CENIC AND THE COVID19 CORONAVIRUS

Home and Remote Broadband Access Strategies

Introduction

The current period of shelter-in-place restricted travel, and the necessity to both work and learn from home sheds new light on the digital divide, the "homework gap," and associated issues. 26% of Californians[1] lack broadband Internet access at home, and many others have access that may be inadequate for robust remote teaching, learning, and productivity. California's research, education, and service communities, as well as our commercial partners, provide a wealth of resources that can help to address this gap, both in the short term and in the long.

CENIC maintains a frequently-updated list of resources to assist its member institutions during this difficult time. For the most up-to-date version of resources identified in this document please see that page.

Home And Remote Access

Many residential and wireless broadband providers are taking special steps such as pausing data caps, providing some number of free months of service for new customers, or distributing mobile hotspots to households with students.

- AT&T: Free WiFi, data caps paused, two months free access to low-income households
- Comcast: Free WiFi, data caps paused, two months free access to low-income households
- Charter: Free WiFi, two months free access to households with K-12 or college students
- Cox: Free Wifi, one month of free access to low-income families with students
- Sprint/T-Mobile: Data caps paused, distributing mobile hotspots to students
- Sonic: three months of free access to households with K-12 or college students or senior citizens
- Frontier: Free WiFi
- Vast: Free WiFi
- Verizon: Free WiFi
- Low-cost Internet offers
- Low-cost and refurbished devices

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[1] US Census Bureau 2013-17 American Community Survey

Community Mesh Networking

To further extend WiFi availability in the medium and long term, libraries and schools may wish to explore serving as hubs for community-based mesh networks. Communities in [Detroit](#), [New York](#), [Spain](#), and [South Africa](#) have successfully provided a useful adjunct to traditional access mechanisms.

Security

It is critically important that the rush to remote access not be done in a way that compromises our institutions' security, particularly in an environment where miscreants are already taking advantage of the situation by creating phishing emails purporting to contain COVID-19-related information and other criminal schemes.

- [Defending Against COVID-19 Cyber Scams](#)
- [SANS Security Awareness Work-from-home Deployment Kit](#)
- [US Secret Service Advice on COVID-19 Fraud](#)
- [Phishing in the Time of COVID-19: How to Recognize Malicious Coronavirus Phishing Schemes](#)

Access via CENIC Institutions

Public WiFi

Many CENIC institutions provide public WiFi to their constituents. Although libraries' public WiFi typically is available to all comers, that provided by K-12 and higher education is usually restricted to students, faculty, and staff and requires authentication. Some schools and campuses are looking into relaxing their authentication requirements during the current crisis. Whether they limit access to constituents or make it available to the public at large, many institutions are working to allow network access (in cars, or maintaining appropriate social distance) from parking lots and other nearby areas. The most up-to-date list of institutions known to be offering public WiFi can be found here.

The American Library Association [recommends](#) that libraries leave WiFi on during building closures whenever possible.

Technical Resources for Extending WiFi Signal

- The Wirecutter: Best WiFi Extender and Signal Booster
- Linkedin Learning: Extending and Optimizing a WiFi Network for Small Businesses
  (requires license)

Hotspot Lending Programs

Many libraries maintain programs to lend wireless hotspots to their patrons. While these may be inaccessible owing to library closures, some libraries are considering other options such as curbside pickup. Others are supporting shelter-in-place requirements by allowing hotspots already lent out to remain active after their due date.

Libraries With Hotspot Lending Programs:

- Alameda County Library
- Blanchard Community Library
- Los Angeles Public Library
- Oakland Public LIbrary
- Redwood City Library
- Sacramento Public Library
- San Bruno Public Library
- San Francisco Public Library
- San Mateo County Libraries
- Santa Clara City Library
- Santa Maria Public Library Systems
- Sonoma County Library

To add your library to the list, please email bac@cenic.org.

Resources for Libraries wanting to create a hotspot lending program:

- Building a Rural Library Hotspot Lending Program: Results from a One-Year Pilot
- Mobile Beacon, a provider of hotspots for libraries

WiFi On Wheels

Some institutions are developing innovative approaches to delivering access to the unserved. One stellar example is the "WiFi-On-Wheels" program developed by the Coachella Valley Unified School District, where school buses equipped with wireless routers are parked overnight in underserved communities. Some libraries are exploring similar programs using their bookmobiles.

Mobile WiFi resources
- [Kajeet SmartBus](#) (provided for information only, CENIC endorsement not implied)
- [South Carolina effort](#)

Advocacy

The current crisis will lessen, and the challenges in digital access our community faced before will continue. Perhaps the one bright spot to emerge from today's tempest will be a new focus on addressing these.

In the immediate term, members may wish to encourage their local municipalities to interpret "essential activities" defined in shelter-in-place orders to include activities related to distance learning, such as travel to a public WiFi location as described above.

The Schools, Health, and Libraries Broadband (SHLB) Coalition has made [some initial recommendations](#) to Congress and to the FCC to encourage, and provide funding for, activities such as those described here. CENIC supports these recommendations and urges its member institutions to do likewise and to follow SHLB's policy initiatives at https://www.shlb.org/.

Similarly, members should consider advocating that funding for broadband connectivity to un- and under-served communities, as well as removal of barriers to broadband deployment, be included as part of any infrastructure stimulus package being considered by policymakers.