Digital Equity & Broadband 101

By: Makala Hebbert, Central Nebraska Economic Development District- November 23, 2022

DEFINITIONS:

Digital Equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies. This includes five elements:

- 1. Affordable, robust broadband internet service
- 2. Internet-enabled devices that meet the need of the user
- 3. Access to digital literacy training
- 4. Quality and technical support
- 5. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration.

Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.

Broadband Adoption has traditionally been defined as residential subscribership to high-speed Internet access. But for those in the field working to increase the digital capacity of communities, broadband adoption means daily access to the internet:

- At speeds, and with the quality and capacity necessary to accomplish common tasks;
 and
- Having the digital skills necessary to participate online; and
- On a personal device with a secure, convenient network.

Broadband Equity is achieved when every person within every community can access, affordable, high-speed, reliable internet that meets their current and long-term needs.

Wi-Fi allows devices to communicate with each other at close distances. Don't mistake this as being broadband.

ISP: Internet Service Provider

TYPES OF BROADBAND

Broadband Infrastructure at Home

"Fixed Line" is a physical line to the point of service (your home or business). A Fixed Line may be:

- 1. Digital Subscriber Line ("DSL"):
 - Local phone line to deliver high-speed internet
 - Typically, the slowest
 - Widely available
- 2. Cable: This service uses cable wires, rather than telephone wires.
- 3. Fiber Optic ("Fiber Optic"):
 - Fastest
 - Most "future proof"
 - Can carry massive (infinite?) amounts of data very quickly
- 4. Wireless Service: This relies heavily on wired infrastructure and may be:
 - Fixed ("Fixed Wireless")
 - Mobile
 - Satellite

BROADBAND EQUITY vs AVAILABILITY

Availability can you get connected. Is if affordable? Is the speed adequate and reliable enough
to be considered digitally equitable? Is the area "served" by any broadband infrastructure at all?
And if so, what kind?

UNSERVED vs. UNDERSERVED

- UNSERVED: No one can access broadband service because there is no infrastructure at all.
- **UNDERSERVED:** Insufficient access to include, significant gaps and variances in speed, reliability, and affordability and cannot be digitally equitable.