



January 4, 2017

*Via E-Filing and U.S. Mail*

Oregon Public Utility Commission  
Attn: Filing Center  
P.O. Box 1088  
Salem, OR 97308-1088  
[Puc.filingcenter@state.or.us](mailto:Puc.filingcenter@state.or.us)

**RE: UM 1354 – Price Plan Performance Report**

Dear Commission:

Attached for filing, please find CenturyLink QC's Price Plan Performance Report. The Confidential Exhibit 1 is printed on yellow paper, sealed in a separate envelope, and was mailed via regular U.S. Mail.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Philip E. Grate".

Phil Grate  
Regulatory Affairs Director

Attachment

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**QWEST CORPORATION DBA CENTURYLINK QC  
PRICE PLAN PERFORMANCE REPORT  
DOCKET UM 1354**

On October 3, 2014, in Order No. 14 346 in Docket UM 1354, the Oregon Public Utility Commission (the Commission) adopted a Price Plan for Qwest Corporation's Oregon operations (hereafter referred to as "CenturyLink QC"). CenturyLink QC's Price Plan that was adopted by the Commission resulted from a stipulation among a number of parties including Commission Staff, the Citizens' Utility Board of Oregon, Integra Telecom of Oregon, Inc. and its affiliates ("Integra") and the Telecommunications Ratepayers Association for Cost-based and Equitable Rates ("TRACER"). On September 27, 2016 CenturyLink QC notified the Commission of the company's election to extend the term of the Price Plan by an additional (fourth) year. Thus, the Price Plan expires October 3, 2018.

Section V of the Price Plan sets forth provisions requiring the Commission to complete a review of CenturyLink QC's performance under the Price Plan every three years. To commence the three year review, CenturyLink QC is required to file a report regarding its performance as compared to the objectives of the plan by the 90<sup>th</sup> day of the third year of operation under the plan. This report provides the information required by Section V of the Price Plan and includes the following sections:

- Section A – Provides an analysis of current market conditions for the various categories of CenturyLink QC's regulated retail telecommunications services to the extent such information is publicly available.
- Section B – Provides data regarding the gain or loss of access lines, organized by CenturyLink QC Oregon wire center.
- Section C – Provides a discussion of how the pricing flexibility of the Price Plan allows CenturyLink QC to meet the Price Plan's objectives.
- Section D – Provides a summary of CenturyLink QC's performance for the review period with respect to the Commission's retail service quality standards.
- Section E – Provides a report of CenturyLink QC's progress towards completion of network investment and other specific commitments set forth in the Price Plan.
- Section F – Identifies any new services CenturyLink QC has introduced.
- Section G – Provides a discussion of the ways in which the burden of regulation for both CenturyLink QC and the Commission has been simplified or reduced.

## **A. THE OREGON LOCAL EXCHANGE MARKET**

### **1. Summary**

As described below, the telecommunications market in Oregon is exceptionally competitive, and the mix of competitive telecommunications alternatives continues to grow and evolve. Traditional competitors continue to aggressively compete with CenturyLink QC. They include the major cable companies, such as Comcast, Charter and BendBroadband, that serve much of CenturyLink QC's Oregon territory including most of the major cities and towns, and a number of Competitive Local Exchange Carriers ("CLECs") such as Integra, XO, AT&T, and Verizon. At the same time, intermodal voice services from wireless companies such as AT&T, Verizon, Sprint and T-Mobile, and Voice over Internet Protocol ("VoIP") services from companies like Vonage and Google, have gained a significant share of the telecommunications market in the state. Oregon consumers and businesses have numerous alternatives to meet their local voice calling and broadband needs. The Oregon telecommunications market is competitive, and there is no reason to conclude that the expansion of competitive alternatives will subside as new technologies are developed and customer preferences evolve.

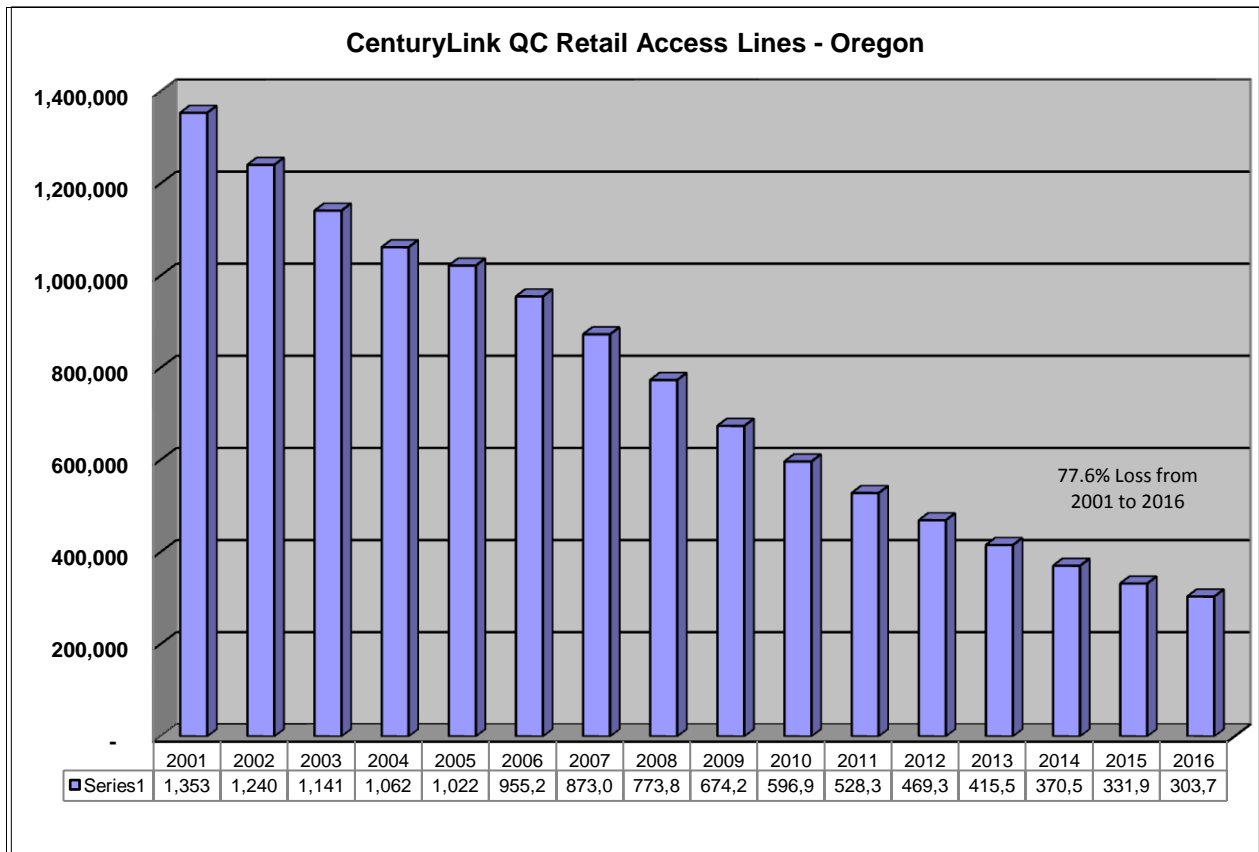
Some of these competitors offer services to customers by purchasing wholesale services from CenturyLink QC (including unbundled network elements, CenturyLink QC Local Services Platform ("CLSP"), Special Access, and the resale of CenturyLink QC's retail services) while many other competitors--including cable providers, wireless carriers and certain CLECs--offer services to customers over their own facilities. CenturyLink QC's wireline services also face competition from non-voice services such as email, texting, internet communication and social networking sites. These services provide users with the ability to communicate instantly across a wide variety of platforms and customer equipment.

As competition for voice communications services has increased, CenturyLink QC has lost over three quarters of its Oregon access lines. Between December 2001 and September 2016, CenturyLink QC retail access lines in Oregon declined 77.6%, from 1.354 million to .304 million.<sup>1</sup> During the time period that CenturyLink QC's current Price Plan has been in place

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<sup>1</sup> Residential retail access lines dropped 82.1% and business retail access lines dropped 66.1% over this time frame.

(October 2014 to September 2016), CenturyLink QC access lines declined 19.3% from 376,422 lines in October 2014 to 303,738 lines in September 2016.<sup>2</sup>



The damage competitors have inflicted on CenturyLink QC’s regulated telephone business is worse than a nominal 77.6% access line loss because line loss alone disregards substantial growth in the customer base for Oregon’s voice services. Over the period of CenturyLink QC’s access line decline, U.S. Census data show significant increases in both Oregon population and Oregon households. Over the fourteen years ended July 2015 Oregon’s population increased 16%<sup>3</sup> and the number of Oregon households increased 16.3%<sup>4</sup>. Accounting for Oregon’s 16% population increase requires multiplying CenturyLink QC’s 77.6% Oregon access line loss by 116% which yields a population growth-adjusted competitive loss of 90%.

<sup>2</sup> Residential retail access lines dropped 23.1% and business retail access lines dropped 13.6% over this time frame. See Confidential Exhibit 1 for supporting information, including wire center level detail.

<sup>3</sup> From 3,472,867 people in July 2001 to 4,028,977 people in July 2015. See: <http://www.census.gov/popest/data/state/totals/2015/index.html>

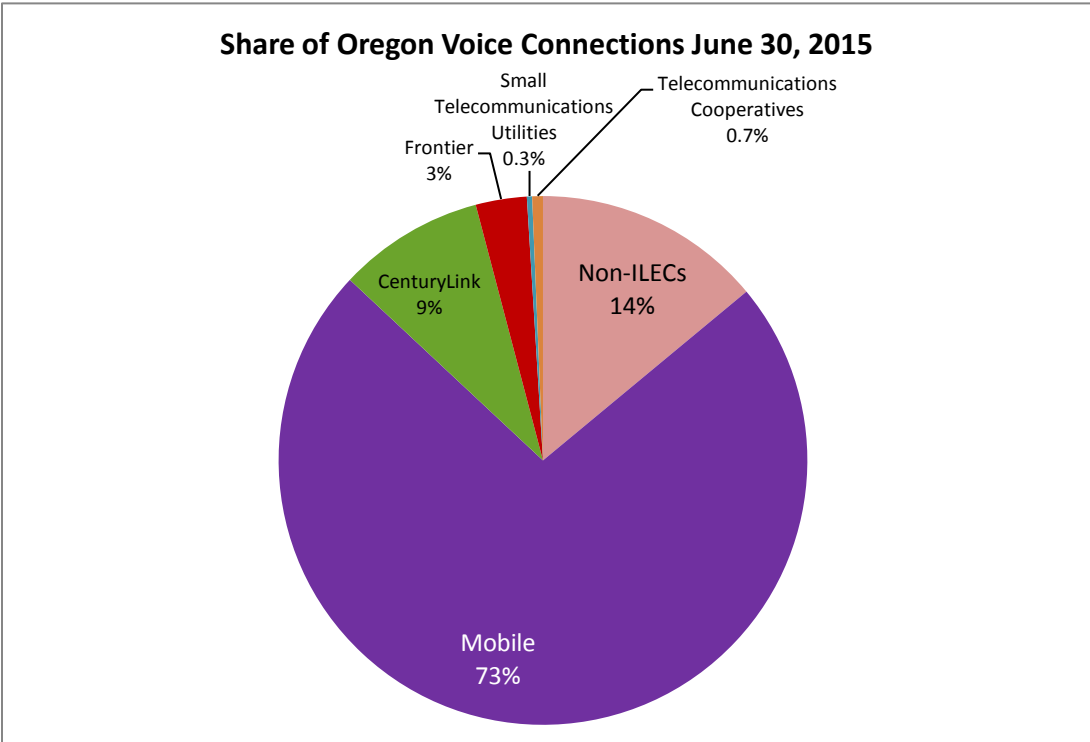
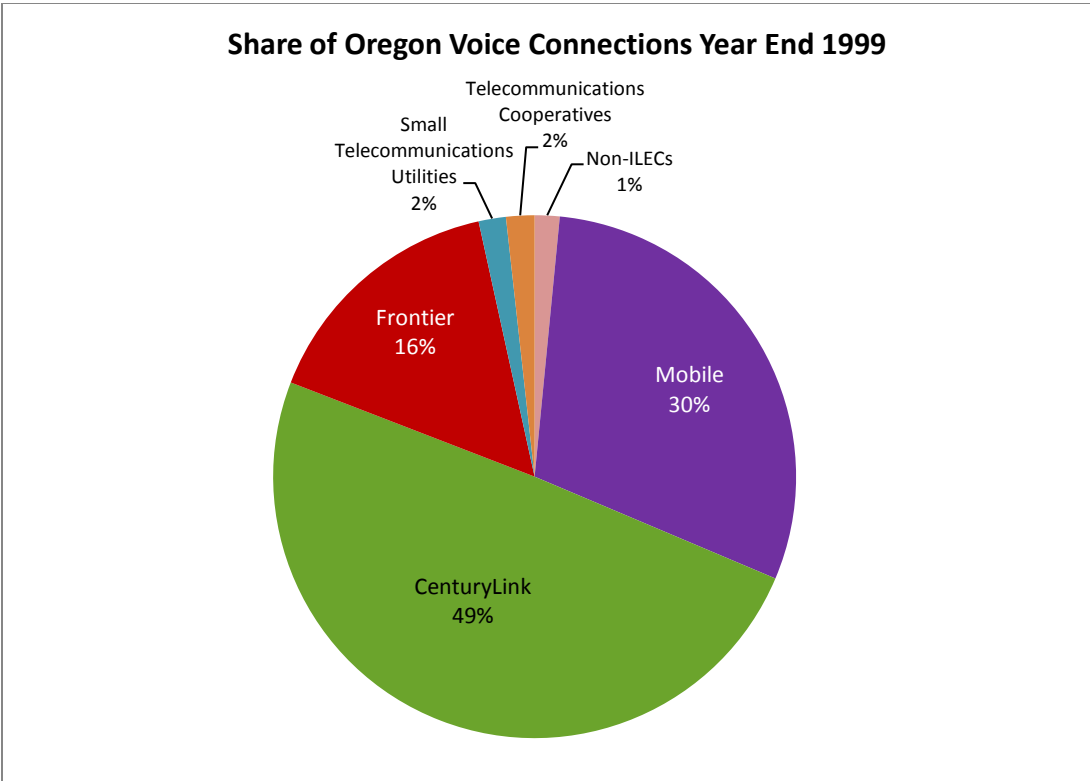
<sup>4</sup> From 1,476,996 households in July 2001 to 1,718,409 household in July 2015 See: <http://www.census.gov/popest/data/housing/totals/2015/index.html>

As Oregon has grown, demand for voice communications services in Oregon has grown with it. Increases in Oregon households and population notwithstanding, CenturyLink QC's retail residential access line base in Oregon has fallen sharply since 2001. These divergent trends—growth in population and households; decline in access line counts—demonstrate that an ever increasing portion of consumers avail themselves of the wide array of competitive alternatives to CenturyLink QC's wireline voice telephone services. As CenturyLink QC's access lines decline, more consumers satisfy their telecommunications needs with services provided by cable telephony providers, wireless providers, Voice over Internet Protocol (“VoIP”) providers and CLECs.

Every six months the FCC compiles voice connection data for

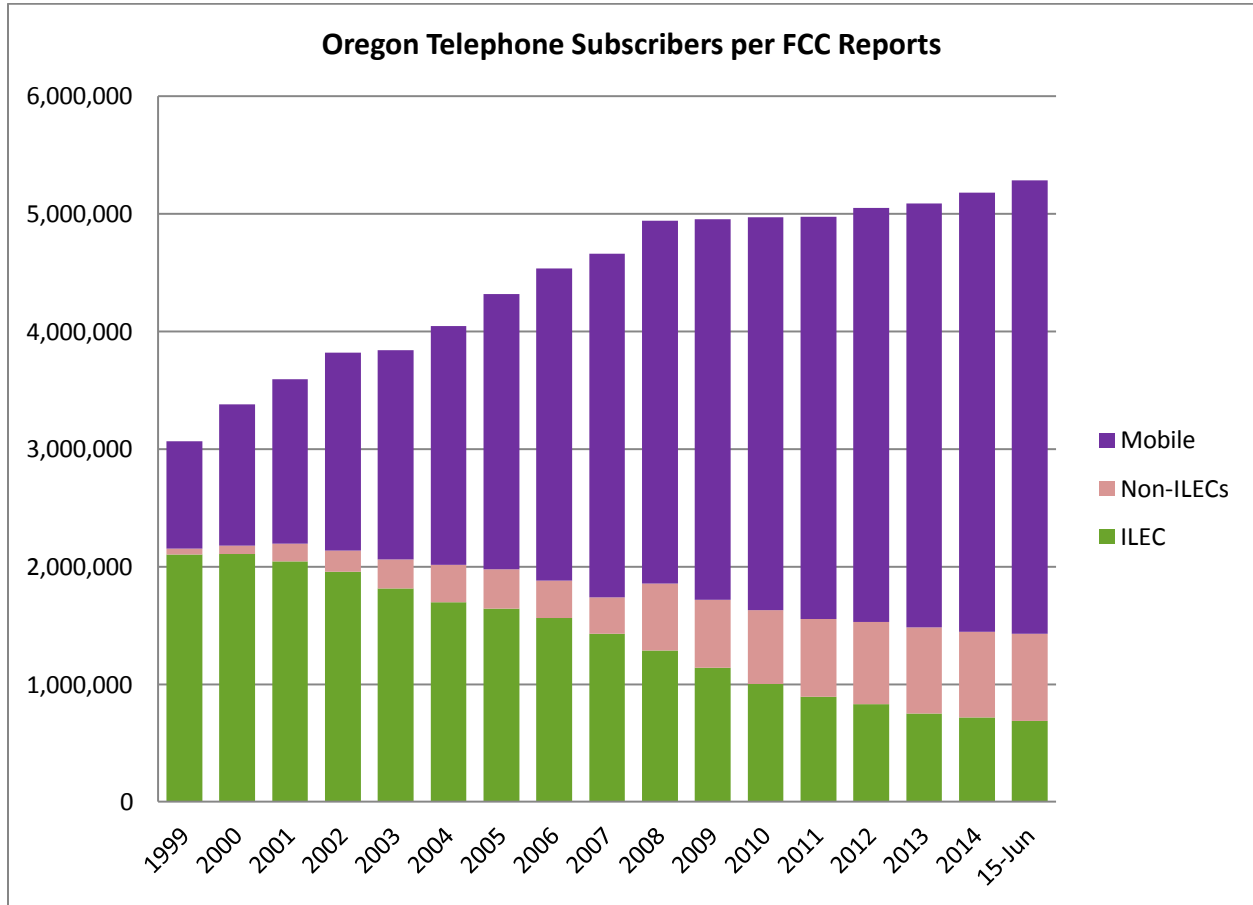
- CLECs (such as Comcast, XO and Integra);
- Wireless providers (such as Verizon, AT&T, T-Mobile and Sprint) and
- Incumbent Local Exchange Carriers (“ILECs” such as CenturyLink QC, CenturyTel and Frontier),

The FCC presents this data in its *Voice Telephone Services Reports*. These reports demonstrate how CenturyLink QC and other ILECs' share of the voice market in Oregon has shrunk as customers have migrated from the ILECs to cable, wireless, CLEC and VoIP service providers. The following two charts chronicle the change in the share of voice connections in Oregon.



The charts show wireless providers' share (including residence and business lines) grew from 30% in 1999 to 73% in 2015. The non-ILEC share grew from 1% in 1999 to 14% in 2015. The ILEC share (CenturyLink, Frontier, Coops and Rural ILECs) shrank from

69% in 1999 to 13% in 2015.<sup>5</sup> The following chart shows the overall growth in voice subscriptions (from 3.1 million in 1999 to 5.3 million in 2015) and shows the migration of customers from ILECs such as CenturyLink to other wireline and wireless providers over the past fifteen and a half years.

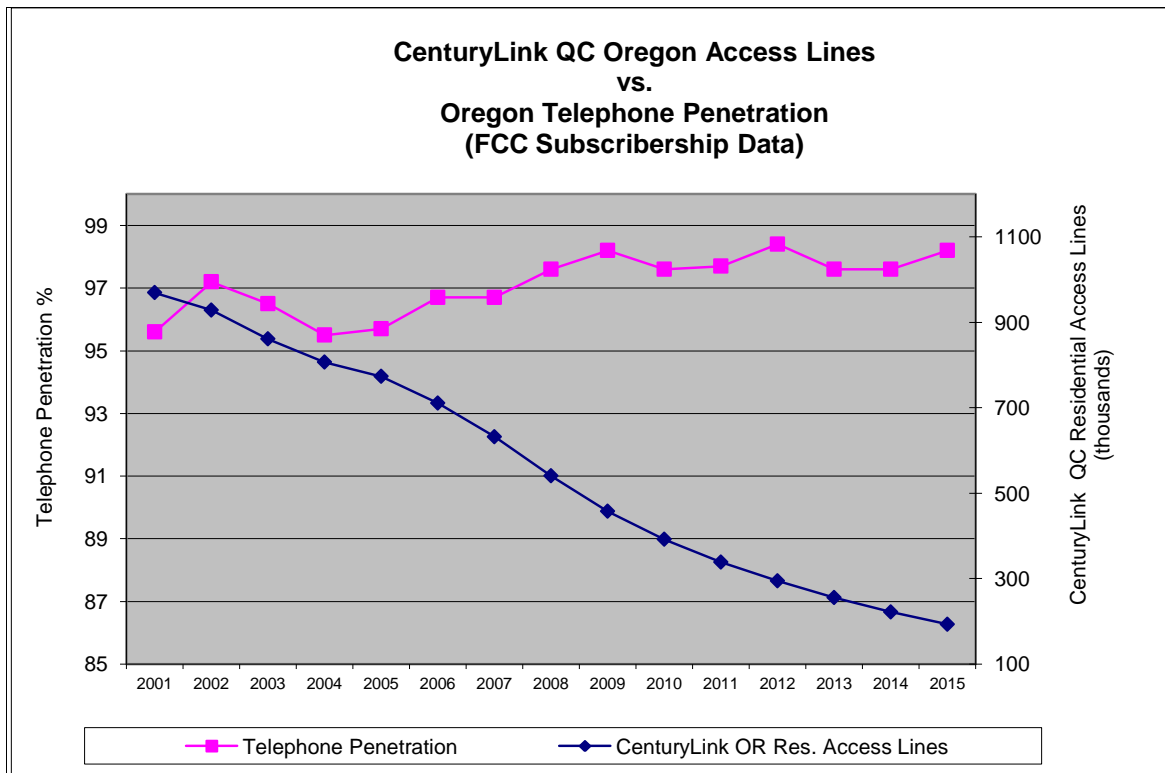


FCC subscribership penetration data also reveal how consumers have steadily increased their use of multiple local service options, including voice-over-cable, wireless voice services and VoIP-based voice services. When the FCC evaluates telephone subscribership (and develops penetration percentages), it considers all local exchange options—including wireless, cable and VoIP—because these are readily available voice service options available to consumers.<sup>6</sup> The

<sup>5</sup> *Voice Telephone Services : Status as of June 30, 2015*; Industry Analysis and Technology Division, Wireline Competition Bureau, August 2016, Supplemental Table 1. Voice Subscriptions – Oregon, <https://www.fcc.gov/wireline-competition/voice-telephone-services-report>

<sup>6</sup> The U. S. Census Bureau’s Current Population Survey (“CPS”), which is used to develop telephone penetration data, asks the following question: “Does this house, apartment, or mobile home have telephone service from which you can both make and receive calls? Please include cell phones, regular phones, and any other type of telephone.” And, if the answer to the first question is “no,” this is followed up with, “Is there a telephone

chart below shows that in the past decade the telephone subscriber penetration rates in Oregon have remained relatively steady even as CenturyLink QC has consistently lost access lines. These data demonstrate that if a customer is dissatisfied with any aspect of CenturyLink QC’s service—including rates, service quality, billing or any other aspect of CenturyLink QC’s service—he or she is likely to choose a competitive provider rather than go “phoneless.” The following chart shows CenturyLink QC’s decline in Oregon *residential* access lines along with the FCC’s Oregon telephone penetration rate since 2001.<sup>7</sup>



The maintenance of a 96% to 98% telephone penetration rate (pink line) in the face of steeply declining CenturyLink residential access line counts (blue line) demonstrates that, instead of going without voice service, Oregon consumers have been replacing CenturyLink and other ILEC telephone service with voice service from cable telephony, wireless and VoIP-based providers.

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elsewhere on which people in this household can be called?" If the answer to the first question is "yes," the household is counted as having a telephone "in unit." If the answer to either the first or second question is "yes," the household is counted as having a telephone "available." *Universal Service Monitoring Report, 2015*, Federal Communications Commission, See: [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-337019A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-337019A1.pdf)

<sup>7</sup> *Id.*, Table 3.



The sections below provide additional detail on the current market conditions and competitive alternatives being offered in Oregon.

## **2. Wireline competition**

### **a. Cable Telephony**

Cable companies provide voice service (along with video and high speed internet) throughout CenturyLink QC's Oregon serving territory. Comcast, Charter and BendBroadband are major cable companies, offering digital voice and broadband service to customers in many parts of the state, including major cities such as Portland, Salem, Eugene, Medford and the Bend/Redmond areas. Cable voice service is now available to customers in 79 of CenturyLink QC's 82 wire centers in Oregon, and these wire centers comprised 99.6% of CenturyLink QC's access lines in Oregon as of September 30, 2016.<sup>8</sup> Thus, voice service from cable companies is now available to the vast majority of CenturyLink QC's customers in Oregon.

Cable companies provide voice service over their own coaxial/fiber facilities, and sometimes partner with wholesale providers to offer a complete array of local voice services. The voice services provided via cable telephony include local calling, long distance calling and calling features, and are functionally equivalent to the services that are offered by CenturyLink QC. Some cable providers use VoIP-based technology, but these are managed services that do not utilize the public internet. Because voice-over-cable providers utilize their own networks and facilities, they do not rely on CenturyLink QC's wholesale network elements in the provision of their voice services.

Comcast, Charter and other cable companies offer a broad range of telecommunications services to residential and business customers in Oregon, as described below. These offerings demonstrate that voice-over-cable service providers see the provision of voice service as a key ingredient in their strategy to expand their customer bases and improve revenue streams by driving up the number of customers purchasing multiple services in addition to cable television service.

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<sup>8</sup> While cable providers serve at least some customers in these communities, each company may not offer services to all of the areas served by CenturyLink in each wire center.

## **b. Competitive Local Exchange Carriers (“CLECs”)**

According to data from the Commission’s 2015 Competition Survey<sup>9</sup>, there were 206 CLECs certified in Oregon, with 153 of those CLECs providing services and 66 of those CLECs providing local exchange switched service. While not all certificated providers currently offer voice services in Oregon, there are—in addition to Comcast, Charter and other cable providers—numerous unaffiliated CLECs actively competing with CenturyLink QC for customers in Oregon, including Integra, XO, AT&T, and Verizon and many smaller CLECs. *Most* of these CLECs are primarily focused on serving business customers. In many cases these carriers provide service using their own facilities and in other cases they provide service by leasing CenturyLink QC facilities (e.g., resale, CenturyLink QC Local Services Platform (“CLSP”) or Unbundled Loops (UNE-L)). CLECs serve business and governmental customers of virtually all sizes.

## **3. Wireless Competition**

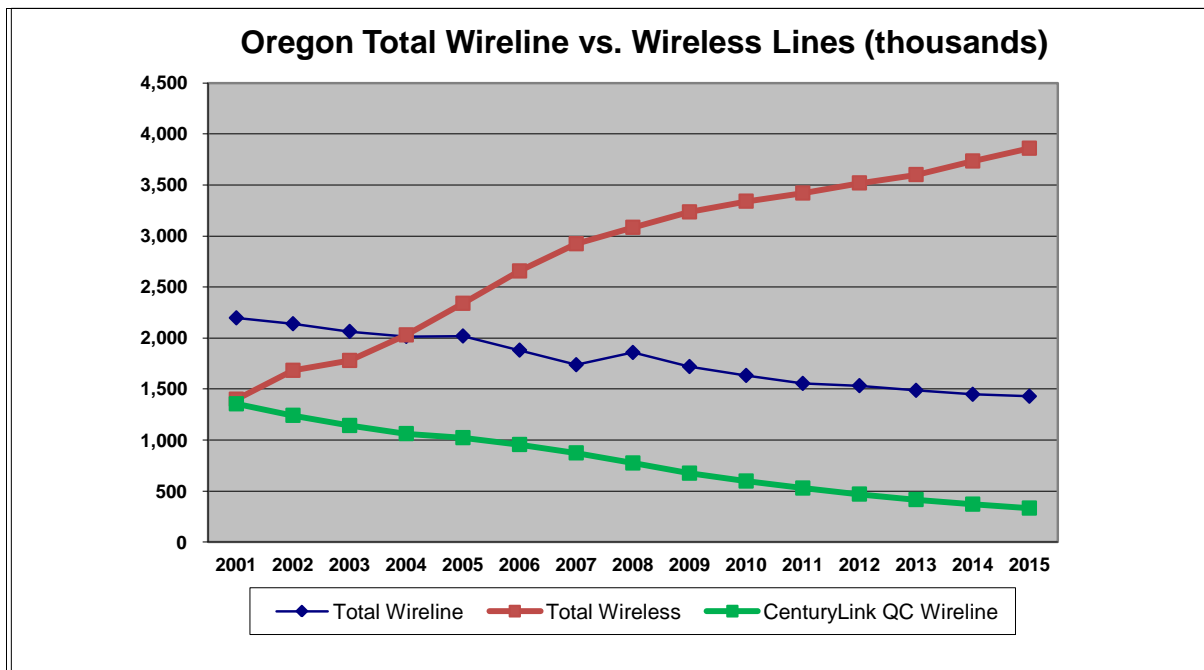
FCC data<sup>10</sup> show that at June 30, 2015 wireless providers served 73% of the total Oregon access line market. Data obtained from FCC reports on telephone service subscribership,<sup>11</sup> indicate that wireless subscriptions in Oregon have increased 322% over the past 16.5 years from 0.915 million at year end 1999 to 3.859 million as of June 30, 2015. Over that same period, ILEC access line counts shrank 67% from 2.105 million at year end 1999 to 0.689 million at July 1, 2015. While wireless subscriptions have more than tripled since 1999, CenturyLink QC access lines (residence and business) in Oregon have dropped 77.6% since 2001—from 1.354 million in December 2001 to .304 million in September 2016. The following graph shows the relationship of wireless connections, total wirelines and CenturyLink QC access lines in Oregon:

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<sup>9</sup> Local Telecommunication Competition Survey, 2015 Annual Report, Public Utility Commission of Oregon, December 2015.

<sup>10</sup> *Voice Telephone Services : Status as of June 30, 2015*; Industry Analysis and Technology Division, Wireline Competition Bureau, August 2016, Supplemental Table 1. Voice Subscriptions – Oregon, <https://www.fcc.gov/wireline-competition/voice-telephone-services-report>.

<sup>11</sup> See the FCC’s [Local Telephone Competition Reports](#) and [Voice Telephone Services Reports](#).



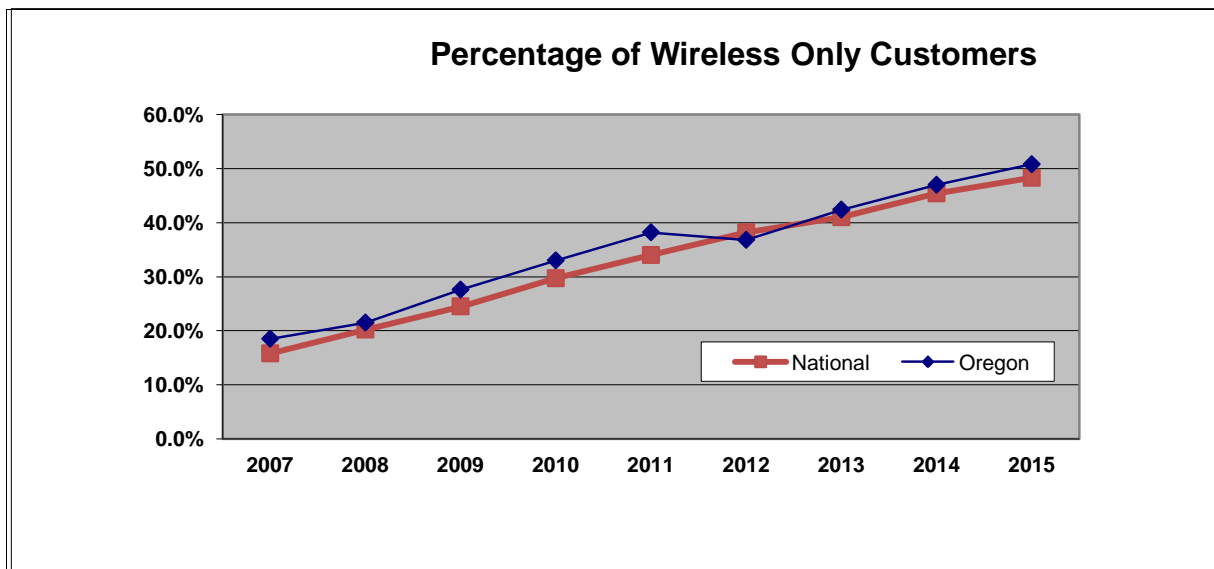
Except for a very few consumers located in extremely remote areas, most Oregon consumers have wireless options. Exhibit 2 (page 3) provides a map showing the areas served by CenturyLink QC, along with the areas with wireless coverage in Oregon based on mobile voice deployment data as reported by the wireless carriers via Form 477.<sup>12</sup> The map demonstrates that there are hardly any areas within CenturyLink QC wire centers boundaries that have no wireless coverage, and then only in the most sparsely populated areas. Thus, very few Oregonians actually live in the areas without wireless service.

The large national wireless companies, including AT&T, Verizon, Sprint and T-Mobile each have a large presence in Oregon. There are also regional wireless carriers providing service in Oregon such as US Cellular. Exhibit 2 (pages 4-8) provides maps for each of these carriers that show the wireless coverage area based on mobile voice deployment data as reported by the wireless carriers on Form 477 overlaid on the CenturyLink QC serving territory in the state. These maps show that AT&T, Verizon, Sprint, T-Mobile and US Cellular provide services across the vast majority of CenturyLink QC’s serving area. That broad coverage allows nearly all customers to choose from multiple wireless providers.

<sup>12</sup> Source: Form 477 mobile voice deployment data as of December 31, 2015 from <https://www.fcc.gov/mobile-deployment-form-477-data>

The decline in CenturyLink QC landlines, coupled with the tripling of wireless connections, demonstrates that Oregon customers increasingly view wireless phones as a substitute for wireline service, and that wireless phones are replacing wireline service. In fact, more than half of all Oregon households have already “cut the cord,” and rely solely on wireless service to meet their telecommunications needs.

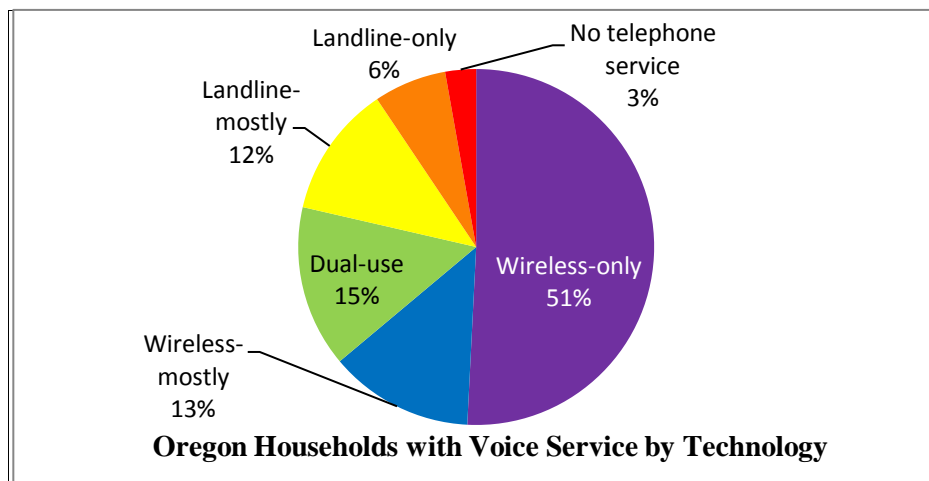
The National Center for Health Statistics (“NCHS”) routinely surveys Americans about a variety of issues including their access to voice services. NCHS uses this survey data to issue periodic Wireless Substitution reports. In August 2016, the NCHS released a detailed analysis of its Wireless Substitution report—with state-specific data—for the January through December 2015 timeframe. For this time period, the NCHS found that 50.8% of adult Oregon households were “wireless-only,” which reflects a slightly higher percentage of cord-cutters than the national average of 48.3% for the same time period.<sup>13</sup> The chart below shows the wireless-only percentages – both nationally and Oregon specific – and demonstrates that the increase in the percent of wireless-only households in Oregon tracks with and slightly exceeds the national increase.



The trend towards wireless-only adoption seems destined to continue, especially because many Oregon households that are not wireless-only are “wireless-mostly.” Utilizing information

<sup>13</sup> Centers for Disease Control and Prevention, National Center for Health Statistics, Wireless Substitution: State-level Estimates From the National Health Interview Survey, 2010-2011, released August 2016, Table 1. [http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless\\_state\\_201608.pdf](http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless_state_201608.pdf)

from the August 2016 NCHS survey results for Oregon, the chart below graphically depicts just how deeply wireless service has penetrated the Oregon voice communications marketplace for consumer customers.



The NCHS survey estimates that another 13.1% of Oregon households fall into the wireless-mostly category (the blue shaded area on the pie chart above). Wireless-mostly households are prime candidates for “cutting the cord” because they already depend on their wireless service for most of their voice needs. As the steady increase in wireless-only adoption shows, households making little use from their wireline service are more likely to determine they do not get enough benefit from wireline service to justify the cost.

#### **4. Voice over Internet Protocol (VoIP) Competition**

It is useful to describe VoIP services as either “managed” or “over-the-top.” Generally, cable companies offer “managed” VoIP-based services that are non-portable and that carry traffic over private managed networks, rather than the internet. Many other companies, such as Vonage, Google and MagicJack offer “over-the-top” VoIP services, which rely on a third-party broadband connection, and transmit calls over the public internet. These companies often offer “portable” VoIP services that can be used over any high speed internet connection. Because cable VoIP services were addressed above, this section describes “over-the-top” VoIP services.

From a customer perspective, VoIP service functions in a manner similar to standard circuit switched telephony, and allows a customer to utilize a standard telephone set to originate and receive telephone calls using the same dialing patterns that are used for standard wireline

telephone service.<sup>14</sup> To utilize VoIP services, a customer must have a high speed connection, such as Digital Subscriber Line (“DSL”), a high-speed wireless connection, satellite broadband, or a cable modem. The FCC describes VoIP as follows: Interconnected VoIP service “(1) [e]nables real-time, two-way voice communications; (2) [r]equires a broadband connection from the user’s location; (3) [r]equires IP-compatible customer premises equipment (CPE); and (4) [p]ermits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.”<sup>15</sup>

VoIP telephone service is a rapidly growing communications technology that clearly represents a competitive alternative to traditional landline-based telephone services in Oregon. As described earlier, the FCC includes VoIP-based telephone service when it is developing telephone subscribership data, and the FCC now includes VoIP-based services in its *Voice Telephone Services Report*. Starting with the data reported for 2014, the FCC has solicited information on VoIP service to differentiate between “over-the-top” interconnected VoIP subscriptions from other interconnected VoIP subscriptions. As noted in the most recent *Voice Telephone Services Report*, non-ILEC VoIP subscriptions in Oregon increased to 583,000 in June 2015.<sup>16</sup> In addition, the FCC reported an additional 56,000 over-the-top interconnected VoIP subscriptions as of June 2015. VoIP-based telephone offerings represent an increasing and significant form of competition for CenturyLink QC’s local exchange service.

While it is very difficult to obtain accurate subscribership information regarding VoIP services in Oregon, VoIP is clearly a rapidly growing communications technology that represents a competitive alternative to traditional landline-based telephone services. “Over the Top” VoIP-based telephone service, which is typically offered as a package that includes unlimited local and

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<sup>14</sup> VoIP setup is simple—a standard telephone is simply plugged into a VoIP adaptor (provided by the VoIP carrier), which is connected to a broadband internet modem. From the standpoint of the customer, VoIP works just like traditional phone service, except that it provides additional features and functionality.

<sup>15</sup> *In the Matter of Connect America Fund A National Broadband Plan for Our Future Establishing Just and Reasonable Rates for Local Exchange Carriers High-Cost Universal Service Support Developing an Unified Intercarrier Compensation Regime Federal-State Joint Board on Universal Service Lifeline and Link-Up*, WC Docket No. 10-90, GN Docket No. 09-51. WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109, Notice of proposed rulemaking and further notice of proposed Rulemaking, FCC 11-13, released February 9, 2011 (“*ICC/USF NPRM*”), footnote 923.

<sup>16</sup> *Voice Telephone Services: Status as of June 30, 2015*; Industry Analysis and Technology Division, Wireline Competition Bureau, August 2016, Supplemental Table 1. Voice Subscriptions – Oregon, <https://www.fcc.gov/wireline-competition/voice-telephone-services-report>.

long distance service plus an array of calling features, is now readily available from a broad range of providers to *any customer in Oregon that has high-speed broadband internet access*. And it is clear that broadband availability and subscribership will increase over time, especially given the current initiative by the FCC to provide universal service funding for broadband through its Connect America Fund. In fact, the FCC acknowledged how increases in broadband availability will stimulate VoIP usage: “The deployment of broadband infrastructure to all Americans will in turn make services such as interconnected VoIP service accessible to more Americans.”<sup>17</sup>

Broadband access has been increasing rapidly in Oregon. According to the FCC’s latest *Internet Access Services Report*, ADSL broadband connections in Oregon have grown from 57,899 in December 2001 to 317,000 in June 2015—an increase of approximately 475 percent, and cable modem broadband connections in Oregon have grown over this timeframe from approximately 100,000 to 831,000—an increase of 731 percent.<sup>18</sup> As of June 2015, according to the FCC, there were 317,000 ADSL connections, 831,000 cable modem connections, 52,000 fiber connections, 18,000 fixed wireless broadband connections, 2,983,000 mobile wireless broadband connections, and 37,000 other broadband connections, for a total of 4.238 million broadband connections.<sup>19</sup> Thus, the number of broadband connections in Oregon far exceeds the 303,700 total CenturyLink QC basic exchange access lines that were in service in Oregon on September 30, 2016. According to the FCC, as of June 2015, 75% of residential households subscribe to a broadband connection from one of the 98 broadband providers in the state.<sup>20</sup> Thus, competitive broadband services are now widely available from multiple providers in Oregon, and these services have been embraced by a rapidly increasing number of customers. Each broadband connection represents an existing or potential VoIP subscriber.

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<sup>17</sup> ICC/USF Order, ¶67

<sup>18</sup> Internet Access Services: Status as of June 30, 2015, FCC Industry Analysis and Technology Division, Wireline Competition Bureau, August 2016, Figure 36, and High Speed Services for Internet Access: Status as of December 31, 2007, FCC Industry Analysis and Technology Division, Wireline Competition Bureau, January 2009, Tables 11 & 12.

<sup>19</sup> Internet Access Services: Status as of June 30, 2015, FCC Industry Analysis and Technology Division, Wireline Competition Bureau, August 2016, Figure 36.

<sup>20</sup> *Id.*, Figures 34 and 38.

CenturyLink QC broadband service subscribers have the option of utilizing their CenturyLink broadband connection (or a broadband connection from another provider) to subscribe to VoIP service from another provider, in lieu of traditional CenturyLink QC local exchange services. Residential and business customers within CenturyLink QC's service territory in Oregon may subscribe to CenturyLink QC broadband service on a "stand-alone" basis; they are not required to subscribe to standard CenturyLink QC local exchange service as a precondition to subscribing to CenturyLink QC DSL service. These customers may order VoIP telephone service from a wide range of non-CenturyLink QC VoIP providers as a replacement for CenturyLink QC basic exchange service. Numerous companies offer VoIP services in Oregon, including Vonage, Lingo, 8x8, MagicJack, VoIP.com, viatalk, Intalk, PhonePower, CallCentric, VoIPYourLife and many others. VoIP providers offer very attractively priced phone services that are functionally equivalent or substitute services to CenturyLink telephone service and are readily available at highly competitive rates, terms and conditions.



## **B. CENTURYLINK QC ACCESS LINE GAIN OR LOSS**

As described in greater detail in Section A of this report, CenturyLink QC continues to face significant competition in its Oregon markets. As competition for voice communications services has increased, CenturyLink QC has continued to experience declines in access line volumes. During the time period that CenturyLink QC's current Price Plan has been in place (October 2014), CenturyLink QC access lines declined by 17.8% from 376,422 lines in October 2014 to 303,738 lines in September 2016. Residential retail access lines declined 20.5% and business retail access lines dropped 13.5% over this time frame. Confidential Exhibit 1 provides access lines counts organized by CenturyLink QC Oregon wire center for the period 2001 through September 2016.

## C. PRICING FLEXIBILITY

### 1. Introduction

CenturyLink QC's Price Plan was designed to achieve the following objectives with respect to pricing flexibility:

- Allow CenturyLink QC to price other services competitively with services offered by alternative providers, including those using landline, wireless, cable, and VoIP technologies.
- Increase CenturyLink QC's pricing flexibility to meet changing market conditions.

The Price Plan established price or rate increase caps for services subject to the plan. At the initiation of the Price Plan in October 2014, rates for all services covered by the plan were set at pre-plan levels. Noted below is information on CenturyLink QC's use of the pricing flexibility established in the Price Plan for the major categories of services.

### 2. Summary of Pricing Flexibility Utilized

**Non-recurring charges for residential primary line basic service.** Under the current Price Plan, non-recurring charges associated with residential primary line basic service may increase a maximum of \$10 during the period of the Price Plan. CenturyLink QC has not modified the rates for non-recurring charges for residential primary line basic service since the effective date of the current Price Plan.

**Recurring charges for residential service.** Under the current Price Plan, monthly rates for primary line basic service for residential customers may increase a maximum of \$3.00 during the period of the Price Plan. The Price Plan allows increases of up to a \$2.00 on the Price Plan's effective date, and an additional \$1.00 increase beginning in year 2 of the Price Plan. CenturyLink QC increased residential primary line basic service rates (both flat rate and measured service) by \$2.00 effective May 9, 2015 and by \$1.00 effective June 1, 2016.

**Recurring and non-recurring charges for business primary line basic services.** Under the current Price Plan, recurring and non-recurring charges associated with business primary line basic service are not subject to price caps. To date, CenturyLink QC has not modified the rates for non-recurring charges for business primary line basic service since the effective date of the

current Price Plan. For flat rate business primary line basic service recurring charges, CenturyLink QC increased rates by \$2.00 in rate group 1 and \$1.50 in rate groups 2 and 3 effective July 17, 2016. The rates for measured rate business primary line basic service recurring charges were increased by \$2.00 across all three rate groups effective July 17, 2016.

**Switched Access, E911, EAS, Toll Restriction, Call Trace and Unlisted Numbers.** The rates for these services were capped at pre-plan rates with no upward pricing flexibility. Consistent with this limitation, CenturyLink QC has not increased the rates for switched access, toll restriction, call trace and unlisted numbers since the effective date of the current Price Plan. For EAS, CenturyLink QC did not increase any rates but did decrease rates for business EAS for rate bands B and C effective July 17, 2016.

**DS-1 and ISDN-PRI Services.** Rates for DS-1 and ISDN-PRI services are not subject to price caps under the current Price Plan. CenturyLink QC has not increased the rates for these services since the effective date of the current Price Plan.

**Directory Listings.** Under the current Price Plan, CenturyLink QC is allowed to increase the rates for additional listings and other directory listing services. CenturyLink QC has not increased the rates for these services since the effective date of the current Price Plan.

**Other Services.** Under the current Price Plan, monthly rates for “Other Services” for business customers are not subject to price caps. Monthly rates for residential customers may increase up to 50 percent or \$.50, annually, whichever is greater. The cumulative price increase over the term of the Price Plan is not to exceed 200 percent for residential customers. CenturyLink QC utilized the pricing flexibility provided for select services under these provisions of the Price Plan with annual filings being completed in 2015 and 2016. CenturyLink QC price changes for residential services covered by these provisions of the Price Plan did not exceed the 50 percent annual cap or the 200 percent cumulative cap.

### **3. Conclusion**

The pricing flexibility provided under the Price Plan has allowed CenturyLink QC to modify its prices for some services to meet changing market conditions and remain more

competitive with services offered by other providers. As outlined above, CenturyLink QC has utilized the pricing flexibility afforded under the Price Plan to modify certain of its prices in an attempt to provide compelling value propositions to its customers while remaining competitive in the market.

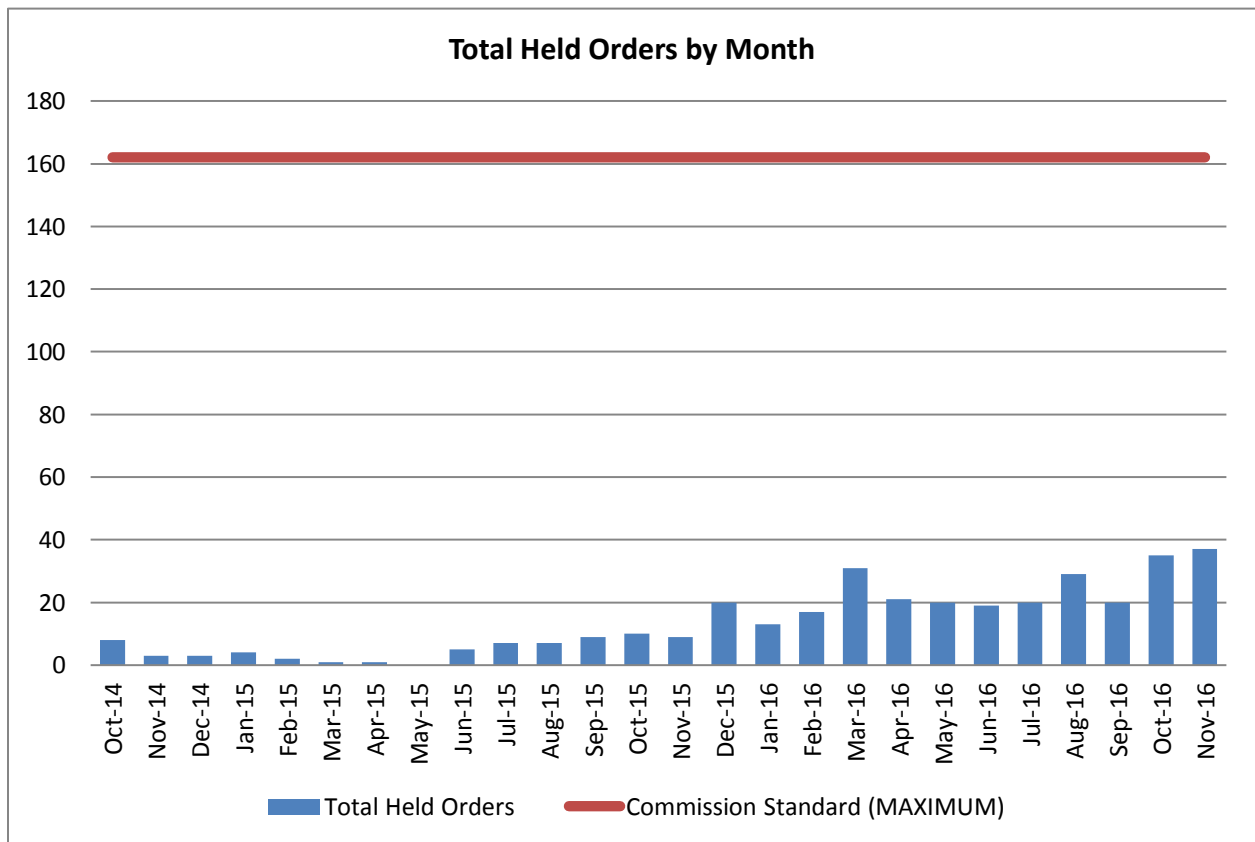
Although the Price Plan has provided CenturyLink QC additional pricing flexibility that did not exist prior to the adoption of the plan, CenturyLink QC still faces significant pricing constraints that none of its competitors are subject to. As outlined in the previous section on competition, CenturyLink QC is facing ever increasing competitive pressure from alternative providers, including cable, wireless and VoIP providers who continue to gain market share. As a result, competitive market forces can be relied upon to ensure discipline over pricing is maintained, and the non-market pricing constraints that apply to CenturyLink QC—but none of its competitors—should be eliminated.

## **D. RETAIL SERVICE QUALITY PERFORMANCE**

The review of CenturyLink QC's performance required by Section V of the Price Plan does not include service quality. Nevertheless, CenturyLink QC offers this analysis of service quality for the Commission's consideration. This service quality report provides information on CenturyLink QC's retail service quality performance for the 26 month period from the beginning of the Price Plan, October 2014, to the most recent data available, November 2016.

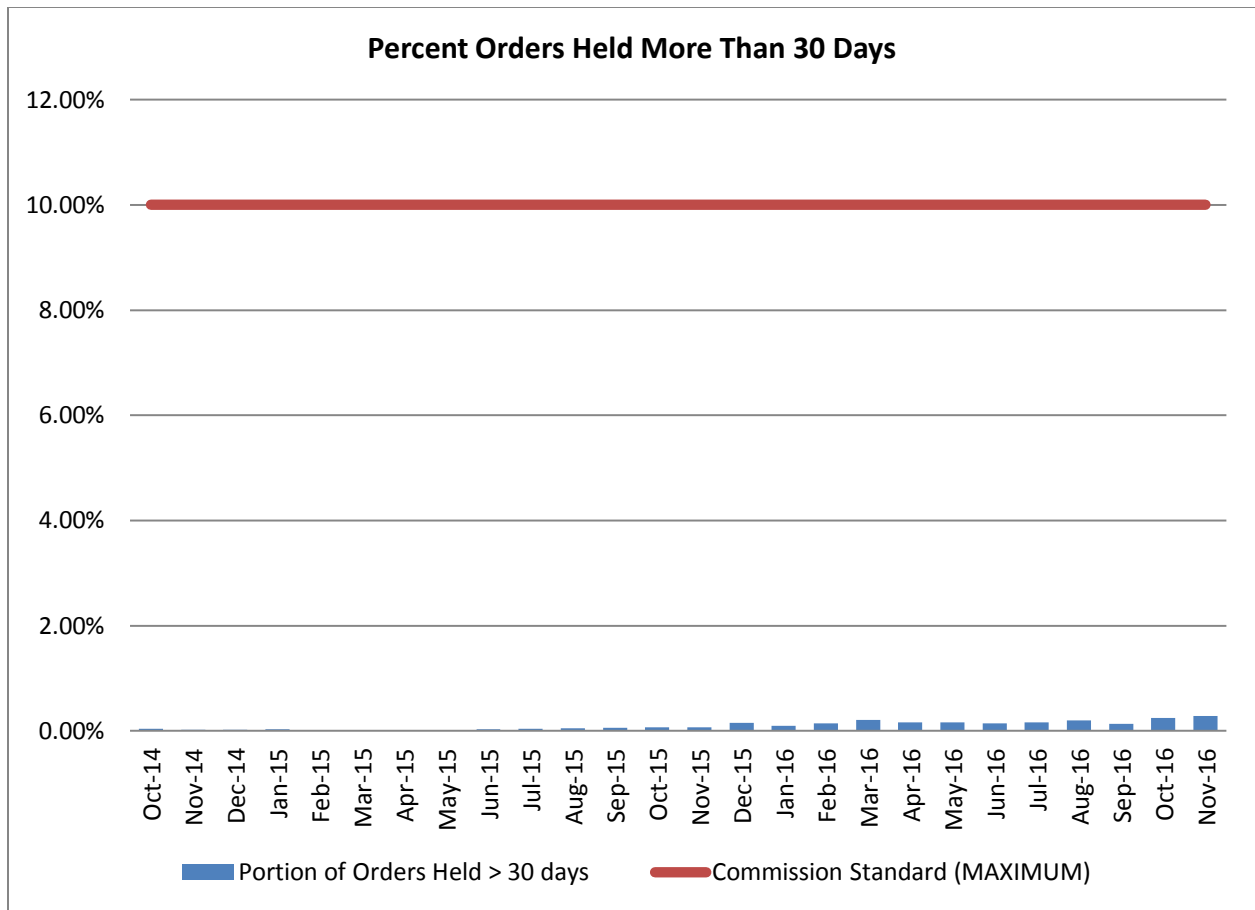
### **Held Orders**

OAR 860-023-0055(4)(b)(B), the Commission's Held Order for Lack of Facilities rule, establishes an objective service level of no more than two held orders for lack of facilities per wire center per month averaged over a large telecommunications utility's Oregon service territory. Because CenturyLink QC measures service quality for 81 wire centers, the standard for CenturyLink QC is no more than 162 total held orders ( $81 * 2$ ). The following graph charts CenturyLink QC's results against this standard over the 26 month period.



The graph reveals that while the total number of held orders (the blue columns) has increased during the Price Plan, CenturyLink QC’s total held orders have remained well below the maximum standard in the Commission’s rule (the red line).

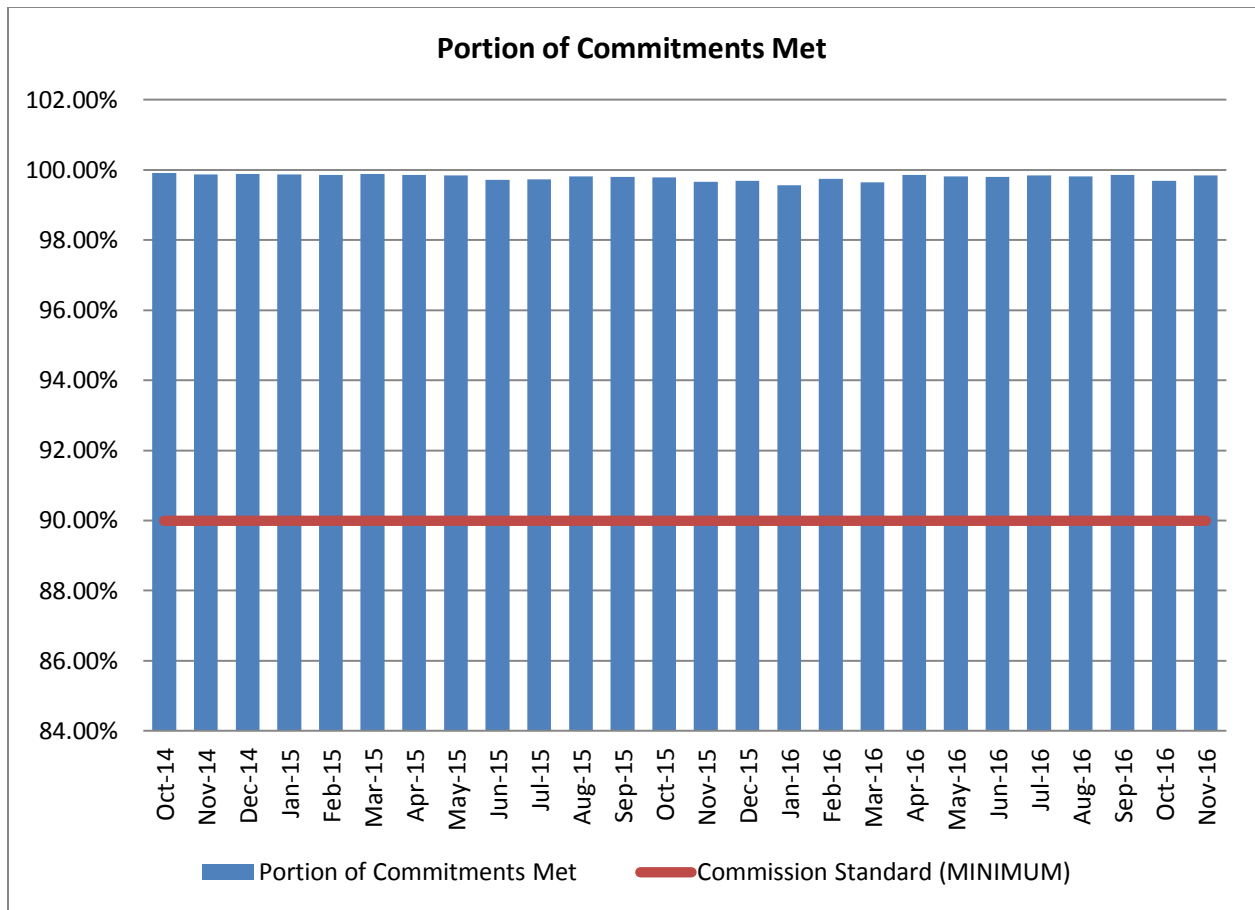
The Commission’s held order rule also establishes an objective service level for the total number of primary held orders for lack of facilities in excess of 30 days past the initial commitment date. The standard is no more than 10 percent of the total monthly held orders for lack of facilities within the large telecommunications utility’s Oregon service territory. The following graph charts the percentage of primary held order in excess of 30 days over the 26 month period.



The graph reveals that the percent of primary held orders in excess of 30 days beyond commitment date (the blue columns) has remained consistently and well below the Commission’s maximum 10% standard (the red line) during the 26 month period.

**Commitments Met**

OAR 860-023-0055(4)(b)(A), the Commission’s Commitments Met rule, establishes an objective service level requiring each large telecommunications utility to meet at least 90 percent of its commitments for service. The following graph charts CenturyLink QC’s results against this standard.



The graph reveals that CenturyLink QC consistently and substantially exceeded the Commission standard of 90% during the 26 month period. In none of the 26 months, did CenturyLink QC meet less than 99.5% of its commitments.

**Trouble Reports**

Trouble reports reflect trouble in the company’s time division multiplexing (TDM) network (aka traditional telephone network). The rate of trouble reports gives some indication of the health of the TDM network.



OAR 860-023-0055(5), the Commission’s Trouble Report rule, establishes a standard for trouble report rates (TRR) applies to each individual wire center. It establishes an objective service level requiring maintenance of service so that the monthly trouble report rate, after approved trouble report exclusions, does not exceed:

(A) For wire centers with more than 1,000 access lines: two per 100 working access lines per wire center more than three times during a sliding 12-month period.

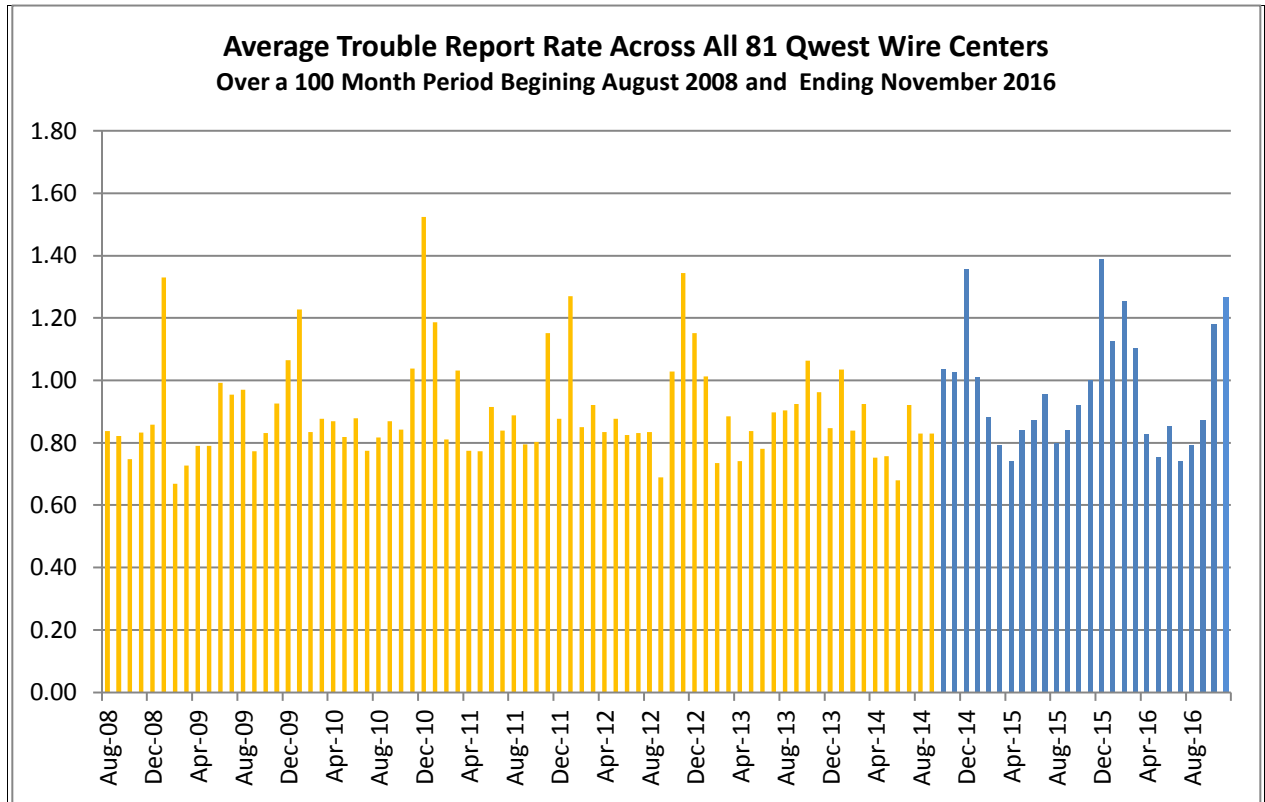
(B) For wire centers with 1,000 or less access lines: three per 100 working access lines per wire center more than three times during a sliding 12-month period.

Over the 26 months of the current Price Plan, five of CenturyLink QC’s 81 wire centers did not meet the standard all 26 months. The following table quantifies the results for these five wire centers.

Wire Center	Months during which Trouble Report Rate exceeded the Commission’s nominal standard	Total number of sliding 12 month periods during which the wire center’s TRR exceeded the Commission’s nominal standard three or more months
A	6	8
B	10	18
C	4	1
D	10	19
E	8	14
Total	38	60

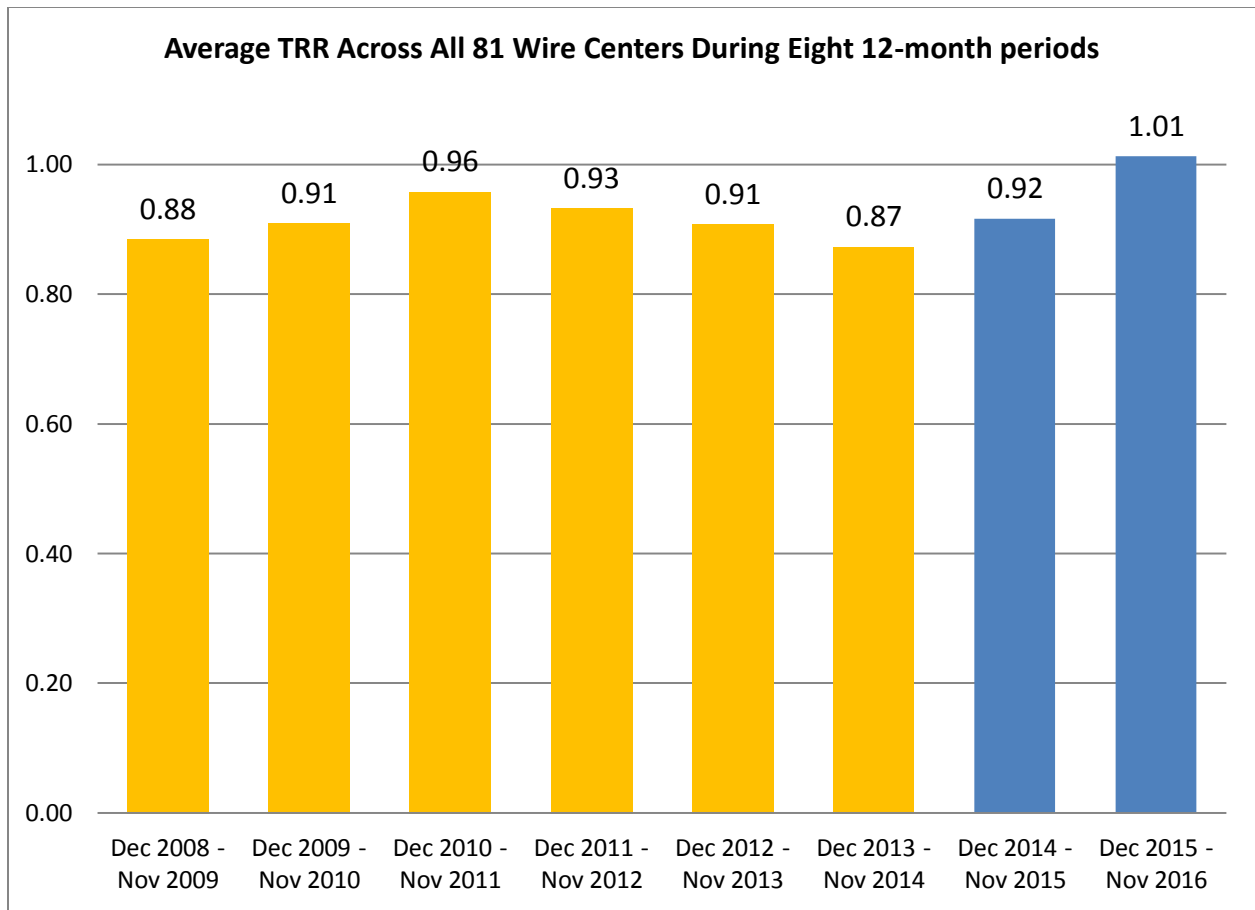
The current Price Plan’s 26 month period contains 2,106 sliding 12-month periods (81 wire centers \* 26 months). Dividing the 60 sliding 12-month periods during which the TRR exceeded the nominal standard for three or more months by the 2,106 total 12-month sliding periods yields a non-compliance rate of 2.8%.

The following chart graphs, by month, CenturyLink QC's average TRR over a 100 month period ending November 2016.



The blue columns cover the 26 month period of the current Price Plan. The orange columns reflect a 74 month period before the current Price Plan. There is no red line for a Commission standard because the Commission has no standard for average TRR across all wire centers.

The flowing chart graphs the average TRR across all 81 wire centers during eight 12-month periods starting December 2008 and ending November 2016.



The chart shows some variability from year to year with a high of 1.01 and a low of 0.87. On average over the eight years the average 12-month TRR was 0.92.

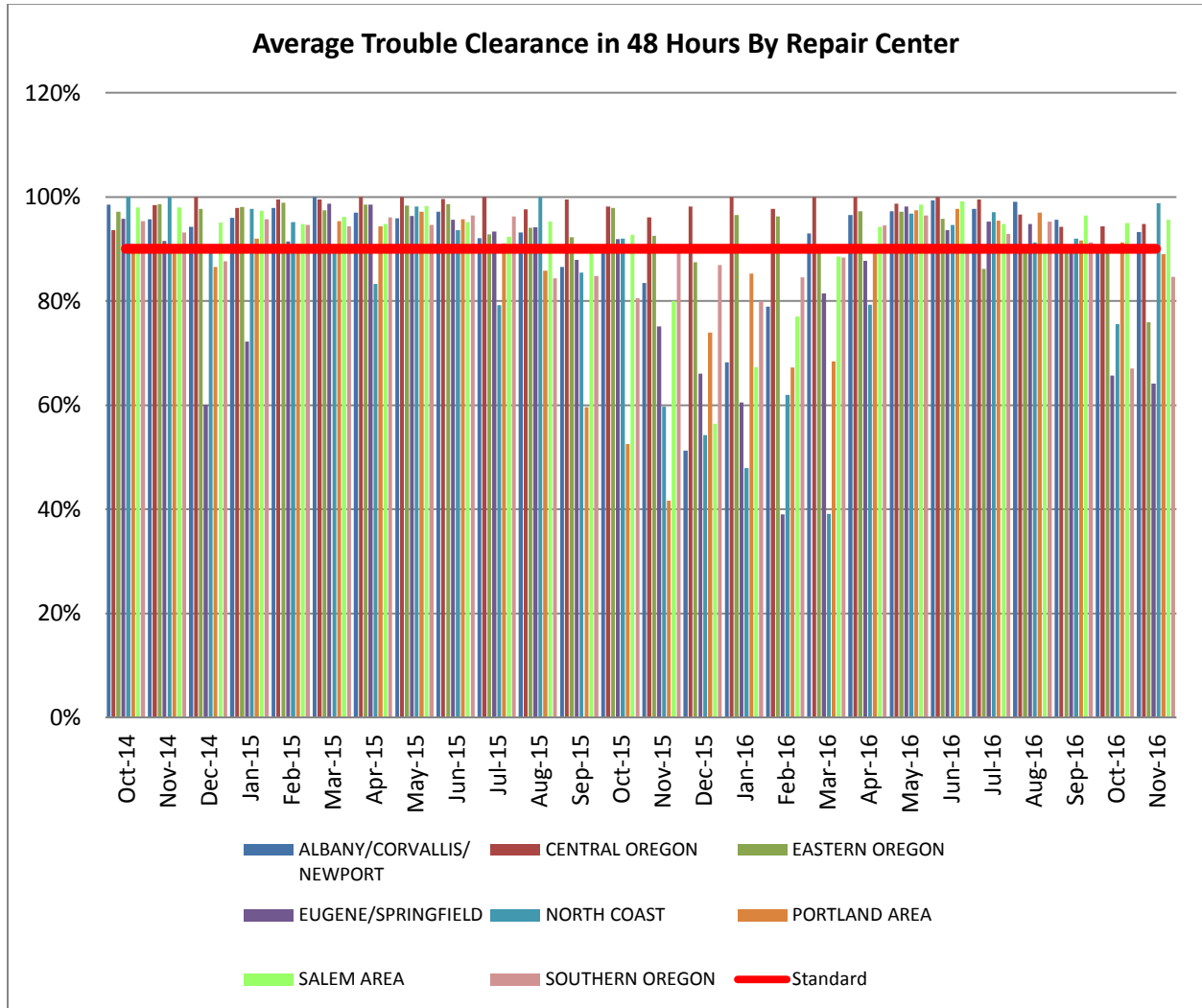
**All Troubles Cleared**

OAR 860-023-0055(6), the Commission’s Repair Clearing Time rule, establishes the clearing time for all trouble reports from the time the customer reports the trouble to the large telecommunications utility until the trouble is resolved. It establishes an objective service level requiring clearance of at least 90 percent of all trouble reports within 48 hours of receiving a report for each repair center. Alternatively, for those reports that are received between 12 pm on Friday and 5 pm on Sunday, the large telecommunication utility may use the following weekend exception to calculate the percentage for trouble reports cleared:

(A) The large telecommunications utility must clear 90 percent of all trouble reports received between 12 pm Friday and 5 pm Saturday by 5 pm the following Monday for each repair center.

(B) The large telecommunications utility must clear 90 percent of all trouble reports received between 5 pm Saturday and 5 pm Sunday by 5 pm the following Tuesday for each repair center.

The following graph charts the results for the 26 months of the Price Plan.

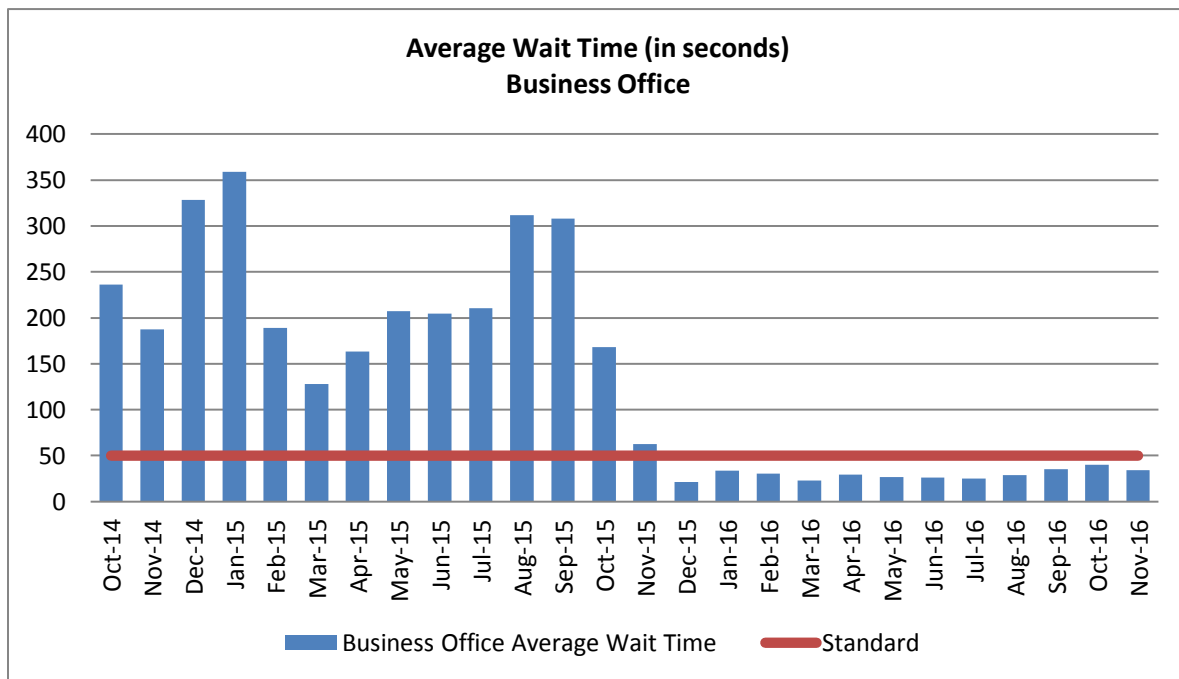


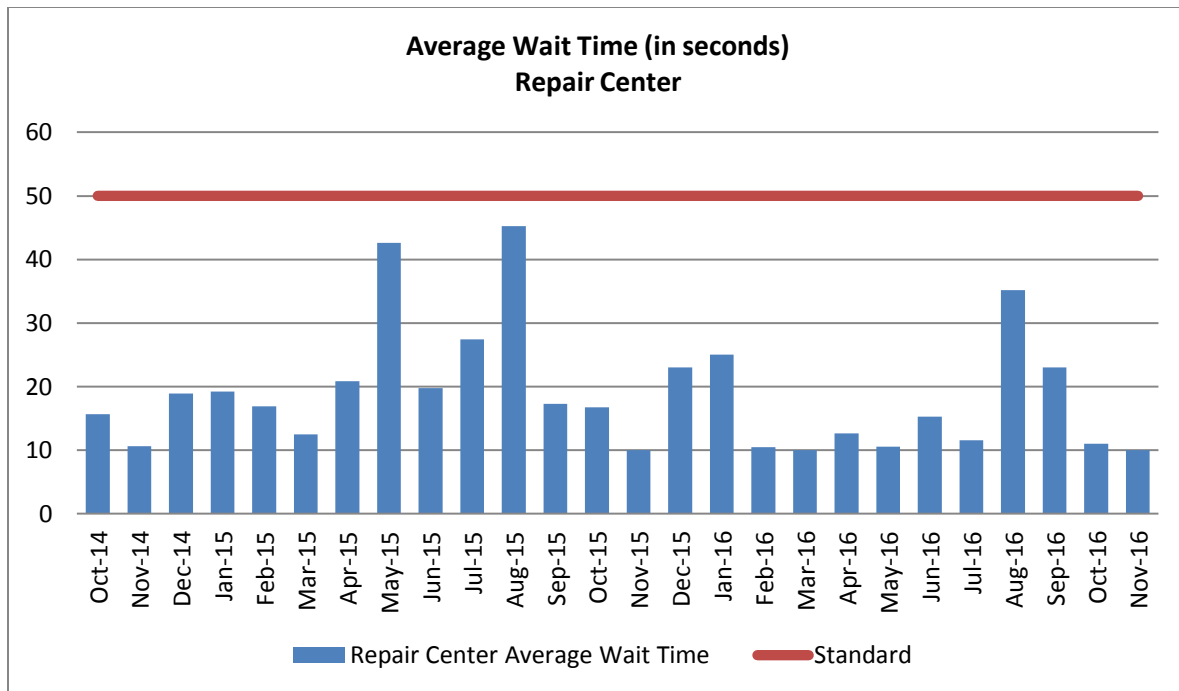
The graph reveals that CenturyLink QC experienced difficulty meeting the standard during the heavy weather months of 2015 and 2016. CenturyLink QC personnel, including Darrion Bowers, Vice President of Operations for Oregon, met with Commission Staff May 12 to address CenturyLink’s failure over the prior six months to meet the OPUC’s 90% standard for clearing trouble reports within 48 hours. CenturyLink had earlier answered in writing a series of detailed questions Staff had posed about identifying trouble and how clearance is measured. At the meeting Darrion Bowers explained the convergence of challenges—extreme weather events, staffing, demand for new products, etc.—that had made it impossible for CenturyLink to meet

the standard. He also explained the positive steps—hiring contractors and adding over 80 new technicians to the payroll—that had yielded growing improvements in CenturyLink’s performance over the past few months.

**Average Wait Time**

OAR 860-023-0055(8), the Commission’s “Access to Large Telecommunications Utility Representatives” rule (aka “average wait time rule”) provides: “The large telecommunications utility representatives must answer at least 80 percent of calls within 20 seconds or have an average speed of answer time of 50 seconds or less.” CenturyLink QC separately tracks access to its Business Office and access to its Repair Call Center. The following two graphs chart CenturyLink QC’s results during the 26 month period.





CenturyLink QC’s Business Office wait time did not achieve the Commission standard during the first 14 months of the current Price Plan. The Business Office wait time has substantially exceeded the standard the last 12 months of the Price Plan.

CenturyLink QC’s Repair Center average wait time substantially exceeded the standard during all 26 months of the current Price Plan.

## **E. SPECIFIC COMMITMENTS**

On October 3, 2014, in Order No. 14 346 in Docket UM 1354, the Oregon Public Utility Commission approved the Stipulation Agreement and adopted CenturyLink QC's current Price Plan. The Price Plan included two Specific Commitments (see Section T of the Price Plan) made by CenturyLink QC governing the company's service performance guarantees and network investment projects. The commitments and the current status is outlined below.

### **Service Performance Guarantees.**

The Price Plan included the following commitment related to CenturyLink's QC's existing service performance guarantee program.

The service performance guarantee present in the Price Plan adopted in Order No. 08-408 will be removed. That guarantee will be reinstated if the standard in 860-023-0055(4) - on a statewide basis, or 860-023-0055(6) – for any repair center, is missed for 3 months out of a 12 month rolling period. Force Majeure events, as defined in OAR 860-023-0055(1)(h), that cause a miss in the service results will not be counted as a miss for purposes of reinstating the service performance guarantees. If the service performance guarantee program is reinstated due to missing either of the standards, the program can be removed again if the company meets the previously missed standard for a 12 month period.

### **Status**

CenturyLink QC has not taken action to remove its service performance guarantee program and the plan has remained in place as it existed before approval of CenturyLink QC Price Plan in Order No. 14-346. Therefore, the provision in the Price Plan addressing conditions under which the service guarantee program would be reinstated are moot; the service guarantees have remained in place.

### **Network and Other Investments.**

CenturyLink committed in the Price Plans to make incremental investments of at least \$650,000 in link diversity improvements and other projects at shareholder expense. Projects included CenturyLink's portion of a South Oregon Coast Diversity Project at an estimated cost of \$150,000 to provide route diversity and a public safety benefit to customers in that region. In addition, CenturyLink agreed to construct a Hood River Gorge Diversity Project. This is a fiber ring to supply route diversity to the Hood River, Columbia Gorge and Mount Hood areas, and

also provide diversity for legacy CenturyTel and United Internet connections statewide and 911 SS7 link redundancy for legacy CenturyTel and United customers in the Hood River, Columbia Gorge and Mount Hood areas. The estimated equipment cost for this project is \$500,000. It was further stipulated that if CenturyLink completed these two projects at a cost of less than \$650,000, CenturyLink would complete additional projects as identified or work with Staff and CUB to identify new projects to reach the \$650,000 investment. The specific terms of the commitment are included below:

**Network and Other Investments.**

- b. CenturyLink invests in its Oregon network to expand the network’s capabilities and enhance reliability, thereby providing benefits to its customers. In order to provide a customer benefit during the term of the Price Plan, CenturyLink agrees to make the following public benefit commitments:
  - i. CenturyLink’s portion of the South Oregon Coast Diversity Project at an estimated cost of \$150,000 which will provide route diversity and a public safety benefit to customers in that region.
  - ii. The Hood River Gorge Diverse Route Fiber Ring. This is a fiber ring CenturyLink intends to construct to establish route diversity to the Hood River, Columbia Gorge and Mount Hood areas, which will also provide diversity for legacy CenturyTel and United Internet connections statewide and 911 SS7 link redundancy for legacy CenturyTel and United customers in the Hood River, Columbia Gorge and Mount Hood areas. The estimated equipment cost for this project is \$500,000.
  - iii. If CenturyLink completes the projects above in T (b) (i and ii), and the project actual costs are less than the estimated \$650,000, CenturyLink will complete additional projects as identified in T (c) (ii) or will work with Staff and CUB to identify new projects to reach the \$650,000.
- c. If CenturyLink is unable to complete the projects identified in T (b) (i. and ii.) above, CenturyLink would commit to the following projects:
  - i. Same as (b)(i) above.
  - ii. Augments to CenturyLink’s backbone fiber rings to migrate services off the original platform to a newer and higher capacity ring. This upgrade would provide the ability to add capacity as well as new technologies to the existing backbones rings. This project would benefit all CenturyLink Oregon customers.
  - iii. If CenturyLink is unable to complete the projects identified in b above, CenturyLink would invest the same estimated dollar amounts that were agreed to in section b for projects listed in section c (subparagraphs i. and ii.)

**Status**

**South Oregon Coast Diversity Project**

In compliance with the Commission in Order No. 14-347, the South Oregon Coast Diversity Project is complete and now entirely functional. Frontier and CenturyLink have each



completed the Coos Bay project. All grooming of traffic onto the new diverse OC192 was executed during third quarter of 2016. CenturyLink invested \$157,821 in this project.

### **Hood River Gorge Diversity Project**

The Hood River Gorge project was expanded far beyond its initial estimate and it is nearly complete. All cable and electronics are in place and operating. Orders to create capacity to roll the existing circuits onto the new infrastructure have been issued and are pending. The move of the existing circuits onto the new capacity (OC48 onto 7100) is not firmly scheduled yet. Moratoriums limit options to move circuits during the last six weeks of 2016. This final aspect of the project is anticipated to be complete during the first quarter of 2017 to create the diversity planned in the Gorge. CenturyLink has invested \$1,166,313 in this project.

### **Summary**

CenturyLink has far surpassed both individual investment estimates and the \$650,000 total network investment commitment. All cable and electronics are in place and operating. The South OR Coast project is entirely complete. Only the grooming of circuits onto the new ring in the Gorge remains. This final step is pending and anticipated to be complete during the first quarter of 2017.

## **F. NEW SERVICES**

CenturyLink QC has not introduced any new services subject to the Commission's jurisdiction since the effective date of the current Price Plan.

## **G. SIMPLIFICATION OR REDUCTION IN THE BURDEN OF REGULATION**

In adopting CenturyLink QC's Price Plan, the Commission waived requirements set forth in several state statutes and Commission rules relating to the regulation of telecommunications in Oregon. Certain of these waivers represented a continuation of the manner in which CenturyLink QC has operated since 2000 under its prior price cap regulation plan. Other waivers provided expansion of relief from existing regulatory requirements, thereby reducing regulatory burdens affecting both CenturyLink QC and Commission resources. This section of CenturyLink QC's report discusses how adoption of the Price Plan has simplified regulation for both CenturyLink QC and the Commission or reduced regulatory burden. The discussion centers on those waivers that have the more significant impacts.

The waivers of statutes and Commission rules authorized by the Price Plan have reduced the resources that CenturyLink QC previously devoted to gathering, assimilating and filing Commission required reports. In turn, because the Commission is no longer required to expend its resources reviewing and analyzing these reports, it can focus on other areas that are more critical to Oregonians. In addition, the Price Plan has provided relief from regulatory burdens associated with the regulation and pricing of CenturyLink QC's services. Below are the more significant areas where the burden of regulation has been reduced for CenturyLink QC and the Commission as a result of the waivers of statutes and Commission rules authorized by the Price Plan.

### Financial

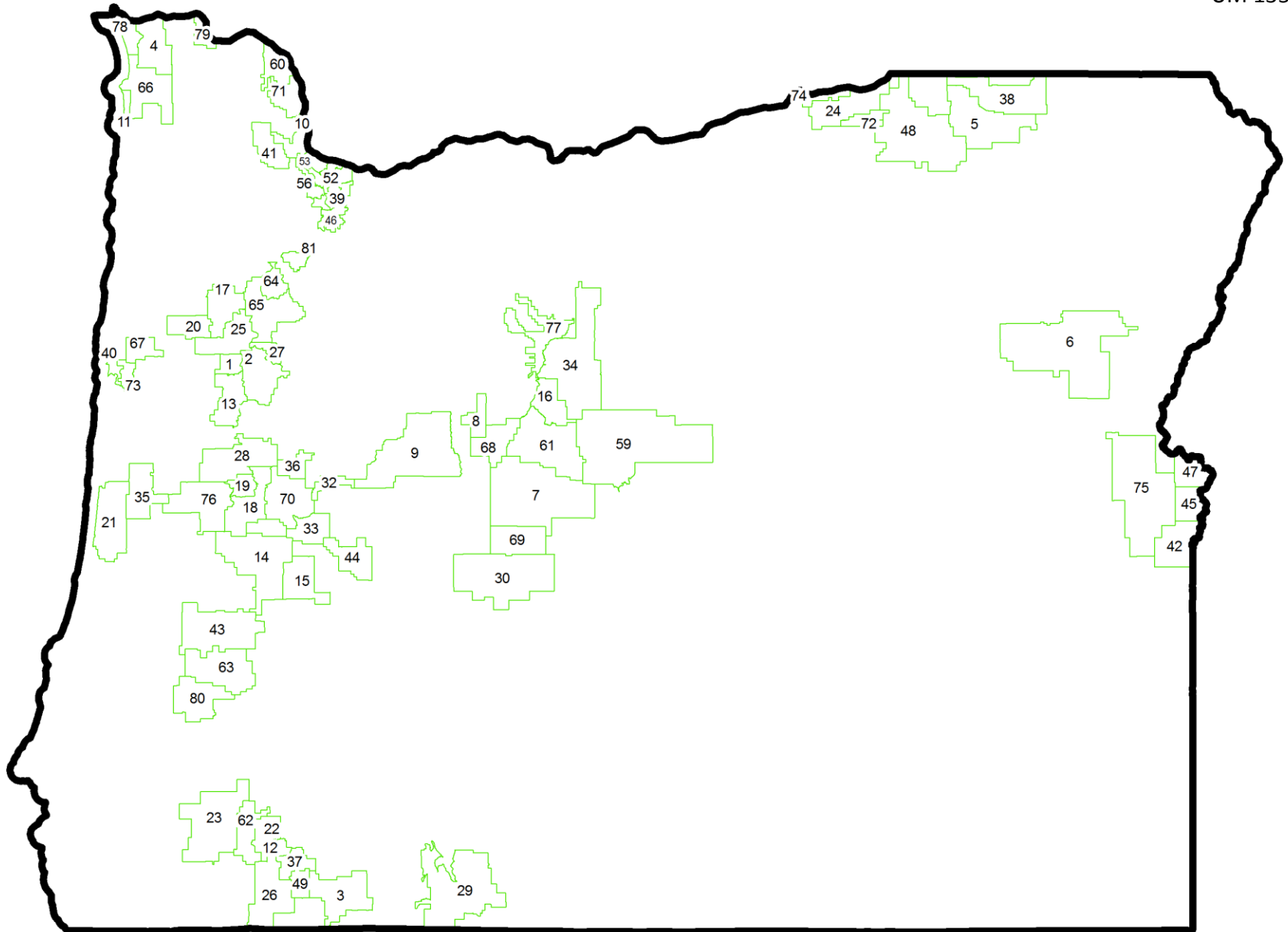
- Financial Reporting – Partial waivers of financial reporting requirements as established in statutes and rules and further specified in Condition #11 in Commission Order 11-095 to Docket UM 1484 imposing as a condition of approval of the merger a requirement that CenturyLink QC annually submit Form O and Form I. Specifically, the Price Plan allows:
  - CenturyLink QC to submit a Form I every three years instead of annually and with less detail than the standard Form I.
  - CenturyLink QC is not required to provide regional information in the Form O and is only required to provide Oregon-specific information.
- Accounting Practices – Partial waivers of certain statutes and rules related to accounting practices are provided for in the Price Plan to the extent allowed by Order 11-095, Condition #11.

- Securities Issuance – Waiver of statutes related to the issuance of securities are provided for in the Price Plan.
- Depreciation – Waivers of certain statutes and rules related to depreciation are provided for in the Price Plan.
- Affiliate Interest Transactions – Waivers of certain statutes and rules related to affiliate interest transactions are provided for in the Price Plan.

#### Pricing Flexibility and Tariff/Schedule Filings

- The Price Plan provides flexibility for CenturyLink QC to change prices for certain services within established parameters without meeting the requirements of certain statutes related to rate of return regulation.
- The Price Plan allows CenturyLink QC to make price list filings for new services and specified other retail services not subject to price caps without meeting the requirements of certain statutes and rules for filing tariffs or schedules. This allows CenturyLink to more quickly respond to market factors to introduce new services and change prices.

# CenturyLink QC (Qwest) Oregon Wire Centers

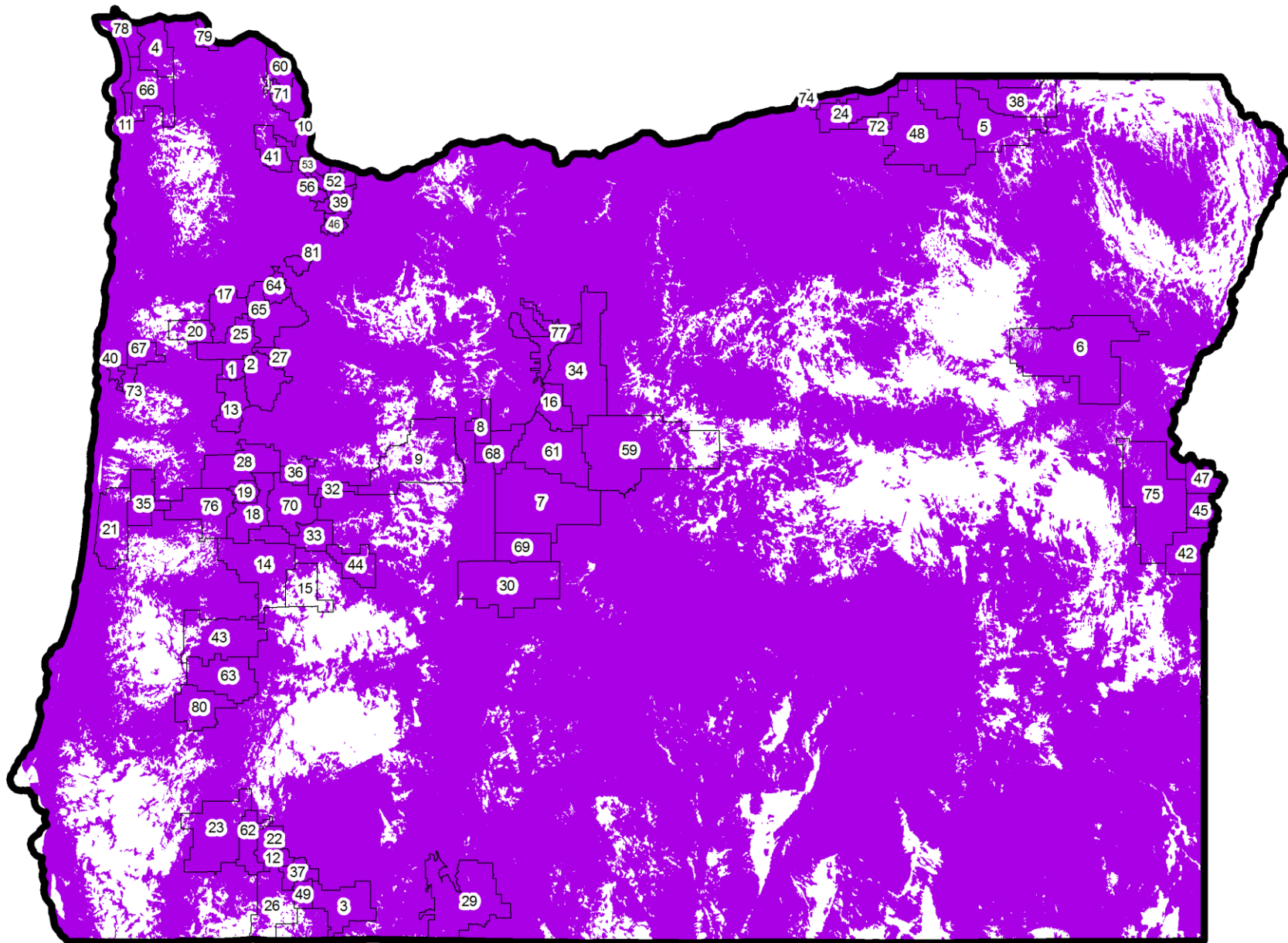


## CenturyLink QC (Qwest) Oregon Wire Centers

Ref	Wire Center	CLLI	Ref	Wire Center	CLLI	Ref	Wire Center	CLLI
1	Adair	ADAROR21	33	Lowell	LWLLOR53	65	Salem Main	SALMOR58
2	Albany	ALBYOR63	34	Madras	MDRSOR52	66	Seaside	SESDOR64
3	Ashland	ASLDOR55	35	Mapleton	MPTNOR54	67	Siletz	SLTZOR66
4	Astoria	ASTROR64	36	Marcola	MRCLOR53	68	Sisters	SSTROR01
5	Athena	ATHNOR56	37	Medford	MDFDOR33	69	Spring River Road	SPRVOR02
6	Baker-sumpter	BAKROR23	38	Milton-freewater	MLTNOR56	70	Springfield	SPFDOR01
7	Bend	BENDOR24	39	Milwaukie	MLWKOR17	71	St Helens	STHNOR40
8	Black Butte	BLBTOR01	40	Newport	NWPTOR35	72	Stanfield	STFDOR56
9	Blue River	BLRVOR53	41	North Plains	NPLNOR62	73	Toledo	TOLDOR66
10	Burlington	BURLOR62	42	Nyssa	NYSSORXC	74	Umatilla	UMTLOR57
11	Cannon Beach	CNBHOR64	43	Oakland-sutherlin	STHROR58	75	Vale	VALEORXC
12	Central Point	CNPNOR29	44	Oakridge	OKRGOR01	76	Veneta	VENTOR54
13	Corvallis	CRVSOR65	45	Ontario	ONTRORXC	77	Warm Springs	WRSPOR52
14	Cottage Grove	CTGVOR53	46	Oregon City	ORCYOR18	78	Warrenton	WRTNOR64
15	Culp Creek	CLCKOR53	47	Oregon Slope	ORSLORXC	79	Westport	WSPTOR64
16	Culver	CLVROR01	48	Pendleton	PNTNOR56	80	Winston	WNTNOR57
17	Dallas	DLLSOR58	49	Phoenix	PHNXOR55	81	Woodburn	WDBNOR59
18	Eugene 10th Ave	EUGNOR53	50	Portland Alpine	PTLDOR11			
19	Eugene River Road	EUGNOR28	51	Portland Atlantic	PTLDOR12			
20	Falls City	FLCYOR58	52	Portland Belmont	PTLDOR13			
21	Florence	FLRNOR53	53	Portland Butler	PTLDOR14			
22	Gold Hill	GLHLOR55	54	Portland Capitol	PTLDOR69			
23	Grants Pass	GRPSOR29	55	Portland Cherry	PTLDOR17			
24	Hermiston	HMTNOR56	56	Portland Cypress	PTLDOR02			
25	Independence	INDPOR58	57	Portland Harold	PTLDOR08			
26	Jacksonville	JCVLOR56	58	Portland Prospect	PTLDOR18			
27	Jefferson	JFSNOR63	59	Prineville	PRVLOR53			
28	Junction City	JNCYOR51	60	Rainier	RANROR01			
29	Klamath Falls	KLFLOR54	61	Redmond	RDMDOR01			
30	La Pine	LAPIOR52	62	Rogue River	RGRVOR55			
31	Lake Oswego	LKOSOR62	63	Roseburg	RSBGOR57			
32	Leaburg	LEBGOR54	64	Salem 10th Ave	SALMOR59			

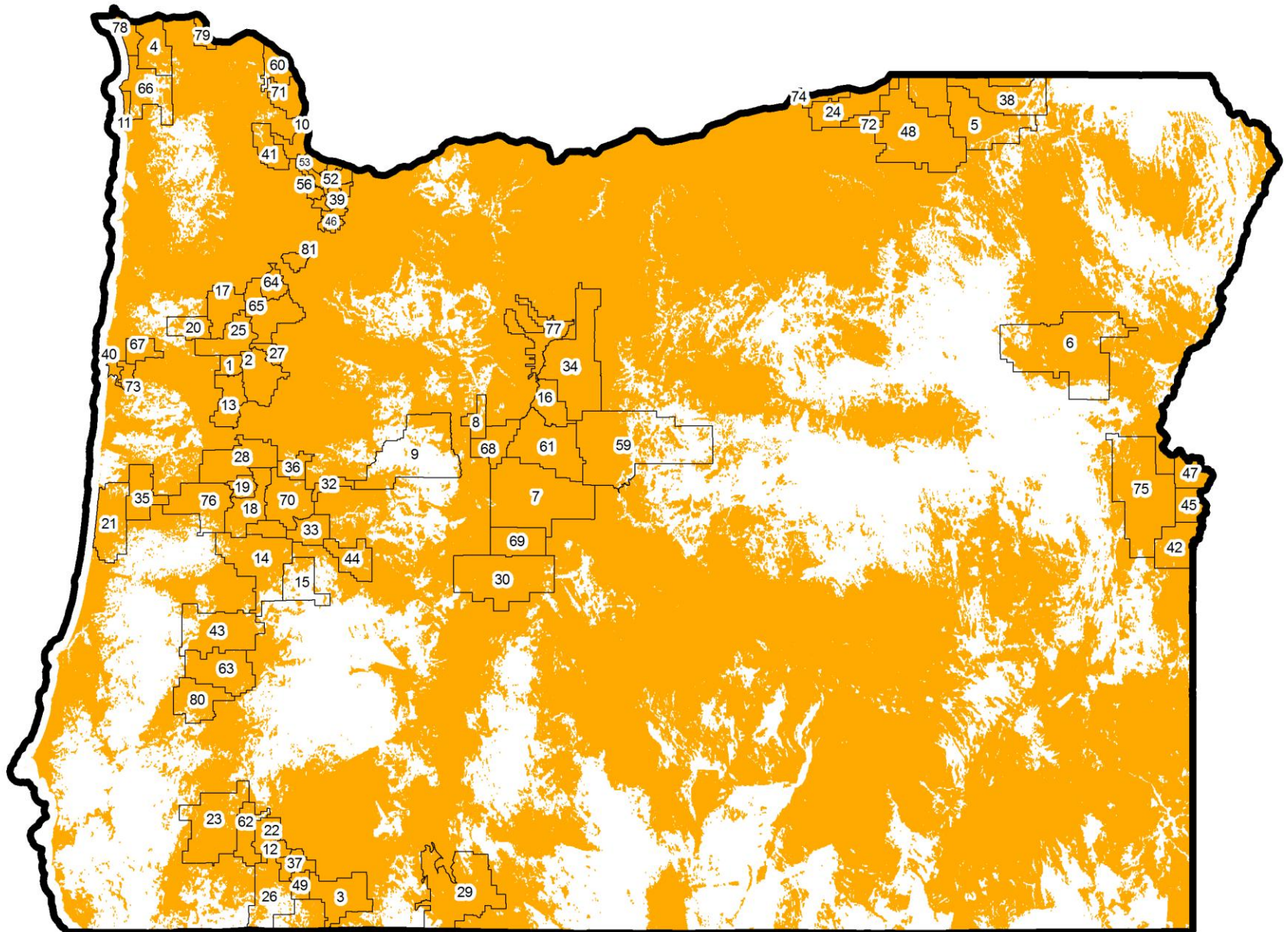
# All Mobile Providers Wireless Coverage

## CenturyLink QC (Qwest) Oregon Wire Centers



# AT&T Wireless Coverage

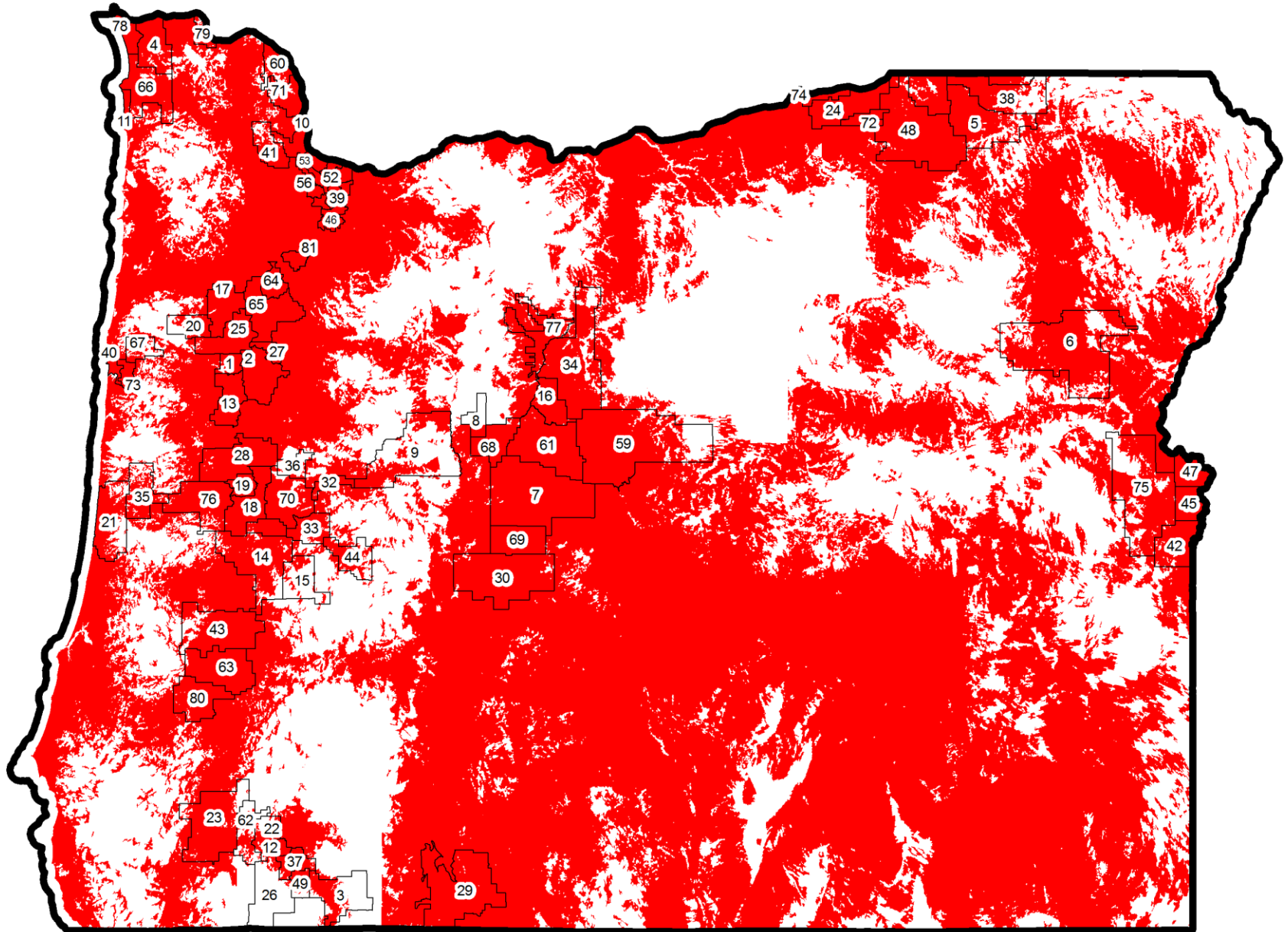
## CenturyLink QC (Qwest) Oregon Wire Centers





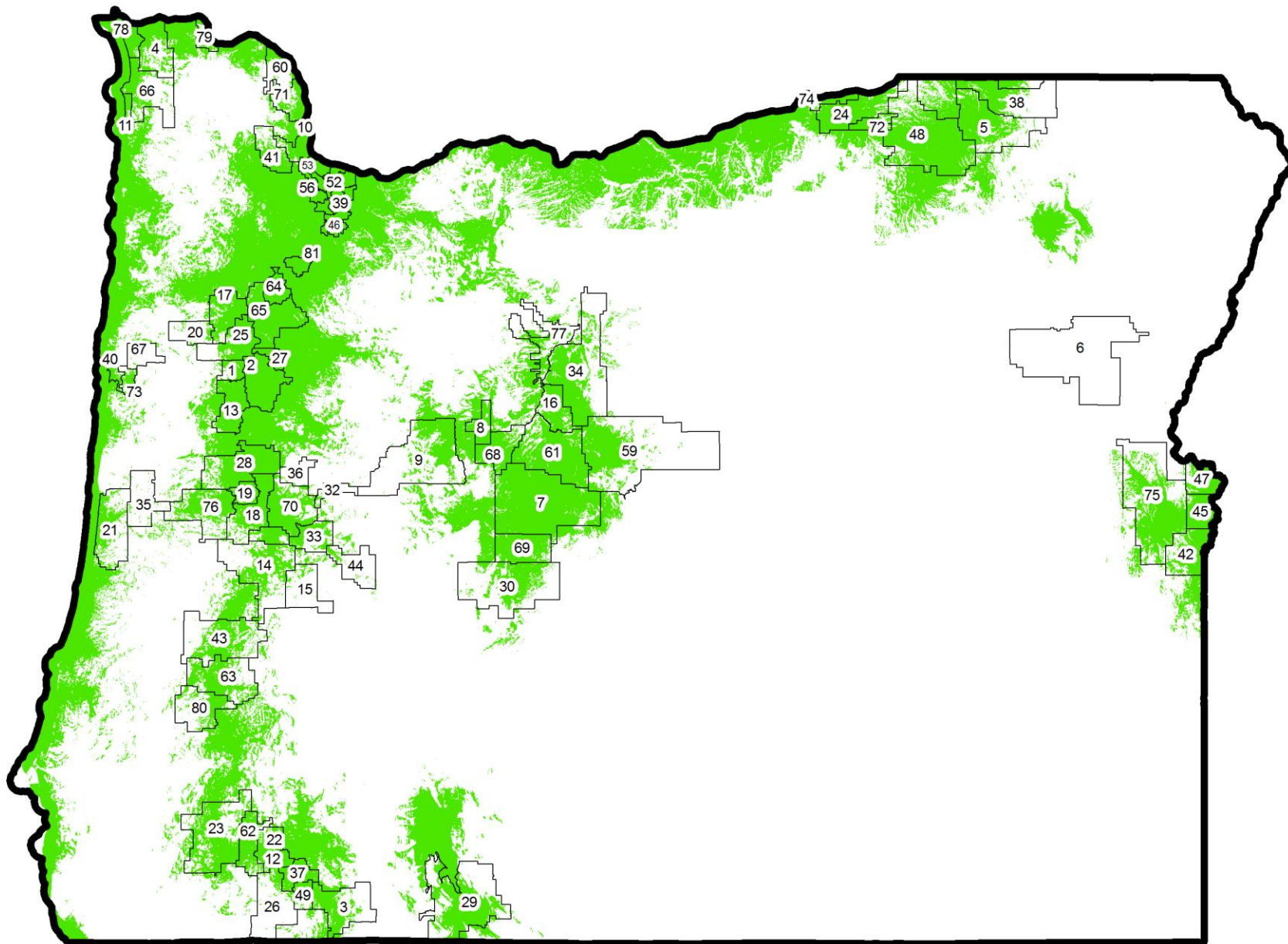
# Verizon Wireless Coverage

## CenturyLink QC (Qwest) Oregon Wire Centers



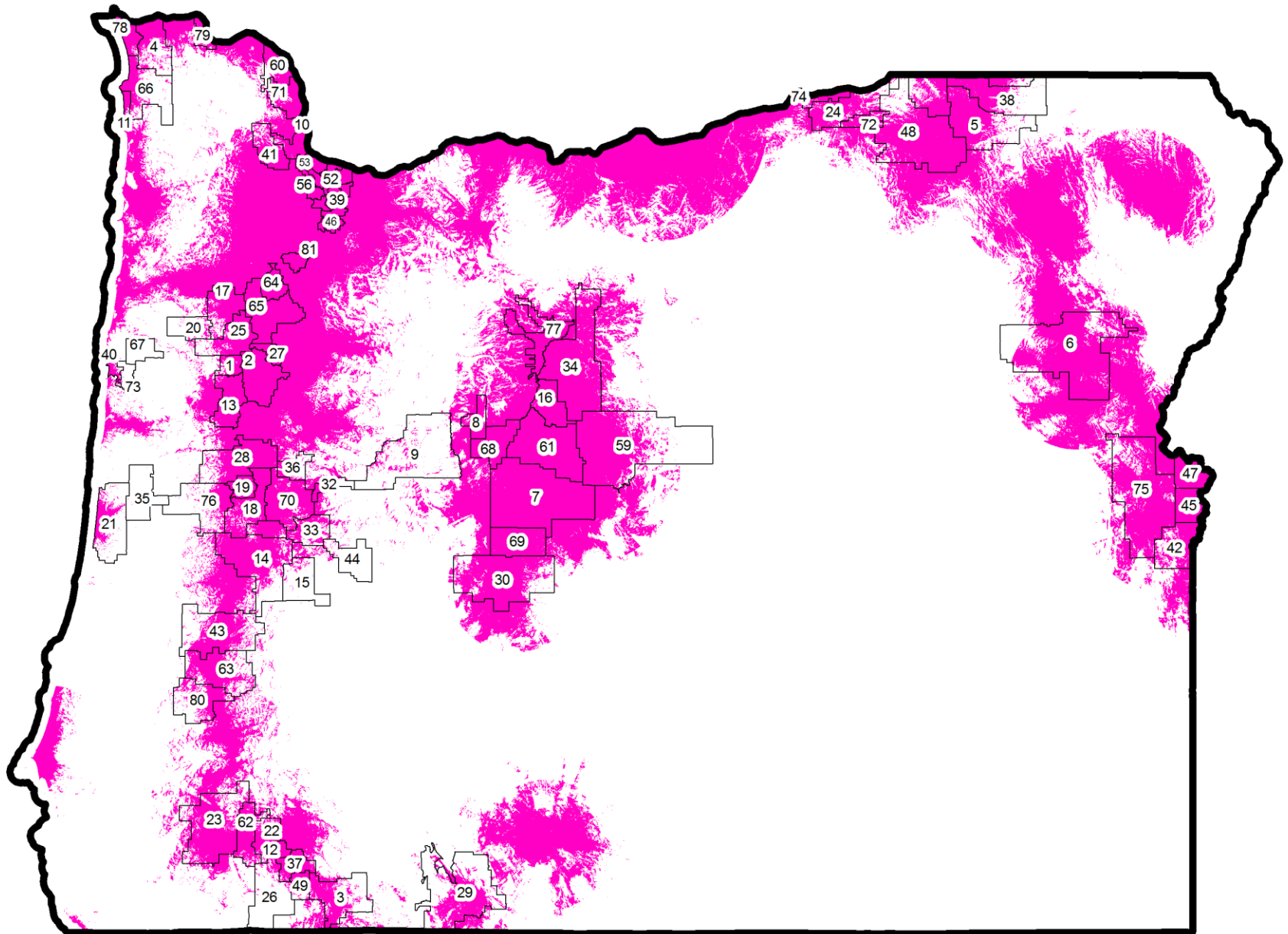
# Sprint Wireless Coverage

## CenturyLink QC (Qwest) Oregon Wire Centers



# T-Mobile Wireless Coverage

## CenturyLink QC (Qwest) Oregon Wire Centers



Source: Form 477 mobile voice deployment data as of December 31, 2015 from <https://www.fcc.gov/mobile-deployment-form-477-data>.

# US Cellular Wireless Coverage

## CenturyLink QC (Qwest) Oregon Wire Centers

