

## COMMUNITY AND DEMOGRAPHICS (source: [United States Census Bureau](#))

Dayton, Ohio; population 137,644 (as of Census 2020)

- **Race, Origin, Age, and Sex Demographics**
  - **White alone:** 55.7%
  - **Black or African American alone:** 37.9%
  - **Persons under 18 years:** 21.9%
  - **Persons 65 years and over:** 12.7%
  - **Female persons:** 51.1%
- **Education Demographics (persons ages 25+)**
  - **High school graduate or higher:** 83.4%
  - **Bachelor's degree or higher:** 18.4%
- **Economy, Income, and Poverty Demographics**
  - **In civilian labor force (age 16+):** 56.8%
  - **Median Household Income:** \$32,540
  - **Persons in Poverty:** 30.6%
- **Digital Demographics**
  - **Households, 2015-2019:** 57,505
  - **Households with a Computer:** 84.3%
  - **Households with a Broadband Internet Subscription:** 76%

## NEEDS ASSESSMENT

Based on the most recent data available from census.gov, 24% of households in Dayton, or 13,802 total, are without a broadband internet connection. This is an improvement from 2017, when the *Community Technology Action Plan* published by Connected Nation Ohio reported 19,278 households lacking a broadband connection. This same report provides us with insight to many of the needs assessment questions, which are addressed point by point below.

*Who are the individuals that do not use broadband? What prevents them from accessing services? Is it lack of affordability? Or lack of neighborhood infrastructure? Or do they not see value in obtaining access?*

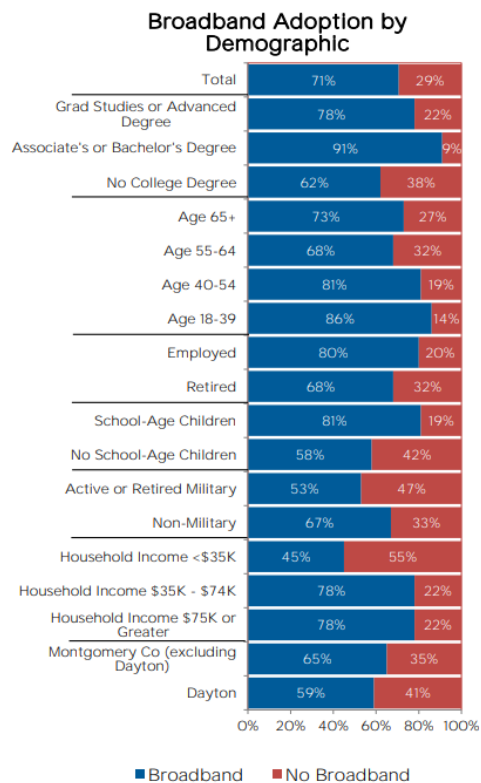
Connected Nation Ohio's report notes that the populations most impacted by digital inequity in Dayton are military households, adults without college diplomas, households earning less than \$35,000 annually, and households without children (p. 24). It is important to note that Dayton's median income is lower than \$35,000, so

digital inequity impacts over half of the city's populations. The report finds that the overwhelming barrier to access is affordability, as shown in the table below. A secondary barrier is access to a computer at home. Digital literacy and desire to obtain access are not barriers.

| Barriers to Broadband Adoption Among Various Groups |                |                          |                               |  |  |
|---|----------------|--------------------------|-------------------------------|--|--|
| Barrier to Adoption                                 | All Households | Household Income < \$35k | Adults with No College Degree | Households with Active or Retired Military | Households without School-Age Children |
| Not Available                                       | 4.1%           | -                        | 28.0%                         | -  | -                                      |
| Too Expensive                                       | 85.7%          | 90.5%                    | 72.0%                         | 100%                                       | 100%                                   |
| No Computer   | 4.1%           | 4.7%                     | -                             | -  | -                                      |
| Access the Internet Elsewhere                       | 6.1%           | 4.9%                     | -                             | -  | -                                      |

(Connected Nation Ohio, 2017, p. 24)

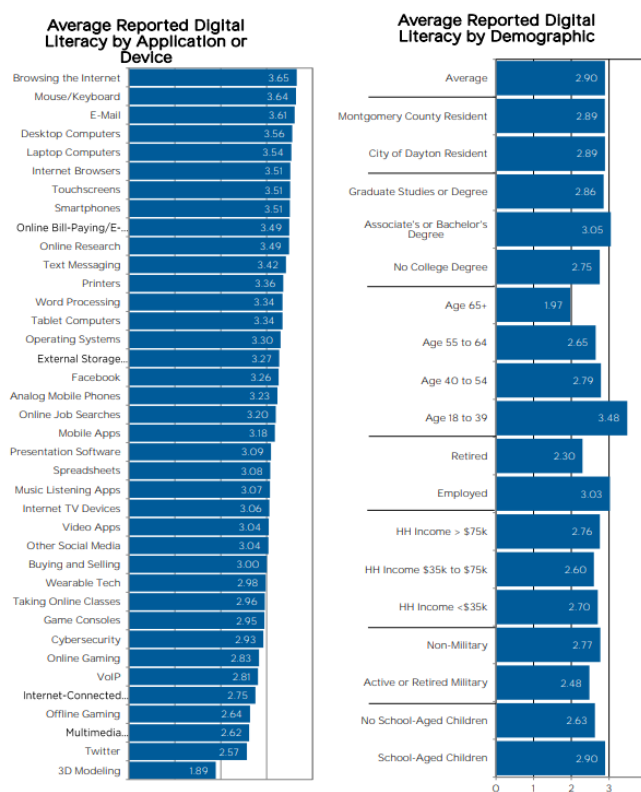
*What neighborhoods do individuals without broadband access reside in? What are the age groups? What is their income level? What are their ethnicities? Is their primary language different from English?*



(Connected Nation Ohio, 2017, p.26)

It is difficult to locate neighborhood-specific data on broadband access in Dayton, but based on my experience living and working in the community, I know that West Dayton is heavily impacted by the digital divide. West Dayton is the poorest area of the city and many residents rely on public internet access, such as connecting to WiFi at the Boys and Girls Club of Dayton or commuting via bus to the libraries in different parts of town. The *Community Technology Action Plan* reports that people age 55 and above are the most likely to not have broadband access, and that households with income below \$35,000 are overall the least likely to have broadband access. I was unable to locate information about broadband access by race, ethnicity, or primary language, but West Dayton's population is mostly Black and English-speaking.

*What level of digital skills do people have across the community? Are people interested in learning more about online safety, social media, online job pages or specific software?*



(Connected Nation Ohio, 2017, p. 29)

I was expecting to find a low level of digital literacy in the community based on issues of access, however, I was pleasantly surprised to find that the average overall self-reported rating of digital literacy was 2.90 out of 4 points. One very interesting finding was this: "Even though a large portion of residents are not proficient with cybersecurity, they are proficient with conducting online banking and bill payment, an

activity typically fraught with opportunities for identity exposure or fraud. Nearly all (92%) of residents say they are comfortable with e-banking or could teach it to others." (Connected Nation Ohio, 2017, p. 28). I've pasted the tables with results from the study's digital literacy survey in line. Respondents ranked their skills from 'no experience' (1) to 'advanced skill' (4).

It's difficult to say what skills people are interested in learning based on the resources available. The *Community Technology Action Plan* provides really insightful statistical information about accessibility and use of technology, but it does not ask the community what skills they would like to develop. There is evidence of a skills gap in the workforce, but even in news searches and looking through other community websites and publications, I can't find anywhere where the question has been asked.

*What devices do people use to access the internet? Cell phones? Tablets? Computers? Do existing devices need to be changed or upgraded to meet their needs for broadband services?*

According to the [American Community Survey](#), 84.3% of households in Dayton have at least one computing device. 60.5% have a desktop or laptop computer, 74.2% have a smartphone (and for 14.3% of those households, a smartphone is the only computing device), and 46.9% have a tablet. The ACS reports that 17.2% of people have a cellular data plan with no other type of internet. Most people in Dayton are using a cellphone or computer for internet access. I was unable to locate information about device needs to support broadband access, however, over 15% of the population has no device whatsoever.

*What internet service providers (ISPs) are in the area? What plans do they offer? At what speeds? How much do they charge?*

There are 6 Residential ISPs in Dayton, Ohio:

- [AT&T \(fiber\)](#): three plans at 300mbps, 500mbps, and 1gbps speeds, starting at \$55.00/month
- [Spectrum \(cable\)](#): two plans at 400mbps (\$39.99/month) and 1gbps (\$99.99/month) speeds
- [EarthLink \(fiber\)](#): three plans at 50mbps, 100mbps, and 1gbps speeds, starting at \$49.95/month
- [Viasat \(satellite\)](#): four plans at 40 gb, 60gb, 100 gb, and 150gb speeds, starting at \$64.99/month

- [HughesNet \(satellite\)](#): three plans at 15 gb, 45 gb, and 75 gb speeds, starting at \$64.99/month
- [TOAST.net \(fiber\)](#): three plans at 300mbps, 500mbps, and 1000mbps speeds, starting at \$64.95/month

## REFLECTION

Although I was able to find demographic and more specific data through the Census bureau and an established report for Dayton, Ohio, there was a lack of neighborhood-specific information that made this assessment difficult to complete fully. It would be incredibly useful to have a view of each of Dayton's neighborhoods' access, affordability, and availability information, as well as more specific feedback about what types of skills people would like to develop and what their actual internet needs are. I see a need for a community based research project, and I think a CBPR model would work very well here. There is a need to collect more community-centric knowledge and to engage the community in developing a digital future that suits each neighborhood in its needs.

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