



CenturyLink™

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June 30, 2011

David Olson
Mary Beth Henry
Office of Cable Communications and Franchise Management
Mt. Hood Cable Regulatory Commission
1120 SW 5th Avenue
Portland, Oregon 97204

Dear David and Mary Beth,

CenturyLink appreciated the opportunity to participate in the June 3, 2011 industry forum and to provide our company's perspectives on the draft Portland Broadband Strategic Plan. We believe the forum provided a useful exchange of ideas and perspectives on the future of broadband infrastructure in Portland.

Attached are the written comments of CenturyLink regarding the draft Portland Broadband Strategic Plan. These written comments incorporate the information I addressed in my presentation at the June 3 industry forum (as Mary Beth requested), plus brief comments on some of the important issues discussed at the industry forum.

CenturyLink looks forward to partnering with the City of Portland to encourage private investment in the broadband infrastructure in the city, and to achieve many of the adoption goals identified in the draft Broadband Strategic Plan.

Please contact me if there is additional information that I can provide.

Sincerely,

Chris Denzin
Vice President & General Manager

attachment

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**CenturyLink Comments RE: Portland Broadband Strategic Plan Draft May 2011
6/30/2011**

Introduction:

CenturyLink would like to thank the Portland Broadband Strategic planning team for the work completed on the draft plan for the future of broadband in Portland. The team has done a commendable job of identifying the nexus between a robust broadband infrastructure including economic development, sustainability, transportation, urban planning, digital inclusion, civil engagement, public safety, education and health.

The name CenturyLink, formerly Qwest, is new to the Portland community as of April 1st 2011, however, the business, community and charitable partnerships with the City of Portland extend back over 100 years and we are very proud to continue that relationship under our new brand name. The investment made in Portland's infrastructure over those years is sizeable; providing the foundation for advanced broadband products and services available to Consumer, Business, Enterprise, Local Government and Federal customers. CenturyLink remains committed to deploying state of the art telecom infrastructure in Portland for broadband and voice communications.

State of CenturyLink Broadband in Portland Today - Consumer:

Currently, in the City of Portland, CenturyLink has deployed consumer broadband service on a wide scale basis and the company continues to expand broadband speeds and availability. CenturyLink provides a wide variety of consumer broadband services with download speeds ranging from approximately 1.5 Megabits per second (Mbps) up to 40Mbps and consumer upload speeds reach as high as 20Mbps. In Portland, CenturyLink provides consumer broadband service over an ever expanding fiber optic network combined with advanced copper loop connections to the home. This technology is referred to as Fiber to the Node (FTTN) architecture. This architecture combines running fiber to a remote terminal that can support local neighborhoods, then using existing copper to complete the connection up to and into the consumer's home.

While not every customer is capable of 40Mbps download speeds today, CenturyLink is unwavering in its commitment to continue to provide the faster and more robust broadband services that customers want and need as evidenced by the broadband commitments made in the Qwest-CenturyLink merger proceedings. The Company has a long track record of deploying advanced technologies to the benefit of the local communities CenturyLink serves.

Future of CenturyLink Consumer Broadband in Portland:

CenturyLink has plans to expand the broadband speeds and coverage currently available in Portland in order to deliver cutting-edge services. As an industry leader in broadband deployment, CenturyLink intends to deploy broadband infrastructure with download speeds up to 100Mbps and upload speeds up to 40Mbps. As applications are developed and customer demand warrants these speeds, CenturyLink will be well positioned to respond. CenturyLink has demonstrated a long-term relationship with the City of Portland and publicly re-state our commitment to meet our customer's broadband needs for the foreseeable future.

CenturyLink has already publicly committed to invest no less than \$45 million in broadband infrastructure in the state of Oregon over the next five years. Clearly Portland will directly and indirectly benefit from this investment in the state. While not all of this will be targeted to Portland, greater broadband availability and faster speeds statewide will ultimately benefit Portland as it enables advanced connectivity for e-commerce, health, education and government. CenturyLink recognizes the importance of broadband in the economic development and education process and has a vested interest in seeing the communities it serves benefit from advanced technologies.

CenturyLink is utilizing advanced broadband infrastructure to deploy new consumer entertainment services such as Internet Protocol Television (IPTV). CenturyLink Prism TV has launched in 8 markets nationwide. Although CenturyLink cannot officially commit to a rollout in Portland at this time, CenturyLink has shared with the City of Portland Office of Cable Communications and Franchise Management that CenturyLink is evaluating its capabilities in the Portland Market. If and when a decision is made, the community would see additional upgrades in our broadband infrastructure that would coincide with that rollout.

CenturyLink is also committed to educating consumers in Portland on the benefits of broadband service and the Company is implementing a program to make broadband service more affordable for low-income consumers. The Company will be partnering with local anchor institutions to spread the word on the availability of the Company's Broadband service for Lifeline eligible consumers. Specifically:

- In the fourth quarter of 2011, CenturyLink will offer discounted broadband service to all customers eligible for Lifeline telephone service (who do not currently have CenturyLink (or legacy Qwest) broadband service) where broadband service is available. The price for up to 1.5 Mbps of service for the first 12 months will be no more than \$9.95 per month, increasing to no more than \$14.95 per month thereafter for eligible low income customers.
- CenturyLink will also offer qualifying customers the ability to purchase Internet-ready computer equipment for no more than \$150. This offer will be available to eligible Lifeline customers who subscribe to a two-year broadband service agreement.
- CenturyLink will offer training opportunities and will promote the availability of this discounted service throughout its service territory.

Current state of CenturyLink Broadband in Portland – Business/Enterprise, Government, Education, Federal:

For our business customers, from entrepreneurs managing small companies up to the largest 1000+ employee Enterprise and Government entities, CenturyLink has the services to meet the broadband needs of its business customers. Our dedicated business sales and support team is focused on helping our business customers utilize the latest technologies delivered over our fiber-optic networks. In addition to having advanced broadband infrastructure for business and government customers, we offer a portfolio of value-added services including web hosting and cloud computing capabilities.

Business high speed internet services starts with our approximately 1.5Mbps connection and goes up to 40Mbps downstream with 20Mbps upstream. As the needs of each business or government customer grows, we also offer fiber to the premise products such as:

- Metro Optical Ethernet is now available in every one of our central offices in Portland and this service offers speed and bandwidth from 3Mbps to 1Gigabit (Gbps). This service can be used to connect offices, connect to the Internet or a varying combination. CenturyLink has invested heavily in Network Operations Centers (NOCs) to monitor and measure the network reliability for our business and government customers.
- Ethernet Private Line service provides a point-to-point, dedicated transport of a customer's Ethernet frame over a SONET backbone capable of providing speeds from 50Mbps to 1Gbps. This service is for critical applications such as data centers, multi-media, broadcasting and hosting.
- QWave is a dedicated point-to-point Dense Wave Division Multiplexing (DWDM) service that is for very heavy bandwidth organizations delivered over fiber optics including OC3 up to OC768 services. Ethernet capabilities up to 10Gbps and Storage Area Network (SAN) protocol up to 10Gbps are available.
- GeoMax is a custom designed DWDM service capable of diverse routes, proprietary protocols, SONET and Ethernet; scalable up to 40Gbps.

Future of CenturyLink Business and Government Broadband in Portland:

As previously mentioned, for businesses, our FTTN infrastructure is capable of 100Mbps download and 40Mbps upload and we are currently developing products that incorporate these greater speeds.

Also, with the recently announced acquisition of Savvis, scheduled to be completed in late 2011, together CenturyLink and Savvis will operate 48 data centers located in North America, Europe, and Asia with more than 1.9 million square feet of gross floor space; a robust, national 207,000 route mile fiber network; a 190,000 mile global access network; and have a customer list that includes a majority of the Fortune 500 and Fortune 1000 companies. CenturyLink will be positioned to provide global reach and connectivity for businesses in Portland.

Our vision to support business and government needs in Portland is to have the broadband capabilities mentioned and deliverable to ANY location in Portland. Unfortunately, that may not be economically

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feasible. However, the Company is constantly looking at ways to expand its broadband network and to upgrade existing network speeds. As the draft Portland Broadband Strategic Plan can identify clusters of business or anchor tenants, provide meaningful broadband investment encouragement and support adoption of broadband services that will enhance our ability to deliver the required bandwidth, CenturyLink would like to partner with the City to meet the evolving broadband needs of its citizens in the future. As an existing provider of broadband service with an extensive network in the City of Portland, coupled with the Company's wide-ranging portfolio of advanced data services, we look forward to partnering with the City to facilitate economic development and to enrich the lives of Portland residents via the CenturyLink broadband network.

CenturyLink's Position on the Proposed Portland Broadband Strategic Plan:

CenturyLink appreciates the vision and concern that the City of Portland has expressed regarding the deployment of advanced broadband infrastructure. As an industry leader in deploying advanced broadband capable networks and delivering and supporting the sophisticated product sets that utilize the broadband network, CenturyLink is valued partner in this endeavor. In the past we have successfully worked with local communities to foster additional private investment in broadband infrastructure by working in a collaborative manner with elected officials to examine the infrastructure needs of individual communities. We are supportive of local initiatives that establish public/private partnerships that maximize the use of existing infrastructure and public assets to extend broadband service to under and un-served areas. Examples of successful private/public partnerships CenturyLink has participated in include:

- The State of Colorado Multi Use Network (MNT) and the Colorado Telehealth Network (CTN) partnership where the State serves as the anchor tenant on the local exchange carriers's publicly available network infrastructure for the purpose of running its official business. The 10-year contract enabled CenturyLink (legacy Qwest) and its partners to invest \$60 million in broadband network capacity.
- CenturyLink has a history of partnerships with Community Anchor Institutes to deliver high capacity network services that meet their needs. In North Carolina, in 2007, a \$1.21 Million matching grant was awarded to CenturyLink to provide broadband service to four counties in North Carolina. The project included 60 sites within Gates, Warren, Jones and Greene Counties.
- CenturyLink supports existing rural business, such as in Forest Hill, Louisiana which is home to over 60 plant nurseries. Forest Hill is also the location where Louisiana Public Service Commissioner, Clyde Holloway, lives and owns the Forest Hill Nursery. Although Forest Hill Nursery had started brokering small container material to service its customers' needs by 2004, it was the CenturyLink broadband infrastructure installation in 2007 that enabled this business to (1) increase efficiencies in its existing commercial relationships, (2) increase market presence while reducing the cost of reaching larger markets, and (3) compete more effectively in the marketplace by introducing new services to its customers.

Commissioner Holloway explains, *“Broadband enables local nurseries to better showcase their products/plants to a larger consumer base. On a daily*

basis our business receives requests for photos of plants; high speed internet enables us to provide this service and therefore be more efficient, better serve and expand our customer base.”

- CenturyLink (legacy Qwest) has partnered with the Utah Education Network in support of the broadband grant that was awarded to them from the National Telecommunications and Information Administration as part of the Federal Stimulus program to construct fiber facilities that will be deployed to schools and libraries across the state of Utah.
- The Washington State University Center to Bridge the Digital Divide (CBDD) and CenturyLink partnered with economic development leadership in Alabama to expand living wage employment and business opportunities through strategic leveraging of available broadband telecommunications services available in southwest Alabama. The goal was to enable Southwest Alabama communities to successfully leverage modern information technologies to increase the number of living wage jobs and the rate of entrepreneurial business formation in their areas. CBDD and CenturyLink worked with state and local economic development leaders, to conduct training and provide consulting services to replicate proactive e-work development strategies developed within the state of Washington to the benefit of rural communities located in southwest Alabama.
- In 2006, the Idaho legislature enacted S.B. 1498 establishing the Idaho Rural Broadband Matching Fund for the purpose of making monetary awards, on a matching fund, cost reimbursement basis, to eligible applicants for rural broadband investment projects selected for funding. CenturyLink (legacy Qwest) applied for and was awarded approximately \$3.75M from this fund. Qwest matched that award with \$3.75M of its own capital that resulted in a combined total investment of \$7.5M in rural Idaho. As a result, Qwest deployed high speed Internet service in 30 rural communities and expanded its high speed Internet service in 23 additional communities by deploying approximately 125 remote terminals between the 4th quarter of 2006 and the first quarter of 2008. This investment may not have occurred at all, but certainly would not have occurred in this accelerated timeframe, without the State matching fund.
- Idaho has a long history of supporting broadband deployment, as early as 2001 the Idaho Legislature enacted and the Governor signed House Bill 377 authorizing income tax credits for the installation of qualifying broadband infrastructure in Idaho. (Idaho Code § 63-3029B(3)(a)(ii).) In particular, Section 63-3029I allows a taxpayer to receive an investment tax credit for eligible broadband equipment. “Qualified broadband equipment” is defined as those network facilities capable of transmitting signals that are at a rate of at least 200,000 bits per seconds (bps) to a subscriber and at least 125,000 bps from a subscriber. Idaho Code § 63-3029I(3)(b). To be eligible for the tax credit, the taxpayer must apply and obtain “from the Idaho public utilities commission an order confirming that installed equipment is qualified broadband equipment.” (Idaho Code § 63-3029I(4))

- In 2007, the Utah Legislature passed S.B. 268 establishing the Rural Broadband Service Fund. The legislation resulted in a \$1 million general fund appropriation to incent private industry to expand wire line broadband availability in unserved areas of rural Utah. CenturyLink (legacy Qwest) applied for grants and ultimately received reimbursement for 50 percent of the actual costs to deploy broadband to 44 previously unserved areas in rural Utah.

As broadband availability has increased, there is an increasing interest in focusing public/private partnership programs on increasing broadband subscribership, e.g., adoption in areas where broadband has already been deployed. Additional subscribers would help to overcome the economic challenges of deploying broadband to the remaining competitively un-served areas. Adoption partnership programs leverage a natural alignment of interest with businesses and community organizations.

Public policy broadband adoption strategies may include a purposeful set of targeted actions to increase consumer awareness of the benefits of broadband service, thereby increasing broadband subscribers over time and expanding the utilization of broadband services by key community institutions. The results would benefit the community and broadband providers which facilitates the ability to make additional network investments. This would also support and foster a competitive marketplace that would continue to drive new investments and product enhancements.

Ultimately the City of Portland and private providers may find “pockets” within the city that are difficult to provide with broadband competitive options. CenturyLink will gladly partner with the City to explore the alternatives in providing service to these pockets, including tapping additional sources of state and federal funding that may facilitate broader deployment. Clearly, policymakers at all levels of government are looking at ways to modernize existing communication infrastructure and as a company with national reach, CenturyLink is uniquely positioned to assist the City of Portland in reaching broadband solutions.

As an industry leading broadband provider with nationwide networks connecting local broadband infrastructure in cities like Portland, CenturyLink is not a proponent of public-owned broadband networks. Given the significant investments required to support the network as well as the scope and scale required to develop advanced data services, the City’s time and resources are better spent on other endeavors. Instead, the City and private broadband providers, such as CenturyLink, can work cooperatively to achieve the City’s broadband objectives.

The City of Portland’s Broadband Strategic Plan appears to contemplate that the only way for the goals of the plan to be realized is if the City were to insure that Fiber-to-the-Home (FTTH) infrastructure existed to every home in the city, and one way that could be accomplished is by the City of Portland extensively placing its own fiber in the public right-of-ways.

CenturyLink questions this assumption on several grounds. First, FTTH is not the only network infrastructure that can effectively deliver broadband services. CenturyLink is confident that its network architecture will support the broadband needs or demands of residential and small business consumers whether the intended broadband usage is for gaming, file sharing or streaming video. Access speeds will continue to increase in concert with the demand for applications that call for higher speeds. The Company has extensive knowledge in operating both FTTH and FTTN networks in meeting the needs of consumers and business. If the marketplace matures to a point where FTTH is

required, CenturyLink will be well suited to deploy that technology in all likelihood at a cost lower than the City can achieve.

Given the changing broadband environment, CenturyLink, like many other broadband providers, constantly monitors applications and new equipment that may be introduced in the future and their associated bandwidth needs, to insure that it upgrades its network to meet such needs. The real measure of success is delivering customers the right services and capabilities at the right time, not a pre-determined choice of technology that may or may not be the most efficient way to provide service.

Second, FTTN is currently one of the most cost-effective technologies that delivers high-bandwidth broadband speeds that consumers want. The deployment lead time is also shorter for this platform since it maximizes using the existing copper distribution network.

Third, at this time the industry has not matured to the point whereby an all FTTH network can be economically justified based on the deployment costs and the existing bandwidth demands of consumers. If and when it does become commercially viable, providers such as CenturyLink will be in the best position to deploy FTTH. In CenturyLink's experience, it costs 2-3 times more to deploy FTTH in existing developed metropolitan areas as compared to the deployment costs of a FTTN architecture.

Lastly, when the City of Portland hosted its Industry Forum on June 3, 2011, in the review of the draft Broadband Strategic Plan, it was pointed out that the city already has at least one high speed broadband service provider available to every home in the City of Portland. Based on this information, (which CenturyLink believes the City of Portland Office of Cable Communications and Franchise Management could validate for the City Council), there are no currently un-served broadband areas within the city limits. Clearly, the private market is already at work in bringing a full range of broadband product offerings to the marketplace, and this would not suggest the need for involvement by the city to install publicly owned fiber facilities to meet the goals of broadband service accessible for every resident.

CenturyLink understands that the current level of broadband deployment in the city does not mean there are competitive alternatives for every city resident, however, if the City of Portland became the competing provider, this would have a chilling effect on the willingness, and ability of additional competitive providers to serve these areas. Instead, CenturyLink encourages private investment to encourage competitive alternatives, bringing long-term advantages to the municipality and its citizens, growing the tax base and exposing taxpayers to less risk.

Municipalities generally lack the long-term resources, experience, product development and customer service resources to manage a publicly-owned broadband network over the long term. Private enterprise is best able to make continued capital investments, to continuously innovate, to bring new services to the marketplace, and have the ability to build system reserves that ensure the long-term viability and expertise customers expect from a broadband service provider. Customers of municipal communications providers may be at risk of reduced service quality, weak infrastructure, increased taxes in other areas to make up revenue shortfalls, and an inability to keep up with the rapidly changing technology facing today's communications industry.

This is not a negative reflection on municipalities; it is a reflection that no organization can meet every need of every citizen. Municipalities have a tremendous burden supporting public safety, public education and the health and welfare of its citizens, without also being the broadband communications service provider.

Citizen and business impacts of a city owned broadband infrastructure may include:

- Increased local taxes to fund the municipal network,
- Risk of sub-par broadband service without scale and scope offered by many private providers,
- Risk of broadband service obsolescence without continued investment, or
- Risk of loss of competitive options if an existing provider exits the market due to city entry.

Substantial concerns have been raised about risks of municipal efforts at broadband infrastructure ownership and operation in other communities. For instance, the UTOPIA business model in Utah is just one example. UTOPIA has over \$500 million in bond financing, has experienced millions of dollars in operating losses every year and has failed to meet projections on customers and revenues, thus requiring it to go back to its member cities for additional financing. By contrast, CenturyLink and Qwest have a proven track record of stability and economic growth with the core business of constructing facilities to provide services that customers demand.

In an effort to support a city owned FTTH broadband infrastructure the Strategic Broadband Plan proposes a “dig only once” policy where the city would place fiber facilities anytime the public right-of-way has been opened for supporting other city services. CenturyLink believes an extensive local practice of placing city owned fiber facilities beyond market-based projections due to a city mandate of a “dig only once” policy would be inefficient. Placing “extra” conduit or fiber for some possible future use would be costly, with no immediate revenue from existing demand. Moreover, technologies may evolve before a given “extra” infrastructure is utilized.

In addition, the stated goal of sharing the city owned fiber piecemeal with other broadband providers may not be feasible for large and complex providers who need to integrate their fiber inventory into their provisioning and repair monitoring systems.

However, if the City of Portland were to have a policy of informing broadband providers when the rights-of-way would be open, such as a city construction event, and a fair, equitable and non-discriminatory way of sharing the cost of accessing that right-of-way were established, then CenturyLink may choose to expand its facilities with the access provided via such an event. Any expansion of CenturyLink facilities would be reviewed at that time, and the decision would be driven by market based decisions, e.g., weighing capacities of existing facilities, technology of existing facilities, cost of upgrades to facilities, and anticipated local demand or growth in the area.

In summary, from the perspective of new fiber placements – all capacity enhancement decisions should be made by the broadband provider based upon market decisions, not solely upon a city mandate.

The City of Portland Broadband Strategic Plan rightly recognizes that broadband is an economic development tool and continued broadband investment should be encouraged and there are many ways in which municipalities can contribute to this effort.

Examples include:

- To foster anchor tenants for broadband services, such as establishing incentives for businesses to locate, remain, and grow urban development areas by limiting business regulation and business tax levels.
- Identify or establish community centers and other anchor institutions with public access to broadband services.
- Sufficiently fund the technology budgets of municipal agencies such as police, hospital, fire, schools, etc. to ensure they too are positioned to take full advantage of broadband network services.
- Ensure local public schools systems adequately train students in the area of technology.
- Additional examples of win-win partnerships (from Dr. Bill Gillis, with VisionTech 360, a consulting group specializing in low income adoption programs. Dr. Gillis was formerly the Director of the “Center to Bridge the Digital Divide” Washington State University, Pullman, WA):
 - **Libraries and nonprofits** – Outreach to local networks delivering targeted awareness and digital literacy education.
 - **Community hospitals** – Piloting new home health applications within local area.
 - **Local government** – Organizing local stakeholders around collaborative initiatives to improve the permitting and regulatory environment for broadband investment.
 - **Public safety** – Joint application for federal funding to upgrade the local network to Next Generation E-911.
 - **Builder and broadband provider partnerships** – Creating local demonstrations of “connected homes.”

Moreover, municipalities should work to establish business-friendly environments. Private broadband service providers will naturally seek government partners that encourage investment and offer lower cost facility placement and fewer regulatory hurdles. In addition to promoting public awareness and training, the City could:

- Provide incentives for existing providers who have a history of successful, sustainable deployment to deliver broadband service to un-served areas before the City considers entering the market themselves as a broadband service provider.
- Encourage private broadband investment through limiting local taxes, rights-of-way, franchise, utility pole attachments and similar fees assessed to private broadband providers.
- Allow placement of cabinets and equipment above ground in the public right-of-way in those instances where a broadband service provider cannot secure a private easement and reduce the public comment cycle from the proposed 30 days to 15 days.
- Minimize the level of restoration required for street cuts (street or concrete patch in lieu of full panel replacement).
- Allow broadband providers to recover facility relocation costs incurred from municipal or other non-provider construction projects.

- Recognize that the marketplace is already extremely competitive and should treat wireline and wireless providers in an equitable manner when developing and applying communications tax policy.
- Have any city provided communications service subject to the same regulations as private broadband providers with regard to price, service quality, etc., to ensure parity and to safeguard the competitive marketplace.
- Any city provided communications service would not be allowed to utilize facilities acquired pursuant to their role as a right of way administrator to provide that service. For example, “spare” fiber optic facilities turned over to a municipality in exchange for the granting of permission to a private company to place facilities in a public right-of-way.

Conclusion:

CenturyLink looks forward to partnering with the City of Portland to encourage private investment in the broadband infrastructure that the city requires to meet the evolving needs of its citizens to compete locally, nationally and globally. Private broadband service providers, including CenturyLink, highly value the communities we serve and seek to continue constructive relationships with community leaders in an effort to maximize the value of broadband networks. The power of such networks greatly enhances the productivity of local businesses and improves the lives of its citizens.

The purpose of these comments is not to discourage a Broadband Strategic Plan, but rather to inform the Council about the complexities and potential conflicts of publicly owned communications infrastructure and to encourage a Broadband Strategic Plan that encourages public/private partnerships, a competitive marketplace, expanded private broadband investments via reduced facility placement costs and city sponsored adoption programs.