Expanding Device Availability for Broadband

This is one of a series of short explainers about high-speed Internet access issues. The full series is available **here.**

BACKGROUND

The lack of a computer or other digital device remains a significant hurdle to Internet connectivity and digital adoption for many households. According to data from the American Community Survey from 2019, nearly 9 million U.S. households had no computer of any kind, and another 12 million relied solely on a smartphone as their only computing device. (See related fact sheets that discuss **Affordability**, **Access**, and **Broadband Availability**.)

This means that even after resolving infrastructure challenges, ensuring affordability, and building digital skills, accessing the Internet requires the right type of device to meet the user's needs.

Additionally, the user may need ongoing technical support to utilize the device. As organizations and digital inclusion advocates work to address this challenge in communities across the country, several successful strategies have emerged to make digital devices accessible and affordable for all.

THE PROBLEM

Resolving the device challenge is not simply a matter of having a manufacturer ship a device to an address. There are many devices suited to different use cases. New devices may be more expensive than a budget can support for the number of people in need. Older devices may have flaws or challenges to refurbish and support.

New or Refurbished?

In deciding what devices to distribute, new devices may be the most flexible. They are often available in whatever numbers are needed from the manufacturer. However, they may be too expensive for low-income households and they generally come with minimal tech support that new-to-technology households may require. One advantage is that manufacturers will often offer reduced costs for bulk order and some have discounts for nonprofits serving certain target populations. Working with a partner experienced in bulk technology procurement can also help to reduce costs.

Refurbished devices can be a good lower-cost alternative to new, and several national organizations specialize in them. Reputable refurbishers provide high-quality devices and generally offer warranties and tech support. Selection and supply can fluctuate depending on demand and the supply of incoming devices. Getting local businesses and public agencies to donate devices for refurbishing can be a great way to ensure supply and for the partners to contribute back to the community. Donating devices can even reduce e-waste and disposal costs.

Loan or Own?

Once the type of device is settled, the program distributing the devices must consider who will own the device after a household takes it home. In most cases it is ideal for the user to own the device they receive - this gives them autonomy and reduces oversight and maintenance responsibilities for an administering organization. However, there may be some instances where loaning devices is preferable; two such cases are when demand far exceeds the number of available devices and there is a need to share them among users, or when device control and software standardization is important, such as with school districts. However, this additional layer of control should only be implemented if absolutely necessary.

Making devices publicly accessible at convenient and centralized locations is another strategy that is commonly employed at libraries, community centers, senior centers, and other gathering spaces. While generally not a substitute for having a device of one's own, it does have the benefit of being able to provide technical support and other digital skills training at the location.

Support

Many users in need of a device are also in need of support services throughout the process. Prior to getting a device, they may need assistance determining the right type for them and where to get it. Afterward, they may need assistance with setup, technical support, and skill building to get the most out of their device. Formally

trained **Digital Navigators** are a great way to provide wraparound support for users. For more information on Digital Navigators, please see the **Key Digital Skills for Broadband Fact Sheet**. Additionally, groups of people going through the process to get the device may form their own ongoing support networks to work through challenges.

Along with the appropriate device type and support, some users may also have accessibility needs that require special hardware or software. It is important to

understand any such needs when considering device specifications. Some accessibility needs can be met just by choosing the right type of device, such as a desktop computer with a large screen and full-size keyboard for the visually impaired. Other features, like screen reading software, come standard on most devices. However, features such as braille keyboards or software for users with cognitive or developmental disabilities may need to be customized.

	Desktop	Laptop	Tablet	Smartphone
Pros	+Good for accessibility needs (large screen & customizable set-up)	+Versatile: standalone or connect to peripherals	+Good for accessibility needs (large display, easy user interface with touchscreen)	+Easy user interface with touchscreen
	+Longest lasting	+Good performance: storage, processing, software options	+Lower cost	+Ubiquitous: nearly everyone has one already
	+Maximum performance: storage, processing, software options	+Portable	+Very portable: long battery life, Wi-fi & cell connectivity, GPS	+Maximum portability: long battery life, Wi-fi & cell connectivity, GPS
Cons	-Not portable and requires a dedicated space	-Limited ergonomic options without connected peripherals (like an additional screen or keyboard	-More limited app-based and cloud-based software	-Device cost compared to performance is high
	-Managing device security requires more proactive effort	-Managing device security requires more proactive effort	-Limited performance without peripherals added on, such as a bluetooth keyboard	-Limited performance without peripherals added on, such as bluetooth keyboard
	-No built-in camera	-Depending on the age of the device, may have a limited battery life	-Device lifetime is short	-Small screens may create accessibility barriers for low vision and vision impaired individuals.
Ideal Uses	Streaming, gaming,email, web browsing, bookkeeping, word processing, graphic design, remote learning, telemedicine, and online banking	Streaming, gaming, email, web browsing, bookkeeping, word processing, graphic design, remote learning, telemedicine, and online banking	Video conferencing, streaming, email, web browsing, taking photos, recording, video, social media and socializing	Video conferencing, streaming, email, web browsing, taking photos, recording, video, social media and socializing

KEY CONTACTS & RESOURCES

- Nonprofit refurbishers (human-I-T, PCs for People, TechSoup, Free Geek, E2D)

- Local commercial refurbishers, computer retailers, and ISPs

- Institutions with bulk tech procurement experience (school districts, higher education, libraries)

- Chamber of Commerce & business community for donations to refurbish

- Potential distribution sites & partners (direct service nonprofits, libraries, schools, housing authorities, computer training programs)

- Senior Planet, from AARP

- AARP's Personal Technology Resource Center

- AARP's 2021 Tech Trends Report—Older Adults Are Upgrading for a Better Online Experience

COMMUNITY/PROGRAM SPOTLIGHT—MOUNT WASHINGTON VALLEY, NH

- Driven by COVID-19 shut-downs, the Mount Washington Valley Age-Friendly Community and Gibson Center for Senior Services sought to holistically meet connectivity needs for the senior community through its Equip, Train, and Connect program. The program focused on providing devices paired with computer training and technical support. They found success with a multi-pronged approach to acquiring devices—holding a community computer donation drive, obtaining discounted refurbishing services, and seeking contributions of new devices from an Internet service provider. They also received four hours of free training in email, Zoom, and telehealth. Read more about the Equip, Train, and Connect program in this Gibson Center newsletter feature from June 2021.

JERSEY CITY HOUSING AUTHORITY COMMUNITY CHALLENGE GRANT

- This project provides Wi-Fi, smart home devices, a computer lab and digital literacy programming for older adults in a public housing development to help reduce social isolation, bridge language barriers and create sustainable, on-site digital programming. Get more information on this program from AARP.

SAN FRANCISCO SUNSET TECH CONNECT

- This project paired older adults taking part in a multilingual learning program with instructors for a 12-week course aimed at reducing loneliness and isolation through the use of technology. Participants learned how to navigate the basics of a tablet device, as well as more advanced programs related to their language course.

NATIONAL RESOURCE SPOTLIGHT:

- The Alliance for Technology Refurbishing & Reuse is a national network of businesses and nonprofits whose goal is to take devices out of the recycle and landfill stream and repurpose them for use by households that would benefit from low—and no-cost devices.

ACTION STEPS

State and local governments, as well as nonprofit and philanthropic organizations, can create programs to distribute devices to those who need them. Though the federal government has invested significantly in improved Internet infrastructure and now digital skills programs, it has yet to meaningfully appropriate funds to distribute devices. Nonetheless, devices are an allowed expense under the **State & Local Fiscal Recovery Funds** distributed in the **American Rescue Plan Act**.

When crafting programs to subsidize ongoing Internet access, devices should be included in program design to maximize benefits to all households.

Under the federal **Affordable Connectivity Program**, households may qualify for up to a $100 one-time discount on a laptop, desktop computer, or tablet if the Internet Service Provider (ISP) they have signed up with participates in the program. However, many ISPs have elected not to provide devices, in part due to the above challenges.

ABOUT ILSR

The Institute for Local Self-Reliance (ILSR) is a 48-year-old national nonprofit research and educational organization. ILSR's mission is to provide innovative strategies, working models, and timely information to support strong, community rooted, environmentally sound, and equitable local economies. To this end, ILSR works with citizens, policymakers, and businesses to design systems, policies, and enterprises that meet local needs, to maximize human, material, natural, and financial resources, and to ensure that the benefits of these systems and resources accrue to all local citizens. Learn more at **www.ilsr.org**.

ABOUT NDIA

NDIA advances digital equity by supporting community programs and equipping policymakers to act. Working collaboratively with more than 700 digital inclusion practitioners in 47 states, NDIA advocates for broadband access, tech devices, digital skills training, and tech support. NDIA combines grassroots community engagement with technical knowledge, research, and coalition building to advocate on behalf of people working in their communities for digital equity. Join the NDIA community as a friend, champion, or ally and get the benefits of connecting with your fellow digital inclusion community members. Find out more at **digitalinclusion.org**.

ABOUT AARP

AARP is the United States' largest nonprofit, nonpartisan organization dedicated to empowering people 50 or older to choose how they live as they age. With nearly 38 million members and offices in every state, Washington D.C., Puerto Rico and the U.S. Virgin Islands, AARP strengthens communities and advocates for what matters most to families, with a focus on health security, financial stability and personal fulfillment. The AARP Livable Communities initiative supports the efforts of local leaders and residents throughout the nation to make their communities more livable and age-friendly. Its programs include the AARP Network of Age-Friendly States and Communities and the annual AARP Community Challenge "quick-action" grant program. Learn more at **AARP.org/Livable** and by signing up for the free, weekly AARP Livable Communities e-Newsletter at **AARP.org/LivableSubscribe**.