Tip 6000

Seattle Information Technology

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 November 5, 2020

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 three cable broadband service providers with networks in the City. They are CenturyLink, Comcast and Wave, and an independent broadband provider, Atlas Networks. A map showing the areas where cable broadband service is available from these providers, and a look-up tool for other types of broadband ISPs, is available at the City's website www.seattle.gov/tech/services/cable-service

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 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.

ATLAS NETWORKS

Eric McDougall, Account Manager
eric@atlasonnet.com
206.395.7222 Ext. 141
www.gigabit.io

CENTURYLINK

Click *Contact your MDU Expert* and complete form at
www.centurylink.com/MDU

COMCAST

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

GOOGLE FIBER WEBPASS

Craig Friedson, General Manager - Seattle
friedson@google.com
206-860-4032
www.webpass.net/seattle/property

WAVE

Patrick Garry, Director of Business Development
pgarry@wavebusiness.com
206.639.5145
www.gowave.com

CITY OF SEATTLE

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

Alice Lawson, Broadband & Cable Program Manager
alice.lawson@seattle.gov
206.684.5957
www.seattle.gov/cable

KEY TERMS:

Broadband: Commonly refers to internet access of at least 25 Mbps that is never switched off and can be accessed at any time. Broadband is not a particular type of technology.

Cable Broadband: Uses coaxial or fiber optic cables to deliver broadband to a service location.

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.

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.

ADDITIONAL RESOURCES

Visit the *B4B - Build for Broadband* website for other resources related broadband planning.

www.seattle.gov/tech/initiatives/broadband/building-for-broadband