

ITEM NO. 1

PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: August 22, 2017

REGULAR  CONSENT  EFFECTIVE DATE TBD

DATE: July 25, 2017

TO: Public Utility Commission

FROM: Stephen Hayes 

THROUGH: Jason Eisdorfer, Bryan Conway, and Bruce Hellebuyck 

SUBJECT: FRONTIER COMMUNICATIONS NORTHWEST INC. (Docket No. UM 1855): Service Quality Performance Plan for Repair Clearing, Trouble Reports, and Access to Utility Representatives.

**STAFF RECOMMENDATION:**

Staff recommends that the Commission require Frontier Communications Northwest Inc. (Frontier) to submit a service quality performance plan to meet the Commission's minimum service quality standards for repair clearing times, trouble reports and access to utility representatives within 45 days.

**DISCUSSION:**

Issue

Whether the Commission should require Frontier to submit a service quality performance plan to meet the Commission's minimum service quality standards.

Applicable Law

The Commission establishes minimum service quality standards to ensure safe and adequate services for all telecommunications carriers pursuant to Oregon Revised Statute (ORS) 759.450. Under Section (5) of this statute, the Commission is required to direct a telecommunications carrier, utility, or competitive provider that is not meeting the minimum service quality standards to submit a plan for improving performance to

meet the standards. The Commission is further required to review and approve or disapprove the plan.

Frontier is currently regulated under a Price Plan, which simplifies regulation, while maintaining the appropriate balance between regulation and competition. The Price Plan was approved by the Commission in Order No. 14-290 dated August 18, 2014 (Docket UM 1677). The Commission found that the current Price Plan “provides Frontier with pricing flexibility in more competitive markets, but installs price cap or customer notification protection for market segments with fewer options.” One of the Price Plan’s objectives is to “ensure that the quality of existing telecommunications services will stay at or above current levels.”

Oregon Administrative Rule (OAR) 860-023-0055 provides the statutorily required retail service quality standards for large telecommunications utilities and also mirrors much of the relevant statute ORS 759.450. The relevant standards are:

- 1. Trouble Reports** per OAR 860-023-0055(5) Monthly trouble report rate may not exceed two or three per 100 working access lines per wire center more than three times during a sliding 12-month period, depending on the number of access lines per wire center.
- 2. Repair Clearing Time** per OAR 860-023-0055(6) 90 percent of all trouble reports within 48 hours of report for each repair center, with a weekend exception; use best efforts to complete out-of-service restorations for business customers; use best efforts to complete out-of-service restorations for residential customers who either have a medical necessity or no access to an alternative means of voice or E-911 communications.
- 3. Access to Utility Representatives** per 860-023-0055(8) 80 percent of calls must be answered within 20 seconds or measure an average speed of answer time of 50 seconds or less. Frontier has opted to measure the average speed of answer time.

The remaining service quality standards address: Provisioning and Held Orders for Lack of Facilities, Blocked Calls, Interruption of Service Notification, Customer Access Line Testing, Customer Access Lines and Wire Center Switching Equipment, Special Service Access Lines, and Large Telecommunications Utility Interconnectivity.

## Analysis

### *Background*

There have been two instances in which the Commission required submission of a service quality performance plan under 759.450(5). The Commission found at its June 19, 2001 public meeting that a telecommunications utility (Qwest) was required to file a plan to improve its business office access performance. This resulted in the Commission adopting a Memorandum of Understanding (MOU) between Staff and Qwest on July 24, 2001, and approval of Qwest's Performance Plan.<sup>1</sup> And, at its May 16, 2017 public meeting, the Commission required Qwest Corporation dba CenturyLink QC to submit a service quality performance plan.<sup>2</sup>

In addition to submitting monthly reports, Staff routinely works with companies to improve service quality. For example, Staff works to promote service quality by conducting onsite visits of central offices and outside plant facilities and conducting field reviews where customer complaints indicate reliability problems. Further, Staff shares information collected from Consumer Services and from field observations with Company officials. Staff processes monthly service quality information provided by companies as required by OAR 860-0023-0055 up to 45 days after the month end and posts selected information on the Commission website.<sup>3</sup>

In some cases, Staff has also worked to relax some service quality standards as warranted. For example, Staff supported and the Commission approved a decrease in the 48-Hour Repair Metric from 95 percent to 90 percent complete within 48 hours and allowed for a weekend exemption along with some added safety-net protections.<sup>4</sup>

Finally, Staff conducted an all-provider service quality workshop on January 15, 2015, with the goal of raising awareness and improving service quality. Staff took further steps to assist Frontier on May 11, 2016, by requesting and conducting a meeting with its company representatives regarding deteriorating service quality.

In summary, Staff has been working with Frontier for over a year in an attempt to improve service quality on several metrics. On April 7, 2016, Staff sent a pre-performance plan letter of warning to Frontier and met with Company officials to discuss assigning more resources to resolving service quality issues. (Attachment No. 1).

---

<sup>1</sup> Commission Order No. 01-689, Docket UM 1026.

<sup>2</sup> Commission Order No. 17-175, Docket UM 1836.

<sup>3</sup> [Link to Frontier's latest service quality report information.](#)

<sup>4</sup> Commission Order No. 14-016, Docket No. AR 575, signed January 21, 2014.

Initially Staff felt that Frontier was making progress, but its efforts have not corrected the underlying issues.

*Failure to Meet Service Quality Measurement Standards*

Frontier has failed to meet the following service quality standards for a prolonged period of time:

I. Trouble Report Standard (Attachment No. 2)

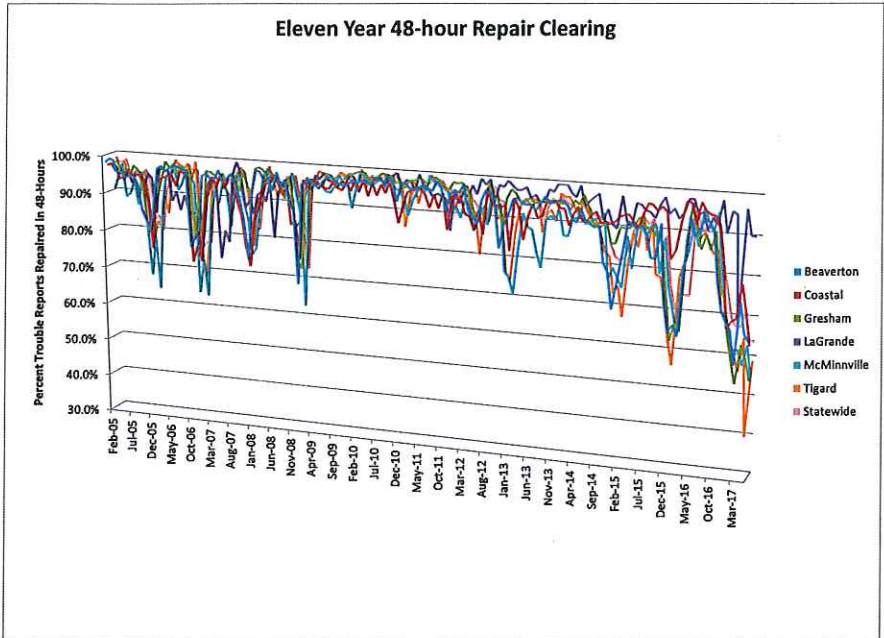
- A utility's monthly trouble report rate may not exceed two or three per 100 working access lines per wire center more than three times during a sliding 12-month period, depending on the number of access lines per wire center. Frontier is not meeting this standard. Four months out of the last twelve Frontier has failed to meet this standard for the Scholls wire center.

A performance plan will help ensure the Company's commitment to restore reliable service to areas like Scholls are completed and durable.

II. Repair Clearing Time Standard (Attachment No. 3)

- Ninety percent of all trouble reports must be cleared within 48 hours. Frontier's performance has failed to meet this standard for 22 months out of the past 24 months in at least one repair center. Frontier has failed to meet this standard in at least five of its six repair centers in each of the last seven months.
- The utility must use best efforts to complete out-of-service restorations for businesses and residential customers who either have a medical necessity or no access to an alternative means of voice or E-911 communications (safety-net provisions). The Commission's Consumer Services Section received 19 complaints from customers between December 1, 2015 and June 30, 2017 who apparently did not receive consideration under the safety-net provisions.

While seasonality influences some service quality results the 11-Year, 48-Hour Repair Clearing Graph below shows some monthly results since February 2015 at a level well below the 90 percent minimum standard; the poorest results in a decade.



III. Access to Utility Representatives Standard

- Frontier has opted to measure its average answer time, which must be 50 seconds or less for both business office and repair service access. Frontier’s performance has failed to meet this standard for nine months out of the last twelve. Frontier made progress toward meeting this standard in 2015 and 2016 but the performance failed to meet standard for 20 months out of the last 24 months. If customers cannot reach the company it can affect other metrics such as the trouble report rate.

**Business Office Access (seconds)**

	2015	2016
January		88
February		54
March		10
April		328
May		170
June	115	
July	127	
August	189	
September	132	
October	76	
November	56	
December	89	

OAR Standard: Average Speed of Answer Time of 50 Seconds  
 DID NOT MEET OAR STANDARD

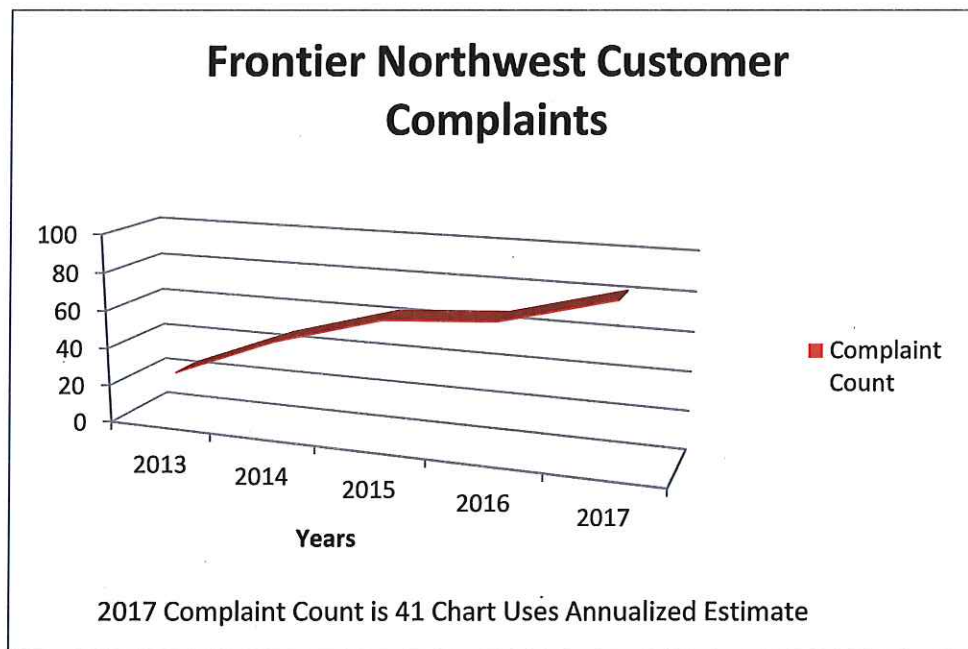
**Business Office Access (seconds)**

	2016	2017
January		340
February		177
March		84
April		34
May		21
June	102	
July	193	
August	301	
September	275	
October	101	
November	50	
December	224	

OAR Standard: Average Speed of Answer Time of 50 Seconds  
 DID NOT MEET OAR STANDARD

Frontier's most recent retail service quality results are available on the Commission website.<sup>5</sup> Except for customer complaint data, Staff has used company reported results through the May data month in this report. It is possible that the results could be better or worse at the time the Commission acts on Staff's recommendation.

The following graph shows how Frontier's statewide service related complaints<sup>6</sup> filed with the Commission's Consumer Services Section have increased during its current Price Plan even as line counts decrease.



### Conclusion

Staff concludes that Frontier has persistently failed to meet three service quality standards, for repair clearing times, trouble reports and access to utility representatives and that informal efforts and outreach to the Company have not rectified the issue. ORS 759.450(5) states that the Commission shall require a telecommunications utility that is not meeting the minimum service quality standards to submit a plan for improving performance. Staff concludes that it is necessary for Frontier to be required to submit such a plan for Commission consideration.

<sup>5</sup> <http://www.puc.state.or.us/telecom/squality/large/Frontier.pdf>

<sup>6</sup> Billing complaints are an example of complaints not included.

**PROPOSED COMMISSION MOTION:**

Require Frontier Corporation dba Frontier (Frontier) to submit a service quality performance plan to meet the Commission's minimum service quality standards for repair clearing times, trouble reports, and access to utility company representatives within 45 days.

Frontier.ServiceQuality.PerformancePlan



# Oregon

Kate Brown, Governor

## Public Utility Commission

201 High St SE Suite 100

Salem, OR 97301

Mailing Address: PO Box 1088

Salem, OR 97308-1088

Consumer Services

1-800-522-2404

Local: 503-378-6600

Administrative Services

503-373-7394

April 7, 2016

Kim Douglas  
 Manager, Compliance  
 Frontier Communications  
 805 Central Expressway South, Suite 200  
 Allen, Texas 75013

Dear Ms. Douglas:

The Oregon Public Utility Commission (Commission) is required by ORS 759.450 to both establish minimum retail service quality standards (MSQ Standards) and to require telecommunication utilities that do not meet these standards to submit a plan for improving performance to meet the established standards (Performance Plan). Because certain MSQ Standards are not being met, as discussed below, Staff provides this notification that it intends to request that the Commission order Frontier Communications Northwest Inc. (Frontier or Company) to submit a Performance Plan related to Access to Large Telecommunications Utility Representative, Commitments Met, and Repair Clearing Time if changes in performance are not forthcoming.

**Access to Large Telecommunications Utility Representatives.** OAR 860-023-0055(8) requires measurements of answering time of customer calls to business office and repair service center representatives. The Rule sets the following objective service levels: (1) no more than 1 percent of calls to the large telecommunications utility business office or repair service center may encounter a busy signal, and (2) 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. Frontier elects to report using the 50 second average answering time. Refer to Tables 1 and 2 for the most current reported results.

Table 1

Repair Service Center Access  
(seconds)

	2015	2016
January		87
February	84	
March	43	
April	42	
May	59	
June	81	
July	91	
August	150	
September	107	
October	43	
November	51	
December	88	

OAR Standard: Average Speed of Answer Time of 50 Seconds  
 DID NOT MEET OAR STANDARD

Table 2

Business Office Access  
(seconds)

	2015	2016
January		89
February	299	
March	122	
April	63	
May	55	
June	115	
July	127	
August	189	
September	132	
October	76	
November	56	
December	89	

OAR Standard: Average Speed of Answer Time of 50 Seconds  
 DID NOT MEET OAR STANDARD

Table 3

Commitments for Service - Provisioning

	2015	2016
January		88.1%
February	85.5%	
March	86.0%	
April	87.6%	
May	86.2%	
June	91.9%	
July	90.1%	
August	88.7%	
September	87.9%	
October	88.2%	
November	81.2%	
December	81.8%	

OAR Standard: 90%  
 DID NOT MEET OAR STANDARD

Commission Staff has been working with Frontier over the last year to bring carrier inquiry response times into compliance. The Company engaged in this effort and implemented measures to bring the



response times down closer to standard. The largest increase in response times occurred during the time that AT&T Connecticut, an acquired telecommunications property, was brought online. At that time, the Company provided information about how it was working to bring its performance back into standard in its monthly service quality reports. Those mitigation efforts appeared to be working but took several months to bring the response times back into or near minimum standards. The Repair Service Access Time metric edged closer to standard in January 2016 while the Business Office Access Time metric appears to be increasing again.

**Commitments Met.** OAR 860-023-0055(4) requires large telecommunications utilities to calculate the monthly percentage of commitments met for service, based on the initial commitment date, across the utility's Oregon service territory, with an exception for commitments missed for reasons solely attributable to customers, another telecommunications utility, and competitive telecommunications providers. The Rule establishes that the objective service level for commitments met is at least 90 percent of the large telecommunications utility's commitments for service. Refer to Table 3 for the most current reported results.

**Repair Clearing Time.** OAR 860-023-0055(6) requires large telecommunications utilities to calculate the percentage of trouble reports cleared within 48 hours of receiving a report for each repair center, or alternatively, the large telecommunications utility may use certain weekend exceptions to calculate the percentage for trouble reports cleared for those reports that are received between 12 pm on Friday until 5 pm on Sunday. The Rule establishes that the objective service level for repair clearing time is at least 90 percent of all trouble reports must be cleared within 48 hours of receiving a report for each repair center, or alternatively, for reports received between 12 pm on Friday and 5 pm on Sunday, the large telecommunications utility may use certain weekend exceptions to calculate the percentage for trouble reports cleared. Specifically, 90 percent of all trouble reports received between 12 pm Friday and 5 pm Saturday must be cleared by the following Monday for each repair center, and 90 percent of all trouble reports received between 5 pm Saturday and 5 pm Sunday must be cleared by 5 pm the following Tuesday for each repair center. Refer to Table 4 for the most current reported results.

Table 4

**Frontier Repair Clearing Time**

Repair Center	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
Beaverton	84.7%	92.7%	92.0%	91.0%	91.9%	90.0%	84.1%	84.1%	92.7%	73.6%	65.9%	67.9%
Coastal	93.9%	94.1%	92.3%	91.2%	94.7%	97.2%	96.9%	95.6%	96.7%	95.5%	84.0%	86.2%
Gresham	90.4%	90.6%	91.6%	93.4%	91.6%	90.4%	90.1%	88.4%	86.5%	74.7%	63.2%	68.0%
LaGrande	91.9%	90.7%	96.6%	96.3%	95.0%	94.6%	93.2%	96.6%	98.6%	94.6%	95.9%	93.5%
McMinnville	88.0%	78.9%	90.2%	90.5%	86.3%	91.0%	91.2%	79.3%	88.2%	75.9%	70.5%	64.5%
Tigard	81.5%	88.4%	85.2%	93.8%	84.5%	91.7%	78.7%	78.1%	72.8%	62.4%	56.1%	78.4%
Statewide	85.4%	90.0%	90.8%	92.2%	90.9%	92.1%	88.9%	86.1%	88.4%	76.0%	70.3%	73.8%

OAR Standard: Through January 2014 - 95% -- Beginning February 2014 - 90%

DID NOT MEET STANDARD

Staff requests that the Company meet with Staff on April 27 in the afternoon to explain why Staff should not request that the Commission place the Company on a Performance Plan pursuant to ORS 759.450(5), including a discussion of detailed plans for meeting the MSQs identified above in a timely manner. Additionally, in order to assist Staff in understanding the measures the Company

proposes and has proposed to remedy, Staff requests that the Company be prepared to provide a detailed explanation of how the calculations are made for answering time, and identify the source(s) of the information used explaining what is captured in the data. Staff also requests a full, detailed explanation of how the Company provides customer's access to its representatives. If the way the Company provides access to Company representatives will change when the California, Florida and Texas customers are incorporated, please be prepared to provide that information as well.

Staff appreciates in advance the Company's willingness to meet and discuss mitigating out-of-standard service quality metrics.

Sincerely,



Bryan Conway  
Administrator  
Telecommunications and Water Division  
Oregon Public Utility Commission  
PO Box 1088  
Salem, Oregon 97308-1088

cc: Jack Phillips, Director Regulatory & External Affairs  
Steve Crosby, Senior Vice President, Regulatory & External Affairs  
Trent Anderson, Senior Vice President, General Manager

This chart has been expanded from the normal 12-month rolling view of the trouble report rate measurements to a 24-month view. The expanded view helps to show how long wire centers have been undergoing chronic service quality problems. This view also shows that while some wire centers have an occasional miss of the service quality threshold Frontier is generally successful in remedying the problem so that the wire center is not considered as failing to meet the standard. The green highlight in the month columns indicates a miss of the threshold while a yellow highlight in the month columns indicates that a problem in the wire center has failed to meet standard during a 12-month period. Additional explanatory notes follow the table.

Wire Center <sup>1</sup>	MO > 2.00 <sup>2</sup>	MO > 3.00 <sup>2</sup>	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	24-Mth Median TRR
Aloha	0		0.35	0.43	0.27	0.48	0.71	0.75	0.48	0.63	0.45	0.48	0.36	0.48	0.34	0.29	0.31	0.25	0.42	0.53	0.36	0.32	0.36	0.32	0.43	0.27	0.39
Amity		1	1.29	1.66	1.11	2.03	2.61	1.89	2.67	4.03	2.74	1.98	1.79	2.81	1.40	1.43	0.82	1.88	2.31	1.48	1.92	1.52	1.52	2.19	2.42	1.11	1.91
Aumsville		1	0.95	0.80	0.80	0.66	1.16	0.83	2.86	3.25	1.55	0.87	1.04	0.53	0.88	0.71	1.06	0.88	1.06	1.60	2.50	1.62	1.10	0.55	0.00	0.75	0.92
Bandon			0.90	0.19	0.64	1.23	1.05	0.87	1.87	1.75	1.23	1.37	0.27	0.90	0.41	0.55	1.25	0.56	1.89	1.19	1.55	1.14	2.45	1.09	1.83	0.45	1.12
Banks		0	1.90	0.53	0.96	0.75	0.75	1.30	1.62	2.82	1.86	1.10	1.10	1.10	0.67	0.56	0.79	0.56	1.71	0.68	1.82	2.06	2.64	1.74	0.35	0.58	1.10
Beaverton		0	0.85	0.45	0.77	0.94	0.80	0.59	1.01	1.04	0.92	1.19	1.11	0.45	0.70	0.28	0.45	0.57	0.44	0.47	0.53	0.79	0.62	0.47	0.53	0.51	0.60
Brookings		0	0.52	0.34	1.01	0.94	0.65	0.54	1.32	1.35	0.97	1.77	0.71	0.84	0.94	0.61	0.44	0.71	1.13	1.41	1.33	1.16	1.65	1.44	1.27	1.12	0.99
Bull Mountain		0	0.74	0.40	0.35	0.43	0.45	0.68	0.92	0.39	0.59	0.37	0.35	1.10	0.33	0.31	0.16	0.18	0.16	0.43	0.30	0.39	0.37	0.43	0.38	0.18	0.39
Clatskanie		0	0.78	0.99	1.00	0.41	0.51	2.32	2.44	2.66	0.75	2.62	1.32	0.77	0.56	1.76	1.23	1.34	1.24	0.23	0.46	0.81	2.66	0.58	0.47	0.71	0.99
Coos Bay		1	0.89	0.35	0.91	0.56	0.89	1.32	2.49	1.99	1.49	1.98	1.53	1.02	0.56	0.86	0.86	1.45	1.96	0.94	1.15	1.16	1.37	1.01	1.72	1.64	1.08
Coquille		4	0.51	0.66	0.74	0.37	0.97	1.27	1.35	2.49	1.90	1.16	1.16	1.02	1.74	2.64	0.57	1.64	1.99	1.41	1.42	2.60	1.96	1.21	2.13	0.99	1.31
Cove		1	1.03	1.37	0.69	0.70	1.40	1.05	0.70	0.70	2.13	1.43	1.08	1.44	1.79	1.44	1.08	3.21	0.72	1.08	2.54	1.11	2.96	0.74	0.37	0.75	1.08
Dayton		1	0.28	0.00	0.72	1.61	1.91	1.90	1.93	4.68	2.89	2.60	1.23	1.57	0.95	0.64	0.64	1.29	0.64	2.30	1.48	2.01	2.56	2.08	1.05	1.43	1.52
Detroit		3	0.88	2.23	0.45	0.00	0.00	0.90	2.74	3.24	1.42	6.57	0.95	1.91	0.47	0.00	0.00	1.42	0.00	3.85	1.93	1.95	1.95	2.91	0.48	1.44	1.42
Elgin		0	0.85	0.51	0.16	0.34	0.52	0.35	1.56	1.06	0.86	0.69	0.52	0.70	0.34	1.02	1.20	0.55	1.71	1.20	1.55	1.22	1.06	0.71	0.36	0.61	
Empire		1	1.01	0.62	1.64	1.02	1.42	1.19	2.13	1.86	1.16	1.17	0.68	0.68	0.94	0.69	1.82	1.04	1.05	1.59	0.97	1.53	1.43	1.89	1.45	0.46	1.11
Enterprise		0	0.35	0.68	0.00	0.34	0.34	1.02	0.67	0.22	0.67	0.45	0.11	0.00	0.34	0.67	0.11	0.34	0.57	0.23	0.34	0.93	0.46	0.24	0.24	0.12	0.34
Forest Grove		0	1.08	1.02	0.52	0.66	0.86	1.31	1.83	4.16	1.30	0.73	1.62	1.34	0.37	0.59	1.48	0.45	1.61	1.13	0.78	1.35	1.25	0.83	0.84	0.67	0.85
Gaston		7	0.68	1.36	1.72	2.95	1.57	2.66	4.93	4.15	6.46	8.62	1.15	1.34	4.86	1.55	11.26	0.79	2.76	4.94	2.39	2.42	2.84	2.03	2.22	1.22	2.44
Gold Beach		0	0.82	1.08	1.20	1.43	0.78	1.11	1.72	0.87	1.14	1.91	0.55	1.34	0.43	1.08	0.87	1.02	1.62	1.27	1.35	1.21	0.91	0.76	0.47	0.93	1.08
Grand Island		5	0.35	0.70	1.05	1.40	0.35	2.11	4.63	7.12	2.62	0.37	0.74	0.75	0.76	1.90	0.00	0.00	1.52	1.91	6.15	3.08	2.63	3.01	1.90	1.16	1.46
Gresham		0	0.64	0.52	0.66	0.55	0.48	0.64	1.16	0.81	0.41	0.88	0.45	0.55	0.61	0.30	0.29	0.27	0.41	0.31	0.58	0.57	0.63	0.33	0.53	0.43	0.54
Hillsboro		0	0.53	0.33	0.47	0.36	0.66	0.97	1.01	0.80	0.62	0.92	0.22	0.35	0.25	0.22	0.40	0.22	0.57	0.46	0.54	0.64	0.39	0.38	0.49	0.75	0.48
Hoodland		0	0.30	0.74	0.07	0.07	0.22	0.98	0.53	0.75	0.76	0.69	1.23	0.47	0.40	0.40	0.40	0.40	0.33	0.57	0.82	0.83	0.68	1.02	0.43	0.61	0.55
Hoodland		0	0.66	1.32	0.67	1.00	0.00	1.03	1.03	0.34	0.00	1.05	1.41	0.00	0.36	0.36	0.36	0.71	0.78	1.09	0.73	1.83	1.49	1.51	0.38	0.87	0.76
Imbaha		0	2.31	0.00	0.77	1.54	0.77	0.00	0.78	0.77	0.00	0.00	0.00	0.00	0.00	0.75	1.49	1.52	0.76	0.76	0.00	1.54	0.00	0.00	0.00	1.56	0.76
Joseph		0	0.81	0.81	0.58	0.23	0.71	0.12	0.48	0.36	0.12	0.00	0.73	0.12	0.24	0.37	0.50	0.25	0.38	0.39	0.13	0.51	1.16	0.26	0.26	0.39	0.38
LaGrande		0	1.33	0.87	0.92	1.04	1.23	0.98	1.33	1.26	0.96	0.85	0.87	1.83	1.28	1.01	1.42	1.19	1.46	1.42	1.31	1.58	1.46	1.35	1.50	1.42	1.30
Lakeside		0	0.69	0.92	0.93	0.71	0.24	1.22	0.99	2.49	1.02	1.79	0.00	0.78	0.26	0.79	0.53	0.40	2.98	1.37	1.11	1.14	1.46	2.42	0.30	1.24	0.96
Langes		0	0.00	0.84	0.00	0.84	0.00	2.10	0.85	0.42	0.43	2.62	0.44	0.89	0.00	1.38	2.30	0.93	1.40	0.47	0.96	1.42	0.95	2.90	1.49	1.00	0.91
Lostine		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	2.16	1.43	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.77	0.00	0.00
McMinnville		0	0.54	0.77	0.84	0.50	1.26	0.62	1.15	1.39	1.87	1.30	0.68	0.57	1.45	0.60	0.73	0.81	1.18	0.85	0.72	1.01	0.59	0.60	0.78	0.94	0.79
Mill City		0	0.71	0.88	0.87	0.35	0.71	0.90	1.08	1.82	2.00	1.45	1.65	0.55	0.73	0.18	1.12	1.30	1.12	1.69	1.14	0.57	1.15	1.53	1.15	0.58	1.10
Murphy		0	0.22	0.67	0.22	0.00	0.00	0.00	1.62	1.88	1.42	0.24	0.24	0.00	0.50	0.50	0.25	0.26	0.26	0.26	0.26	0.26	0.54	0.81	0.55	0.00	0.84
Myrtle Point		1	0.83	1.03	1.37	0.74	0.74	1.18	2.58	4.35	1.86	2.86	2.53	2.10	2.24	1.13	1.47	0.68	1.60	1.74	0.70	1.65	1.05	0.83	0.84	0.85	1.27
Newberg		0	0.58	1.09	1.18	0.61	1.23	1.75	1.90	1.85	1.96	1.30	0.82	1.07	1.58	0.96	1.44	0.78	1.22	1.31	0.97	1.78	1.00	0.69	0.90	1.01	1.14
North Bend		0	0.46	0.68	0.56	0.65	0.62	1.82	1.75	1.22	1.33	0.74	0.70	0.70	0.90	1.20	1.37	1.37	1.52	1.20	1.82	0.92	1.28	0.79	0.64	0.81	0.86
Orient		1	1.67	0.49	1.62	1.73	1.02	1.33	2.59	1.57	1.13	1.00	0.47	1.02	1.20	0.40	1.13	0.73	1.80	0.74	1.34	1.11	0.94	1.91	1.95	1.51	1.17
Port Orford		0	0.84	0.50	1.29	0.33	0.99	1.17	1.35	2.20	1.36	2.56	1.20	1.39	1.21	1.39	1.23	1.42	0.89	2.16	1.64	2.03	2.61	2.85	1.92	1.75	1.37
Powers		0	1.27	0.42	0.00	0.43	0.85	0.85	2.13	0.42	0.42	2.59	0.00	0.44	1.31	0.00	0.44	0.43	1.74	0.00	0.00	0.88	1.78	0.44	0.90	0.00	0.44
Provolet		2	0.96	0.18	0.45	0.63	0.72	0.82	2.19	2.11	0.83	0.85	0.48	0.86	0.48	0.29	1.06	0.78	0.98	1.19	0.30	1.61	1.52	0.72	2.76	1.23	0.84
Reedsport		0	0.59	0.40	0.51	1.13	0.42	0.21	2.96	1.06	1.64	2.99	1.03	0.99	0.35	0.47	0.71	1.08	1.33	0.97	1.09	0.99	1.86	0.50	1.27	1.67	1.01

NOTE 1: Frontier's small wire center names (1,000 lines or less) are in red.

NOTE 2: The "MO>2.00" column is the number of times a wire center with over 1,000 access lines exceeded a 2.00 trouble report rate during a twenty-four month period. The "MO>3.00" column is the number of times a wire center with 1,000 or less access lines exceeded a 3.00 trouble report rate during the reported twenty-four month period.

NOTE 3: The number at the bottom of the monthly columns is the number of wire centers that exceeded either the 2.00 threshold for the large wire centers or the 3.00 threshold for the small wire centers during the twenty-four month period. This only indicates wire centers are over the threshold applicable for that size wire center. It does not necessarily indicate that wire centers failed to meet standard.

NOTE 4: Beginning in January 2014 the calculation of the statewide average changed. Since a range of months going back to February, 2013 is used to compare, those months also reflect the same calculation method to aid comparability.

NOTE 5: Cells with green fill and red numbers indicate the months for those wire centers where the measurements exceeded the threshold applicable for that wire center at the time of the measurement. It does not indicate that the wire center failed to meet standard.

NOTE 6: Cells with emboldened borders indicate where a wire center transitioned from a large wire center to a small wire center due to line losses.

NOTE 7: Only cells with values that would have been considered as failing to meet standard at any time during the 24 month period have yellow fill.

NOTE 8: The far right column is a simple conditional formatting using a color range to highlight the median rate over the 24 months. Occasionally the conditional formatting shows that a wire center that may not have had any months when a threshold was exceeded might still have some lingering problems as in the cases of Amity, Dayton, Detroit, and Yamhill.

This chart has been expanded from the normal 12-month rolling view of the repair clearing time measurements to a 24-month view. A yellow highlight indicates that a problem in the wire center has failed to meet the Commission’s standard. The expanded view reveals chronic service quality problems that prompted staff to warn Frontier in April 2016. Additional explanatory notes follow the table.

Repair Center	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	
Beaverton	91.9%	90.0%	84.1%	84.1%	92.7%	73.6%	65.9%	67.9%	65.1%	80.9%	95.0%	90.1%	92.1%	94.5%	94.1%	91.7%	79.7%	72.6%	69.8%	67.6%	67.6%	59.2%	74.9%	67.1%	65.2%
Coastal	94.7%	97.2%	96.9%	95.6%	96.7%	95.5%	84.0%	86.2%	93.3%	98.4%	98.2%	93.2%	98.4%	96.4%	95.6%	95.3%	92.2%	83.4%	67.9%	69.7%	70.5%	79.2%	72.3%	72.3%	64.0%
Gresham	91.6%	90.4%	90.1%	88.4%	86.5%	74.7%	63.2%	68.0%	65.7%	88.9%	97.9%	91.6%	86.8%	90.2%	86.7%	91.4%	78.8%	75.4%	66.3%	59.9%	59.9%	53.9%	63.6%	60.7%	54.9%
LaGrande	95.0%	94.6%	93.2%	96.6%	98.6%	94.6%	95.9%	93.5%	95.2%	98.5%	98.6%	94.8%	95.6%	91.1%	94.4%	92.8%	98.7%	90.8%	96.2%	95.5%	95.5%	68.2%	97.0%	90.6%	90.5%
McMinnville	88.3%	91.0%	91.2%	79.3%	88.2%	75.9%	70.5%	64.5%	81.1%	85.3%	92.8%	86.8%	96.4%	92.9%	90.6%	95.5%	80.7%	72.3%	64.3%	61.4%	61.4%	61.7%	57.9%	63.1%	54.3%
Tigard	84.5%	91.7%	78.7%	78.1%	72.8%	62.4%	56.1%	78.4%	82.3%	91.5%	94.2%	88.3%	90.0%	87.5%	84.9%	86.2%	70.2%	70.4%	64.7%	59.9%	59.9%	64.6%	39.5%	59.0%	59.0%
Statewide	90.9%	92.1%	88.9%	86.1%	88.4%	76.0%	70.3%	73.8%	73.8%	73.8%	95.8%	90.6%	90.6%	92.5%	92.5%	92.0%	82.5%	76.0%	69.1%	67.0%	67.0%	67.0%	71.1%	63.7%	63.7%

**OAR Standard: Through January 2014 - 95% -- Beginning February 2014 - 90%**

**DID NOT MEET STANDARD**

The wire centers served by the six repair centers are shown in the table to the left. Failures occur from time to time and it tends to be seasonal. One problem with the failure to meet the repair clearing standard shown in this table is that some measurements since September 2015 are worse than other missed standards in the previous eleven years. This is depicted in the Graph on page 5 of Staff’s report.

The table includes a statewide average row. This is somewhat helpful but it is not recognized as a standard. Staff’s experience is that whenever service quality measurements are aggregated the results do not accurately reflect what is going on at the granular level. Consequently staff does not advocate rolling up the measurements into an aggregate. The State-wide average row in the table illustrates how aggregated results can mask actual experience.

<b>BEAVERTON</b>	<b>COASTAL</b>	<b>GRESHAM</b>
Aloha	Bandon	Gresham
Banks	Brookings	Hoodland
Beaverton	Coos Bay	Orient
Clatskanie	Coquille	Sandy
Forest Grove	Empire	Sunnyside
Gaston	Gold Beach	Valley View
Hillsboro	Lakeside	
Somerset West	Langlois	
Vernonia	Murphy	
Yamhill	Myrtle Point	
	North Bend	
	Port Orford	
	Powers	
	Provoit	
	Reedsport	
<b>LAGRANDE</b>	<b>MCMINNVILLE</b>	<b>TIGARD</b>
Cove	Amity	Bull Mountain
Elgin	Aumsville	Newberg
Enterprise	Dayton	Scholls
Imbler	Detroit	Sherwood
Imnaha	Grand Island	Stafford
Joseph	McMinnville	Tigard
LaGrande	Mill City	Tualatin
Lostine	Silverton	Wilsonville
Union	Turner	
Wallowa		