

Broadband Access in the City of Milwaukee

| FCC BROADBAND DEFINITION OVER TIME | | |
|---|-------------------------|-----------------------|
| Date Adopted | Minimum Download | Minimum Upload |
| 2015 | 25 Mbps | 3 Mbps |
| 2010 | 4 Mbps | 1 Mbps |
| 1996 | 200 Kbps | 200 Kbps |

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| Activity | Minimum Download Speed (Mbps) | Activity | Minimum Download Speed (Mbps) |
|--------------------------------------|-------------------------------|--|-------------------------------|
| General Usage | | Video Conferencing | |
| General Browsing and Email | 1 | Standard Personal Video Call (e.g., Skype) | 1 |
| Streaming Online Radio | Less than 0.5 | HD Personal Video Call (e.g., Skype) | 1.5 |
| VoIP Calls | Less than 0.5 | HD Video Teleconferencing | 6 |
| Student | 5 - 25 | Gaming | |
| Telecommuting | 5 - 25 | Game Console Connecting to the Internet | 3 |
| File Downloading | 10 | Online Multiplayer | 4 |
| Social Media | 1 | | |
| Watching Video | | | |
| Streaming Standard Definition Video | 3 - 4 | | |
| Streaming High Definition (HD) Video | 5 - 8 | | |
| Streaming Ultra HD 4K Video | 25 | | |

Source: FCC Broadband Speed Guide

https://www.fcc.gov/sites/default/files/broadband_speed_guide.pdf

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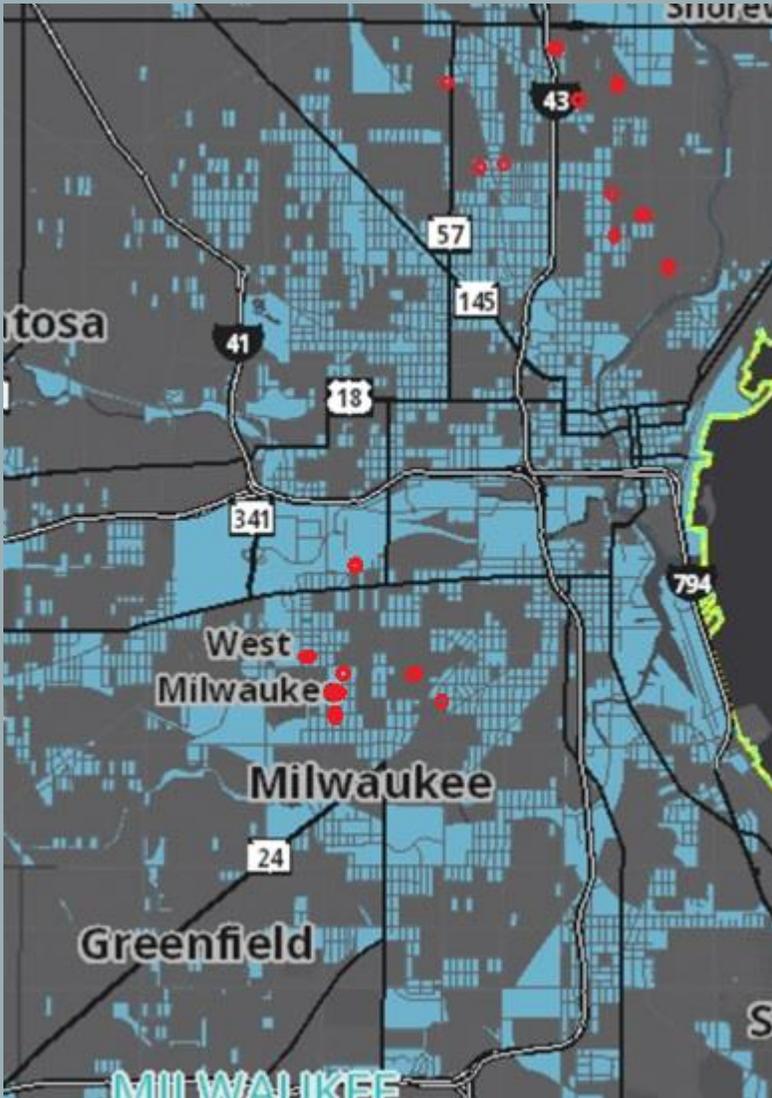


- Unserved area: an area that is not served by an internet service provider offering an internet service that is all of the following:
 - Fixed wireless service or wired service.
 - Provided at speeds of at least 5 Mbps for download and 600 Kbps for upload.
- The City of Milwaukee has no “unserved” areas.
- Underserved area means an area that is served by fewer than 2 broadband service providers providing a broadband service with a speed of 25 Megabits per second (Mbps) for download transmission and 3 Mbps for upload transmission.
- “Underserved” areas are shown in blue on the map.

Source: Wisconsin Public Service Commission

<https://maps.psc.wi.gov/apps/WisconsinBroadbandMap/>

Broadband Access in the City of Milwaukee



Residential Broadband Providers

- Spectrum Cable Internet
 - List price starts at \$70/month
 - Covers all of City of Milwaukee
- AT&T DSL/Fiber Internet
 - List price starts at \$60/month
 - Speeds vary, with less than broadband speeds shown in blue.
- Rates vary for bundling TV and phone services, increased bandwidth, taxes, fees, etc.

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Discount Broadband Programs

- Spectrum Internet Assist
 - \$18/month
 - The speed is 30 Mbps
 - One person in the household must participate in the National School Lunch Program, Community Eligibility Provision, or receive Supplemental Security Income (65 years old or older only).
- Access from ATT
 - \$10/month
 - The speed is 25 Mbps (only where available)
 - One resident in the household must participate in the U.S. Supplemental Nutrition Assistance Program (SNAP).
- PCsforPeople
 - \$11.25/month
 - 4G LTE mobile hotspot (not broadband speeds)
 - Household needs to be 200% or below of the federal poverty level or be currently enrolled in an income-based government assistance program.

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Future Technologies

- Fixed Wireless 5G
 - Verizon
 - T-Mobile

- Satellite Internet
 - SpaceX - Starlink
 - Amazon – Project Kuiper

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City Initiatives

- MPL Computer and Internet Access and Training
- HACM Neighborhood Network Computer Centers
- BTOP Grants
- WiFi at Fondy Market

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Future City Initiatives

- Future grant opportunities
- Additional City Parks
 - 29th & Clybourn
- Municipal Broadband

WISCONSIN

- Wisconsin Statute Annotated § 66.0422

Wisconsin

- × Funding barriers
- × Competition barriers
- × Bureaucratic barriers

Wisconsin state laws allow municipalities to own and operate broadband networks, but such networks can only be paid for by subscribers of the service, not the general population. Municipalities are required to conduct feasibility studies and hold public hearings prior to offering service, allowing telecom incumbents ample opportunity to stall broadband projects. Public entities must include phantom costs in their rates and are not able to charge rates that are lower than what incumbents charge for the same service. The state laws also prohibit municipalities from subsidizing telecom services. [Source https://broadbandnow.com](https://broadbandnow.com)

