recommendations ranging from 512 kbps to 1Mbps per simultaneous user. Read the article below to get a better idea of the amount of bandwidth your library needs.

Identifying how much bandwidth your library needs based on the types of services offered, number of devices connected, etc., can be difficult, especially as needs change over time and at different times of day.

Although not a technical measure, you may already know through experience if you have enough bandwidth or not. If you consistently experience a slow Internet connection when you have many people using your library computers and WiFi at the same time, it's possible that your broadband connection is too slow for the demand.

For E-rate applicants, the FCC says "With respect to libraries, the (E-rate) Order adopts as a bandwidth target the American Library Association's recommendation that all libraries that serve fewer than 50,000 people have broadband speeds of at least 100 Mbps and all libraries that serve 50,000 people or more have broadband speeds of at least 1 Gbps." <https://www.fcc.gov/general/summary-e-rate-modernization-order>

Would you like to dig more deeply? This article offers an excellent description of an approach to produce a number: http://www.broadband4education.nm.gov/uploads/FileLinks/a6cbda6b6c3345ecbadd0cafa50aa1ae/Edge_Benchmark_9.2_Bandwidth_Article_8.19.13.pdf

This approach requires you to do some counting (the inventory you may have performed earlier in this toolkit will come in handy) and also do a little math.

The Edge website also has resources on how to advocate within your community for better broadband: <https://www.libraryedge.org/>. This site requires a login.

Broadband Technical Operational Support

Technology in libraries is more than just a collection of gear. People—including library staff and those who provide technical support—are just as important.

In this section, you will learn more about the people who help make technology available in your library and determine where you could benefit from additional support.

- Available Technology Support
- Staff Training Resources
- ISP Technical Support
- ISP Service Requests
- ISP Service Guarantees

6. BROADBAND TECHNICAL OPERATIONAL SUPPORT

Technology in libraries is more than just a collection of gear. People, including library staff and those who provide technical support, are just as important. In this section you will learn more about the people who help make technology available in your library and determine if there are any areas where you could benefit from additional support.

1. Describe the technology support available to your library.

- ☐ Library staff expertise
- ☐ Community volunteer(s)
- ☐ Broadband provider
- ☐ IT service contract
- ☐ Consortium
- ☐ State library
- ☐ Local school district, municipal government or agency or other partnership.

Describe the technical support you receive from these sources below. What additional support does your library need?

Small, rural, and tribal libraries often have limited access or availability of technical resources to support the library's IT and broadband infrastructure and operations.

Your state library may offer technical support for your library ranging from online resources, site visits, and in person and online training programs for library staff.

List of state libraries and archives: <http://www.cosla.org/Directory>

See "[Section 9: Additional Resources and Best Practices](#)" below for links to even more technology support opportunities for your library.

Building a Network of Support & Advocating for Your Library

Improving your library's broad and IT takes a village.

In this section, you will explore your community networks and identify key people and groups who can support your technology work within your library.

- Identifying your library's unique strengths
- How to build relationships to expand support for your initiatives
- Creating and executing an outreach strategy
- Evaluating your efforts

Create and Execute an Outreach Plan

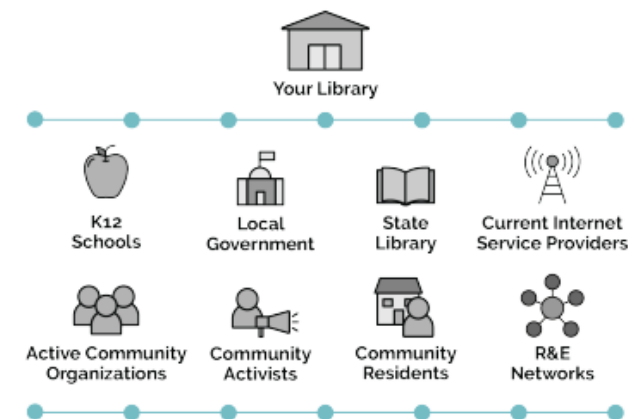
11. Who are your priority partners for impacting your project?

Once you've crafted your message and identified potentially supportive members in your community, it's important to make a plan to begin the process of reaching out and connecting with them. It can be really useful to outline who the potential organizations and individuals are, the priority for outreach, and the type of support you hope to receive.

As you plan and prioritize your outreach to partners consider:

- Who do they serve? What is the overlap with community members the library serves?
- What is their stated mission and/or vision?
- Do you have any common friends – or foes?
- What is the history of interaction between each stakeholder group and the library?

YOUR LIBRARY ECOSYSTEM



Broadband and IT Funding Opportunities

Technology expenses are important budget considerations for all libraries.

This section outlines several opportunities that may be available to help fund your library's broadband connectivity.

- Building a technology budget
- Identifying projects to fund
- Estimating required resources and costs
- Maximizing E-Rate funding
- Grants and other funding sources

Resources Required and Cost Estimate

- 4 WiFi repeaters (\$500)
- Installation to be done by library volunteer (\$0)

Timeframe to Complete

within 3 months

Example
"Resources
Required and Cost
Estimate" row
and "Timeframe
to Complete" row
from the Library
Technology
Budget Worksheet

Estimating Cost

Next, identify potential funding sources for each goal. To do this, look to multiple sources of information:

- Library's existing technology budget
- Library's technology plan
- [Library Grant Funding Opportunities Resources section](#)
- [Eligible equipment and services](#) that E-rate discounts
- Also review the [Support and Advocacy](#) and [Technology Plan](#) sections of the toolkit—since the majority of library funds come from local sources, it is essential to think about what local resources can you access that may help you achieve your goals
- See if your state library maintains a contract or pricing list
- Look into state or local consortia for technology discounts and pricing



Remember to identify all potential funding sources for each goal. For example, getting an E-rate discount does not cover the entire cost of certain equipment or services, so it is beneficial to identify other additional funding sources.

Many states offer consortium pricing for libraries. For example, the [Connecticut Library Consortium](#) (CLC) allows libraries in the state to take advantage of group-rate pricing for discounts on library technology like computer stations. For more information, watch the free edWeb.net webinar, [Cut the Cost of Digital Collection Building: Join a Consortium!](#) (you must enter your email address to watch), or read the 2NDGEAR article, [Don't Go it Alone: What You Need to Know About Participating in an E-rate Consortium](#).



10. ADDITIONAL RESOURCES & BEST PRACTICES

The topics listed here are designed to provide you even more insight and resources to improve your library's broadband connectivity and technology services. You may find these items helpful in gaining a better understanding of your broadband connection, data network, and computers.

[Broadband and Networking](#) | [Content Filtering](#) | [Data Backup](#)

[Digital Inclusion](#) | [E-rate](#)

[Free Technology Related Training Opportunities & Resources for Librarians](#)

[Grant Funding Opportunities and Resources](#) | [Internet Use Policies](#)

[Purchasing Computers, Software, and Equipment](#)

Glossary

The glossary section explains all the terms used in the toolkit, including:

- Ethernet
- Firewall
- Latency
- Router
- WiFi Extender
- Wireless Access Point (WAP)

Transmission Control Protocol/Internet Protocol (TCP/IP)

The suite of communications protocols used to connect hosts on the Internet. TCP/IP uses several protocols, the two main ones being TCP and IP. TCP/IP is built into the UNIX operating system and is used by the Internet, making it the de facto standard for transmitting data over networks.

Voice over Internet Protocol (VoIP)

VoIP is technology that lets you make phone calls over your internet connection instead of a regular, analog phone line.

Wide Area Network (WAN)

Most networks consist of two major zones—the local area network (LAN) and the wide area network (WAN). A LAN is the *internal* network, regardless of whether it is a house with two computers or a high-rise office building with thousands. The WAN is the network *outside* the LAN; this is both other internal networks and the full Internet. A WAN port is the portal by which information passes back and forth between the LAN and the WAN.

WAN (Wide Area Network) Port

A WAN port, sometimes called an “uplink,” is the portal by which information passes back and forth between the LAN and the WAN. Most users will find a WAN port on a network router. A common home router has one WAN port and four LAN ports. Some routers refer to them as an uplink (for the WAN port) and wired connections (for LAN ports). The WAN port takes in information from the outside network or the Internet. The information is filtered through the router’s internal firewall and routing system. Then the information is sent to the proper LAN port or out over a wireless connection to a wireless source.

WiFi Extender

WiFi extenders communicate wirelessly with the primary WiFi system and receive the WiFi signal from the router and broadcast or “repeat” the signal into areas that need more WiFi coverage or signal.

Broadband Improvement Plan

Available for Public Use

SAMPLE BROADBAND IMPROVEMENT PLAN

Short Term Action Plan

(0-3 MONTHS)

Action	
Move WiFi router from back of library to central part	
Intended Result	
Improve throughout in library, reduce dead spots	
Resources Required	Timeline
Additional LAN cabling	One month

Action	
Obtain information on contract with broadband service provider, including speeds, SLAs, contract time, costs, etc.	
Intended Result	
Understand what speeds the library should be seeing, calculate cost per Mbps, understand if there is recourse for missed speeds.	
Resources Required	Timeline
Name of service provider and billing name/ information.	One week

Broadband Improvement Plan

Available for Public Use

SAMPLE BROADBAND IMPROVEMENT PLAN

Long Term Action Plan

(3-12 MONTHS)

Action	
Contract with an additional area broadband service provider and bond/combine with existing broadband capacity	
Intended Result	
Increase broadband capacity at library	
Resources Required	Timeline
Additional broadband connection and equipment to combine connection	6 months

Action	
Install WiFi repeaters	
Intended Result	
Reduce dead spots, increase access to WiFi outside of library for off-hour use	
Resources Required	Timeline
WiFi repeaters	5 months

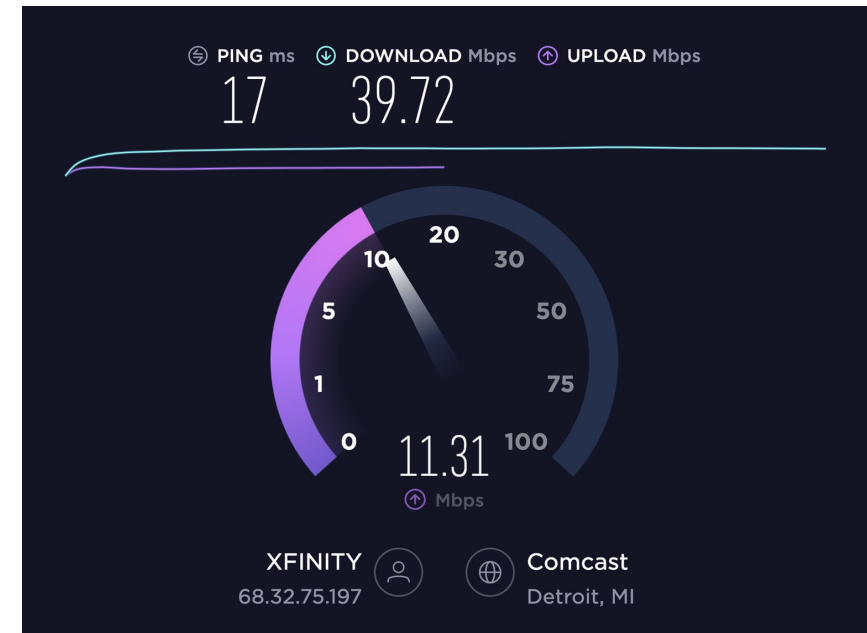
Action	
Participate in E-Rate program	
Intended Result	
Obtain a subsidy for the broadband connection and inside wiring to improve broadband connections and connectivity	
Resources Required	Timeline
Support from State Library, E-Rate consultant (possibly)	12 months

Conduct a Speedtest



Ookla Speedtest (download using QR code)

<https://www.speedtest.net/>



Alternative:

M-LAB Speedtest

<https://speed.measurementlab.net/>

Conduct a Speedtest

- Test at multiple times of day and on different days of the week
- Make sure to record all results
- Download and use this Speed Test Recording Worksheet:
<https://bit.ly/2PIO8pu>

Speed Test Recording Worksheet

Speed Test (<https://speed.measurementlab.net/#/> <https://www.speedtest.net/>)

Date / Time	SPEED TEST RESULTS	Download	Upload		QUALITY TEST RESULTS			Notes
	Test #1 Measurement Lab			Mbps	Latency		Milliseconds (ms)	
	Test #2 SpeedTest.net			Mbps	Ping		Milliseconds (ms)	

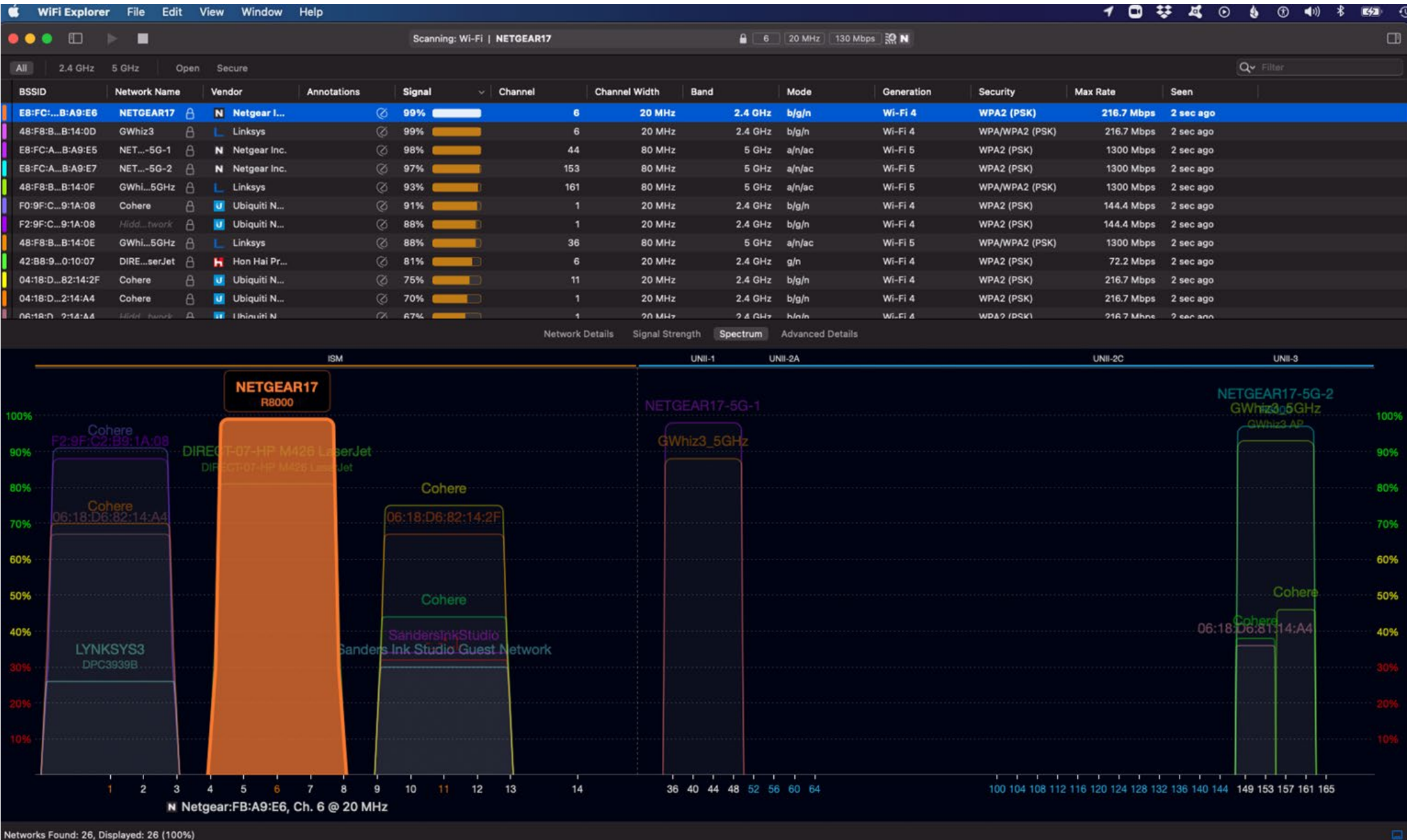
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See WiFi Signals with a WiFi Analyzer (aka Stumbler)



Network
Analyzer Lite
(IOS; free):
<https://apple.co/39pLrk2>

WiFi Analyzer
(Android, free):
<https://bit.ly/31vae1v>

See WiFi Signals with a WiFi Analyzer (aka Stumbler)

Available for Public Use

Network Analyzer Lite (IOS; free):

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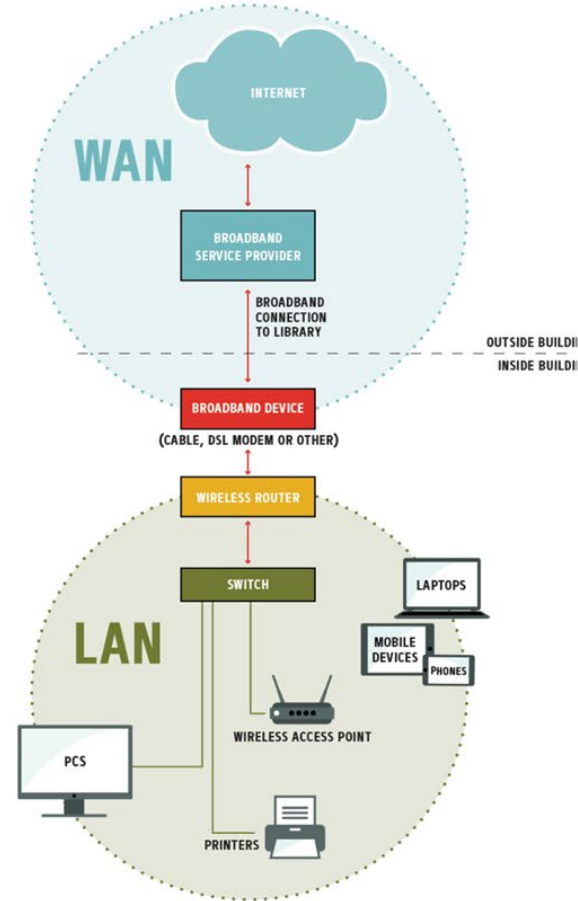


Tools for Understanding Your Network

Drawing a Network Diagram –

and using it to solve problems

Sample Network Diagram



Your Network Diagram

Reaching Across Illinois Library System

Example - Broadband Improvement Plan

June 2025



Broadband Improvement Plan

SHORT TERM ACTION PLAN (0-3 MONTHS)

Action	Intended Result	Resources Required	Timeline
Move WiFi router from back of library to central part	Improve throughput in library, reduce dead spots	Additional LAN cabling	One month

LONG TERM ACTION PLAN (3-12 MONTHS)

Action	Intended Result	Resources Required	Timeline
Contract with an additional area broadband service provider and bond/combine with existing broadband capacity	Increase broadband capacity at library	Additional broadband connection and equipment to combine connection	6 months

**So, I've Evaluated
and Tested – now
what?**

**What do I do with
the information?**

The Broadband Improvement Plan – also found as an Appendix in the
Towards Gigabit Libraries Toolkit

Project Managers

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Internet 2

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Program Manager,
Community Anchor Program
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Carson Block



Library Technology Consultant
Carson Block Consulting, Inc.

Founding Team Included:

James Werle



Susanna Spellman



Download the Toward Gigabit Libraries Toolkit

Watch this fun, short video for a great overview of the TGL toolkit:

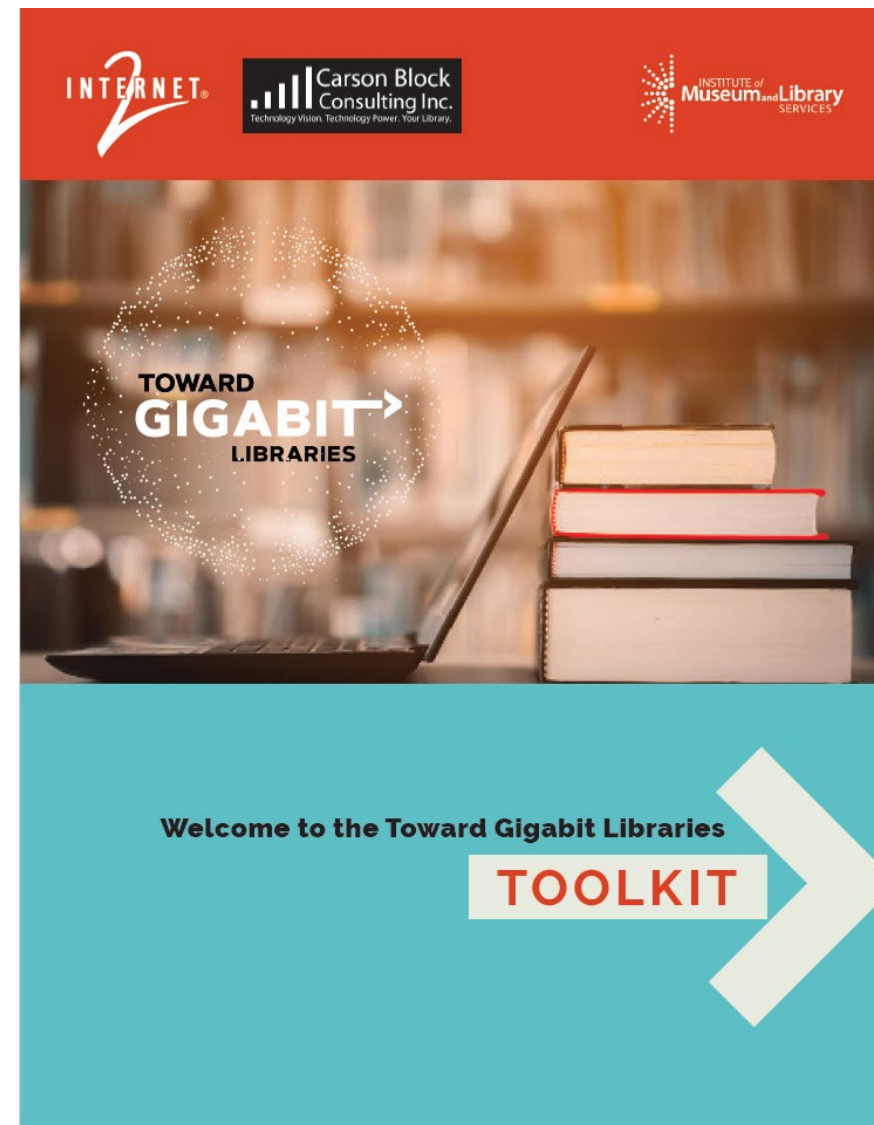
<https://youtu.be/PXWv3-HYm-I>



Download the latest version of the Toward Gigabit Libraries Toolkit:

<https://internet2.edu/tgl>

QR code to download toolkit



Thank you!

Assessing Your Technology Environment

—

Without IT Staff



Carson Block

<http://www.carsonblock.com> librarylandtech@gmail.com

Resources

Resources

- For program information, visit the [E-Rate](#) webpage.
- Schools and libraries interested in applying can visit the [E-Rate Applicant Process](#) page.
- For webinars, videos, and [Tribal FAQs](#), visit the [Learn](#) page.
- [Subscribe](#) to the Tribal and E-Rate Newsletters.
- For general USAC Tribal information, visit the [Tribal Nations webpage](#).
- Email the Tribal Liaison at TribalLiaison@usac.org.

Resources – Before You Begin

- [E-Rate Program At-A-Glance for New Applicants](#) (PDF)
- [Registering for a Billed Entity Number \(BEN\) Checklist for New Tribal Library E-Rate Applicants](#) (PDF)
- [Frequently Used Terms](#) (PDF)
- [Towards Gigabit Libraries Toolkit](#) (PDF)

E-Rate Customer Service Center (CSC)



Call us at (888) 203-8100

Monday – Friday 8 a.m. to 8 p.m. ET



Create a customer service case

1. Log in to the [E-Rate Productivity Center \(EPC\)](#)
2. Select the **Contact Us** link from the upper right menu on the landing page.

Thank You!



Universal Service
Administrative Co.