



B4B - Build for Broadband

Practices that support access to competitive, high-speed broadband for the current and future connectivity needs of Seattle residents.

ENSURING BROADBAND SERVICE ACCESS FOR MULTIPLE-DWELLING-UNIT (MDU) DEVELOPMENT PROJECTS

Updated July 2024

This *B4B* Tip is designed to support planning for broadband service connections when constructing new MDU residences (e.g., townhomes, apartments, condominiums). It addresses planning for the *exterior* connectivity needed to serve a property and provides general guidance on how to approach the planning, helpful contact information and key terms.

BROADBAND SERVICE CONNECTIONS FOR MDU DEVELOPMENT PROJECTS

High-speed broadband access is a high priority for Seattle residents and a key consideration for MDU residents when selecting where they will live. Residents expect fast access to broadband service once they move into a new residence. To ensure your property can meet these expectations, it's critical to plan for broadband service connections like other key utilities, such as water or electricity – at the *start* of your development process.

PLAN EARLY TO INCREASE CHOICE AND SPEED TO SERVICE

MDU residents want broadband options. Providing choice to residents contributes to better broadband customer service, competitive pricing and overall resident satisfaction. Use the opportunity of early planning to engage *more than one* Internet Service Provider (ISP) and build pathways for multiple ISPs to access your building.

SMALL PROJECT ALERT

CONVERTING SINGLE FAMILY RESIDENCE INTO MDU

DON'T ASSUME ISP CAN SERVE YOUR BUILDING

Early broadband coordination is especially important when converting a single-family residence lot into multiple units (e.g., townhomes). The added number of residences increases the load on existing cable systems and may require system reengineering by the ISP. Waiting to contact an ISP until after your building is complete can result in:

- Residents having to wait months for service connectivity to be constructed;
- Increased construction costs for ISPs, which could change their Return on Investment (ROI) decision on bringing service to your building; and
- Increased costs to you if the ISPs require you to cover some of the non-standard installation costs associated with getting post-construction connectivity to your building.

WHEN YOU INITIATE A BUILDING PROJECT

RESEARCH BROADBAND SERVICE PROVIDERS OPTIONS

DETERMINE WHICH PROVIDERS CAN SERVE THE PROPERTY

Seattle has cable, fiber, and fixed-wireless broadband providers with networks to serve MDU buildings. They are Astound Broadband, Atlas Networks, Comcast/Xfinity, GFiber (Google Fiber), Salmon Bay Wireless, and Quantum Fiber. Links to where service is available from providers and their address look-up tools are available at the City's website <https://www.seattle.gov/tech/internet-and-devices/gigabit-availability>.

CONTACT ISP EARLY, AT SAME TIME YOU REACH OUT TO OTHER UTILITIES

Whether an ISP already has network facilities close to your development site or has a Point-of-Presence (POP) in the vicinity and could consider a plant extension to serve your site, months of advance planning are needed for an ISP to be prepared to serve your future residents. This includes time to review the project and site needs, develop engineering and construction plans, get Right-of-Way (ROW) use permits, and complete the actual construction. *The complexity of serving your property is increased in areas with underground utilities.*

Early contact with ISPs allows time to:

- Assess the potential pathways to your site.
- Complete outdoor routing survey to
 - Map nearby poles in and around property.
 - Map nearby manholes, chambers, pedestals and vaults.
 - Note and map existing wall mounted boxes.
 - Note where future equipment can be placed.
 - Determine points of entry for indoor transition.
 - Address any area safety issues.
- Evaluate impact of increased service demand on their network and whether reengineering is needed to provide service.
- Determine access to power.
- Plan for needed Rights of Way use permits.

INTEGRATE BROADBAND PATHWAY INTO PROJECT

INSTALL SEPARATE 4" CONDUIT FOR INCREASED OPTIONS

Plan to install a separate 4" conduit from the ROW to your building's Point-of-Entry (POE) for each ISP expected to serve the building, plus one spare.

Conduit allows for ease of line installation, repair and upgrades for providers serving your building.

Installing a spare conduit is a key way to help future-proof your building; it will support the unknown telecommunication service capacity needs your building may have 10-20 years from now. The spare conduit gives flexibility to accommodate increased service options, which is an important investment in the evolving field of telecommunications and broadband.

ARRANGE FOR ISPS TO INSTALL WHEN BUILDING GROUND WORK BEING DONE

Minimize disruption to the public ROW and your construction site. Ensure ISPs that will serve your building know when your ground work is being done so they can get into the open trench; ISPs will follow power installation into the building.

KEY CONTACTS:

Seattle ISPs will work with you to assess broadband service connection options for your project. Use these contacts to reach team members that work with builders and developers.

ASTOUND BROADBAND

Daren Monroe, Business Development Mgr, Multifamily
Daren.Monroe@astound.com
 206-247-2662
www.gowave.com

ATLAS NETWORKS

Lisa Mark, Commercial Account Executive
sales@atlasnet.com
 206-395-7222
www.atlasnet.com/building-owners

COMCAST/XFINITY

Rich Buffelen, Sr. Manager, Residential Development
Richard_Buffelen@cable.comcast.com
www.xfinity.com/multifamily

GFIBER (GOOGLE FIBER)

Craig Friedson
friedson@google.com
 206-860-4032
www.gfiber.com/webpass/cities/seattle/

SALMON BAY WIRELESS

Erin O'Meara
erin.omeara@salmonbaytechnology.com
 206.905.9520
www.salmonbaywireless.com

QUANTUM FIBER

Click *Contact your MDU Expert* and complete form at
www.quantumfiber.com/connected-communities

CITY OF SEATTLE

Questions regarding which ISPs serve the area of your development can also be directed to:

Jon Morrison Winters, Digital Equity Program and Broadband Manager
jon.morrisonwinters@seattle.gov
 206.684.5957
www.seattle.gov/tech

KEY TERMS:

Broadband: Short for 'broad bandwidth'. Broadband is the ability for high-speed transmission of data across long distances. Broadband is not a particular type of technology; service can be provided over different mediums including coaxial cables, fiber optic cables, and radio waves. In Washington* broadband is defined as *any service connection providing internet access with transmission speeds that, at a minimum, provide 100 Mbps download and 20 Mbps per second upload.* (*See [RCW 43.330.530 \(2\)](#))

Cable Broadband: Uses copper coaxial cables, or a combination of fiber-coaxial cables, to deliver broadband internet access to a service location. Cable broadband uses the same infrastructure as cable television and provides asymmetric speeds (download speeds are faster than upload speeds).

Fiber Broadband: Uses fiber optic lines to deliver broadband internet access to a service location. Provides symmetric speeds (download speeds same as upload speeds).

Fixed-Wireless Broadband: Uses radio waves to deliver broadband internet access to a service location. Depending upon location, fixed wireless may require an ISP to configure a relay to a Point-of-Presence for transmitting the radio signal.

High-speed Broadband: Broadband service capable of delivering 100+ Mbps service.

Internet Service Provider (ISP): A company that provides customers with internet access. Data may be transmitted using several technologies, including dial-up, DSL, cable modem, wireless or dedicated high-speed interconnects.

Mbps: Broadband speeds are measured in 'megabits per second', often shortened to Mbps or MBPS.

Point of entry (POE): The point at which a telecommunication provider's wiring crosses or enters a building. This often occurs in a box on the outside of the building. This is the point at which the carrier's responsibility ends and customer's responsibility begins.

Point-of-Presence (POP): The point at which two or more different networks or communication devices build a connection with each other. POP mainly refers to an access point, location or facility that connects to and helps other devices establish a connection with the internet.

Symmetrical and Asymmetrical speeds: *Symmetrical* internet connection has no difference in how fast data moves in different directions and the service has equally fast download and upload speeds. *Asymmetric* internet connection means that the data speed and file transfer rate on the network is different in each direction, with download speeds faster than upload speeds.

ADDITIONAL RESOURCES

For other resources related broadband planning visit
www.seattle.gov/tech/internet-and-devices/building-owner-and-tenant-resources