

#### **Beacon Hill Broadband Pilot**

### CenturyLink's goals for the city of Seattle

Seattle's policies and resolutions acknowledge that broadband is a key element to the city meeting its economic development, educational, traffic mitigation, green jobs and quality of life goals.

CenturyLink is uniquely positioned to partner with Seattle to fulfill the city's decade-long expectations associated with broadband technology and competitive broadband markets.

CenturyLink has already invested in an extensive fiber backbone that virtually parallels the city's fiber network and expands beyond it.

Since 2009, CenturyLink (and it's predecessor Qwest), has been prepared to invest millions of dollars in Seattle's infrastructure to upgrade its ubiquitous legacy network that passes virtually every home, business and high-rise in the city. The goal is to push fiber further out into it's existing network in order to bring next generation broadband to Seattle's unserved and underserved neighborhoods.

In addition, CenturyLink intends to continue to evaluate emerging technologies to enhance existing network performance and speeds. The company recently implemented changes that double existing speeds, allowing the company to offer speeds up to 100Mbps in areas where next generation infrastructure has been deployed.



#### Why is a pilot necessary?

Seattle's Department of Transportation Director's Rule 2-2009, has brought CenturyLink's deployment of next generation broadband in the city of Seattle to a virtual standstill.

The rule allows an individual or a handful of property owners to "VETO" broadband projects that would provide services to <u>hundreds</u> of their neighbors. These broadband projects are being blocked without consent, knowledge or the opportunity for input from residents of the unserved/underserved communities that would benefit from the project.

The inability to obtain property owner permission to build broadband projects, has forced CenturyLink to export investment earmarked for Seattle to other communities the company serves. As a result, Seattle lags behind not only other large metropolitan cities, but smaller Puget Sound cities and towns as well.

A pilot would allow all residents that would be served by a proposed broadband project to provide input. This would ensure that a public resource, the right-of-way, is being used in a manner that is consistent with the public will. It would further ensure that where there is a will, broadband investment is being spent in Seattle, rather than arbitrarily exported to other Puget Sound communities.

If successful, the pilot can be replicated in other unserved/unserved neighborhoods.



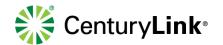
### What has been the impact of the Director's rule?

From 2009 through the beginning of 2011, CenturyLink (Qwest) cancelled nearly 60 projects within Seattle due to the inability to meet the terms of SDOT's Director's rule.

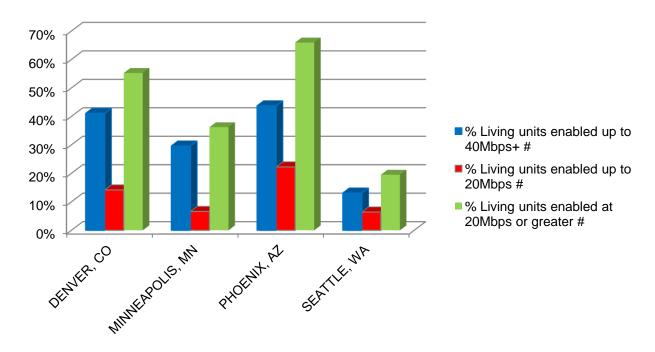
The cancelled projects would have provided next generation broadband to more than 21,000 households and businesses.

The Director's rule requirements are unique to Seattle. The inability to meet the rule requirements have caused deployment of broadband in Seattle to lag significantly behind other large metropolitan and Puget Sound cities and towns served by CenturyLink.

The inability to meet the Director's rule requirements have left areas like Beacon Hill and the Central District with limited, or no competitive broadband options, and has limited competitive choices in communities throughout the city of Seattle.



# How does CenturyLink's deployment in Seattle compare to other major cities?

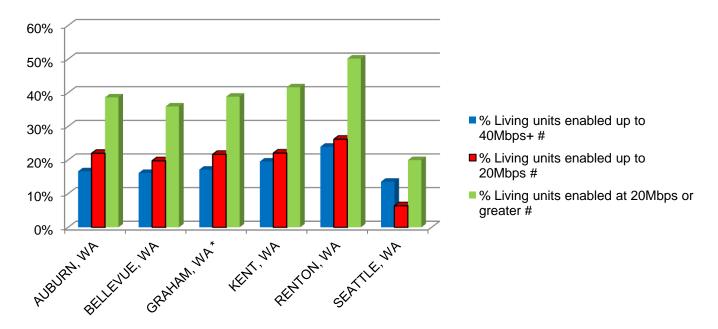


City	% Living Units Enabled 40Mbps+#	% Living Units Enabled up to 20Mbps	% Living Enabled at 20Mbps or greater
DENVER, CO	41%	14%	55%
MINNEAPOLIS, MN	30%	7%	36%
PHOENIX, AZ	44%	22%	66%
SEATTLE, WA	13%	6%	20%

# CenturyLink has implemented technology in Seattle that allows the company to offer speeds up to 100Mbps in many areas previously enabled at a top speed of 40Mbps. The same technology, virtually allows the doubling of speeds in any Seattle neighborhood where the company has been allowed to upgrade existing facilities to next generation broadband equipment.

Century**Link**®

# How does CenturyLink's deployment in Seattle compare to other Puget Sound cities?



City	% Living Units Enabled 40Mbps+	% Living Units Enabled up to 20Mbps	% Living Units Enabled at 20Mbps or greater
AUBURN, WA	17%	22%	39%
BELLEVUE, WA	16%	20%	36%
GRAHAM, WA *	17%	22%	39%
KENT, WA	20%	22%	42%
RENTON, WA	24%	26%	50%
SEATTLE, WA	14%	6%	20%

<sup>\*</sup> Numbers calculated at wire center since Graham is not an incorporated city.

# CenturyLink has implemented technology in Seattle that allows the company to offer speeds up to 100Mbps in many areas previously enabled at a top speed of 40Mbps. The same technology, virtually allows the doubling of speeds in any Seattle neighborhood where the company has been allowed to upgrade existing facilities to next generation broadband equipment.

CenturyLink®

# How can CenturyLink support broadband deployment while mitigating the impacts of infrastructure?

- When placing new broadband equipment in the right-of-way, companies should select the location that provides the best opportunity to shield the broadband equipment from view while meeting required clearances and the technical limitations of the equipment.
  - Companies should strive to use existing foliage or topography for these purposes where possible, and supplement with SDOT approved drought resistant plants and other advances such as cabinet wraps when they are available.
  - When landscaping is used as a means of shielding the equipment, companies should attempt to consult with the abutting customer on the choice of drought resistant plants that are used.
- Where space permits, companies should also take steps to improve the area around any existing cross-connect cabinet that are being upgraded as part of the project.



#### CenturyLink Pilot Program Details

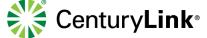
- CenturyLink is proposing two broadband projects in the Beacon Hill area.
- Under the current proposal, a survey along with detailed information will be sent to all residents that could be served by a proposed project.
  - -The survey will include information on the number of living units the project would serve, the speeds that project would enable, as well as before and after pictures of the proposed site.
- If the survey results are favorable, the proposed project will move forward. The project will be tabled if the results are unfavorable.
- If the project moves forward, as part of its community outreach, CenturyLink will attempt to seek input from the abutting property owner on the choice of drought resistant plants used to landscape the site.
- If successful, CenturyLink intends to ask that the pilot be expanded to other underserved neighborhoods in the city, as well as advocate for legislation to modify the Director's rule to eliminate the existing veto and implement appropriate mitigation procedures to support broadband deployment.
  - The pilot would allow the City to test the proposed outreach and mitigation processes to ensure that they work as envisioned and are to be emulated in the final legislation.



### Example of Actual Site – 1056 East Boston Street

view 1

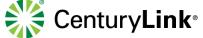




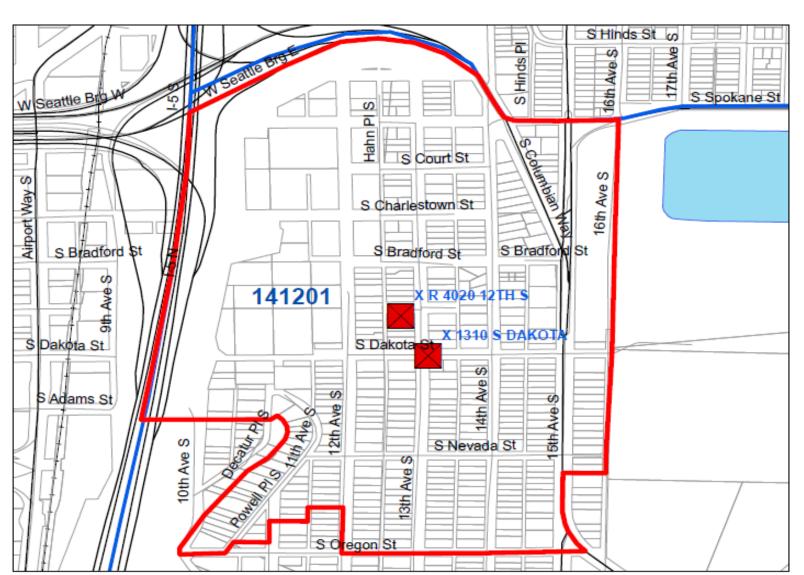
### Example of Actual Site – 1056 East Boston Street

view 2





#### Pilot Area #1





1 inch = 0.11 miles

### Pilot Area #1 – Statistics

### 602 living units

Pilot Project Area 1	Available Broadband Speed	
Before Pilot	Average 1.5 Mbps <i>or less</i>	
After Pilot	Up to 80Mbps	



#### Pilot Area #2



#### Pilot Area #2 - Statistics

## 348 living units

Pilot Project Area 1	Available Broadband Speed
Before Pilot	Average 3 to 5 Mbps
After Pilot	Up to 80Mbps



# Proposed broadband cabinet locations







