Edge is a leadership and planning tool.

Its aim is to help you:

- Assess your public computers and how they are being used,
- Identify ways to strengthen or enhance your public technology, and
- Communicate with key leaders on the value of the library’s computers for supporting a skilled workforce and employment, the educational needs of students, and more.

Led by a coalition of library leaders and bolstered by thousands of public libraries and staff, the Edge Initiative is a suite of tools that support continuous improvement and reinvestment in public technology.

In addition to these Benchmarks, here’s what is included in the toolkit:

- **A Resource Guide** with practical templates, tools, and tips for improving the library’s public computer services.
- **Case studies** that feature examples of public libraries of all sizes using computers to meet citizen needs.
- **Reporting tools** that help library leaders tell the story of how computers support the local economy, workforce, lifelong learning, and a strong community.
- **Training** that will guide libraries in using their Edge results for planning, advocacy, and outreach activities to enhance as well as build technology services.

Edge is a tool for library professionals. It helps libraries plan and grow for the future.
The Edge benchmarks are organized into three main categories that assess:

**COMMUNITY VALUE**
- Specific programs, services, and support that enable people to get value from their use of technology

**ENGAGING THE COMMUNITY & DECISION MAKERS**
- External practices that connect the library to the community

**ORGANIZATIONAL MANAGEMENT**
- Internal management and infrastructure
Benchmark 1

Libraries provide assistance and training with the goal of increasing the level of digital literacy in the community

1.1 The library has curricula for and provides regularly scheduled digital literacy training.
   - Curricula and in-person classes are available in at least one location in the following topics:
     - Basic computer skills
     - Office productivity software (e.g., word processing, spreadsheets, presentations)
     - Internet searching
     - Privacy and security
     - Library resources
     - Social media
     - Multi-media (e.g., photo, video, audio)
   - Training is available for patron owned devices (e.g., eReaders, iPods, tablets, smartphones)
   - Technology classes are available in languages other than English in at least one location

1.2 The library provides individual assistance for digital literacy at all outlets.
   - One-on-one help is available on-demand for at least 10 minute sessions at all locations
   - One-on-one help is available on-demand or by appointment for at least 30 minute sessions at all locations
   - One-on-one help is available for patron-owned devices in at least one location (e.g., eReaders, tablets, iPods, smartphones)
   - One-on-one help is available in languages other than English in at least one location
Benchmark 2
Libraries provide access to relevant digital content and enable community members to create their own digital content

2.1. The library supports the creation of digital content on public access computers.
- Patrons have the ability to retrieve data from and store data to portable devices (e.g., thumb drives, external hard drives, PDAs) while using public computers at all locations
- Office productivity software (e.g., word processing, spreadsheets, presentations) is available at all locations
- Photo editing software (e.g., Photoshop, GIMP) is available in at least 50% of locations
- Video/audio recording and editing software is available in at least one location
- Web development software (e.g., Dreamweaver, CoffeeCup) is available on at least one public computer in at least one location

2.2. The library monitors its service delivery of online content.
- Website links are checked and content is updated at least monthly
- Library website analytics (e.g., number of website visitors, traffic type, popular pages) are reviewed at least quarterly
- Subscription content (e.g., Ebsco databases, Freegal, Learning Express, Lynda) usage reports are reviewed at least quarterly
- A content inventory of the library’s website is performed at least annually

2.3. The library provides access to information resources through its website.
- eBooks can be downloaded through the library’s website
- Audio books can be downloaded through the library’s website
- The library selects and organizes online resources (e.g., how-to guides and videos, tutorials, practice activities) to help patrons learn digital literacy skills
- The library offers access to online interactive language learning tools through its website (e.g., Mango, LiveMocha) and/or language learning software (e.g., Rosetta Stone, Auralog)
- The library provides real-time reference services through short message services, instant messaging, Skype, Twitter, texting, or other interactive applications
Benchmark 3
Libraries provide technology resources to help patrons meet important needs related to personal goals and community priorities

3.1. The library supports use of public technology for workforce development and entrepreneurship.
   • The library selects and organizes online resources for job seeking, employment skill-building, or professional certification
   • The library selects and organizes online resources for small business development
   • The library offers access to online career testing preparation tools through its website and/or career testing software
   • A library-organized or -hosted class for patrons on using online job-seeking, career development, and small business development resources is held at least quarterly

3.2. The library supports use of public technology for eGovernment or legal purposes.
   • The library selects and organizes online links to local, state, and federal eGovernment resources
   • The library selects and organizes online guides and instructions for identifying, finding, and using online eGovernment resources
   • The library offers access to electronic legal and law-related research information and services through its website
   • A library-organized or -hosted class for patrons on navigating online government resources is held at least quarterly

3.3 The library supports use of public technology for patrons pursuing educational opportunities.
   • Early literacy games, web-based read-along programs, and/or electronic toys or tablets are available at the library and through the library website
   • The library selects and organizes online resources related to homework help, research, and information literacy for students
   • The library selects and organizes online resources about college selection and financial aid
   • The library offers access to educational testing (e.g., SAT, GRE, GMAT, TOEFL) preparation through its website and/or educational testing software
   • The library provides proctoring of exams for online learners in at least one location
   • A library-organized or -hosted class for patrons on using or navigating educational resources is held at least quarterly

3.4 The library supports use of public technology for health and wellness purposes.
   • The library selects and organizes online resources for learning about medical conditions, procedures, prescription drugs, and healthcare providers
   • The library offers access to medical databases through its website
   • The library is a designated community access point for health and human services information assistance (211 service)
   • A library-organized or -hosted class for patrons on using or navigating health and wellness resources is held at least quarterly
Benchmark 4
Libraries make strategic decisions based on community priorities for digital inclusion and innovation

4.1 The library has leaders who maintain ongoing relationships with community leaders.
- Library leaders attend meetings of local elected governing bodies (e.g., city council, county board of supervisors, town council) that exist within their legal service area at least annually
- A list of local media contacts is maintained and updated at least annually
- Outreach to local media is conducted at least quarterly through one-on-one meetings, press releases, op-eds, or media events at the library
- A presentation about library technology is made to a community-based organization at least annually
- At least one leader from a community-based organization serves on a library committee or governing board
- At least one library representative sits on the board of a key community-based organization
- The library places information about library technology and/or digital inclusion in local media outlets at least quarterly through a news or feature story, blog post, or a radio or TV interview
- The library maintains its own or participates in an ongoing community advisory body whose responsibilities include helping to develop digital inclusion and technology plans

4.2. The library gathers feedback from the community about its public technology needs.
- An analysis of the social and economic conditions of the community is conducted as part of information gathering for strategic planning and decision making
- Questions about community technology are included in a library-sponsored needs assessment survey
- Community technology-related questions are included in a local government survey
- The library conducts community-representative focus groups on the community’s technology needs
- The library holds advertised forums on the community’s technology needs
- The library conducts an assessment of community needs for technology resources in languages other than English
- The library conducts an assessment of community needs for technology resources for people with disabilities

4.3. The library surveys its patrons about technology use in strategic purpose areas.
- The library surveys patrons annually about public technology use and outcomes in the following purpose areas:
  - Workforce development
  - eGovernment
  - Education
  - Health and wellness

4.4. The library evaluates its technology programs and services.
- The effectiveness of digital literacy programs and services is evaluated annually
- Web analytics are used to annually evaluate the use of online library resources
- The effectiveness of outreach activities is evaluated annually
- The effectiveness of partnerships is evaluated biennially

4.5. The library makes strategic decisions based on information about community needs and priorities.
- Digital inclusion and innovation goals are included in the library’s strategic plan
- Technology-related goals in the strategic plan are reviewed and updated annually
- Staffing plans reflect community needs related to digital inclusion
- Technology resources and services are aligned with community needs
**Benchmark 5**

*Libraries build strategic relationships with community partners to maximize public access technology resources and services provided to the community*

5.1. The library develops and maintains partnerships that amplify the library’s reach, avoid duplication of effort, aid the library in planning or advocacy, or are otherwise mutually beneficial.

- The library has strategies for strengthening existing partnerships and developing new partnerships to advance digital inclusion and technology innovation goals
- The library engages in resource-sharing partnerships benefitting the library (with expertise, in-kind contributions, programming, or workspace) with some/all of the following:
  - A workforce development organization
  - An educational organization (K-12, community college, university)
  - A local government or social service organization
  - A local health and wellness organization, hospital, or other healthcare provider
- Devices or space are loaned to community organizations for technology-related training classes in the library
- Mobile training equipment is maintained for library-sponsored technology training in partner facilities
- The library collaborates on grant or other funding opportunities with a community organization

5.2. The library engages in technology outreach activities.

- A roster of community organizations is maintained to help distribute materials about library technology services
- A roster of community organizations that offer technology services and resources is maintained to easily refer community members in the event additional services are needed
- The library tracks emerging technology trends and applications in the community (e.g., new eGovernment portals, community technology centers, technology programs)
- The library maintains a plan to provide technology services to the community in the event of a disaster or other emergency
Benchmark 6
Libraries support continuous improvement in public access technology services by sharing expertise & best practices with other digital inclusion organizations

6.1. The library participates in a community of practice and shares public access technology knowledge, resources, and other tools.
- Existing resources are used to help improve library technology management and public services (e.g., TechSoup, WebJunction, Edge)
- The library participates in peer learning through technology programs sponsored by a state library, consortium, library association, or other organization
- Training resources and curricula are shared with other libraries or community-based organizations
- Network management policies and practices are shared with other libraries or community-based organizations
- At least one technology-related presentation is made by library staff annually at formal professional gatherings (in-services, conferences, webinars)
- The library participates in or facilitates a technology mentorship program that pairs library staff with more experienced or knowledgeable mentors involved in managing library technology and public access technology
- The library has a collection of technology devices that it loans out for staff development and programming purposes
- The library hosts a dedicated development environment to allow library staff to experiment with new applications and online environments

6.2. The library conducts surveys to gather feedback about library technology.
- The following questions are included in an annual survey:
  - Patron satisfaction with library technology
  - Personal importance of library technology
  - Importance of library technology to others in the community
Benchmark 7
Libraries integrate public access technology into planning and policies

7.1. The library maintains technology and patron data management policies.
   - The library has a hardware replacement plan with a 3-5 year refresh cycle
   - The library has a software upgrade plan with a 3-5 year refresh cycle
   - Practices for updating to current versions of Internet browsers, web applications, and plug-ins (e.g., Java, PDF, Flash, Shockwave, Windows Media Player) are included in a technology management plan
   - Practices to ensure the security of patron data, including at least clearing online session data from public computers and procedures for handling sensitive information, are included in a patron privacy plan
   - Network security practices for timely application of updates and patches are included in a technology management plan
   - Processes for system recovery are included in a technology management plan to ensure continuity of services in the event of catastrophic technology failure
Organizational Management

Benchmark 8
Libraries have sufficient staff with technology expertise to help patrons achieve their goals

8.1. The library provides staff with work time to engage in technology related learning activities.

- All public services staff are allowed work time to engage in technology-related learning activities such as webinars, online tutorials, or classes
- All public services staff are allowed work time for hands-on learning with new devices, software, or other technology
- All staff are provided the opportunity to attend annual training during work time from experts in the following areas:
  - Workforce development
  - eGovernment
  - Education
  - Health and wellness
- Key staff are cross-trained to perform technology-related duties
- Key staff are provided the opportunity to attend training in the creation of digital content during work time
- Key staff are provided the opportunity to attend training in instructional design and techniques during work time

8.2. Library staff assigned to assist patrons are responsible for maintaining technology competencies.

- Job descriptions for public services staff contain technology competencies and responsibilities
- Annual evaluations for public services staff include review of technology related performance
- Annual goal setting for public services staff includes expectations for technology performance

8.3 Staff assigned to assist patrons are able to answer patrons’ technology questions.

- 100% of public services staff are able to answer basic patron technology questions
- At least 25% of public services staff in each outlet are able to answer intermediate patron technology questions
- At least 10% of public services staff in each outlet are able to assist patrons with advanced technology questions
Benchmark 9
Libraries have sufficient devices and bandwidth to accommodate user demand

9.1. The library has a sufficient number of device hours available on a per capita basis.
   • 3.00 - 5.00
   • 5.01 - 7.00
   • >7.00

9.2. The library meets or exceeds the minimum bandwidth capacity necessary to support public user demand.
   • Each public Internet user is allocated at least 128 kbps upload and 512 kbps download of network bandwidth capacity
   • Each public Internet user is allocated at least 256 kbps upload and 768 kbps download of network bandwidth capacity
   • Each public Internet user is allocated at least 500 kbps upload and 1 mbps download of network bandwidth capacity

   *Bandwidth capacity per user is calculated by dividing the total available upload and download bandwidths in kbps by the sum of the number of public terminals and wireless users. For libraries with wireless networks for patrons, the number of wireless users is estimated at 1 wireless user per 3 public computers users.

9.3. The library assures adequate time for patrons to complete tasks.
   • Library has session management software
   • Library staff are empowered to extend public access sessions
   • The wireless network signal extends to all public areas of the library at all locations
   • Some public access terminals are designated with extended session periods
   • Internet-enabled devices with extended session periods are loaned within the library
   • Internet-enabled devices are loaned for use outside the library

9.4. The library provides peripheral equipment that enables patrons to complete tasks.
   • Headphones are loaned or given away to patrons
   • Patron needs for privacy while conducting sensitive transactions are accommodated through at least one of the following:
     Installing privacy screens for computer monitors
     Placing computer monitors so they can’t be viewed by other patrons
     Installing partitions between workstations
     Having public computers in private rooms
   • Patrons are able to scan documents into digital formats
   • Wireless-enabled printers are available for patron owned devices
   • Video conferencing equipment is available for public use
   • Presentation equipment (e.g., projector, microphone) is available for public use
   • Multimedia production equipment (e.g., digital cameras, audio recorders, video cameras) is available for public use
Benchmark 10
Libraries manage their technology resources to maximize quality

10.1. The library actively manages Internet connectivity.
• The library knows the maximum available bandwidth speed at each location
• Speed tests are performed on public computers to compare advertised and actual bandwidth speed
• Alerts about connectivity problems are received in real time
• Connectivity (up/down/ping) is continuously monitored at the network level for all branches
• Traffic is monitored by packet type and volume
• The library allocates bandwidth for library staff functions and public Internet access through separate data circuits or through hardware/software mechanisms that prioritize network traffic
• Network bandwidth is shaped for quality of service

10.2. The library minimizes out-of-service devices.
• Library staff have access to a troubleshooting guide for network devices and peripherals, including call numbers and service provider information
• A lockdown software program (e.g., Deepfreeze) is installed on public computers
• The library uses a master image deployment and recovery system (e.g., Clonezilla, Ghost) for public computers
• Cold spares are available to switch out broken devices with fresh hardware within one business day
• The library has access to personnel with sufficient IT expertise to maintain the library’s network and public technology systems
• The library has at least one staff member located onsite with sufficient IT expertise to maintain the library’s network and public technology systems

10.3. The library tracks key measures about public technology services for planning purposes.
• The following metrics are tracked on an ongoing basis:
  - Number of hours public devices are in use by patrons
  - Number of attendees in technology classes
  - Average wait times for public devices
  - Number of wireless sessions
  - Number of requests for one-on-one technology help
Benchmark 11

Libraries ensure participation in digital technology for people with disabilities

11.1. The library accommodates users with disabilities.

- At least one public terminal with assistive technology that enables use by people with visual impairments (e.g., screen readers, magnification, high contrast keyboards and displays) is available at all locations
- At least one public terminal that can be converted with equipment or programs to facilitate usage by people with motor and dexterity impairments (e.g., touch screens, trackballs, switches, voice-recognition software) is available at all locations
- The library has at least one workstation in each location that can accommodate a wheelchair or mobility vehicle
- The library website is compliant with World Wide Web Consortium (W3C) accessibility standards as evidenced by the use of an online validation service
- Specific accessibility goals are included in the strategic plan
- Staff are provided with training at least annually for recognizing and serving patrons with disabilities
Leading the Edge
The Urban Libraries Council is leading the Edge initiative with a national coalition of library and government organizations:

- American Library Association: Office for Information Technology Policy
- Bill & Melinda Gates Foundation
- California State Library
- International City/County Management Association (ICMA)
- LYRASIS
- Oklahoma Department of Libraries
- OCLC/WebJunction
- Public Library Association
- TechSoup Global
- Texas State Library & Archives Commission
- University of Maryland
- University of Washington