2017 Accomplishments

14,863 Active Connections
970 New Connections
  - 697 regular installs
  - 273 PPB installs
45.4% take rate
  - 77.2% Equipment Utilization
100.00% Network system composite uptime
12 days average for new installs
2,753,868 GB maximum monthly bandwidth

*Numbers as of 11/28/2017
## Historical Snapshot

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CONNECTIONS</th>
<th>TAKE RATE</th>
<th>EQUIPMENT UTILIZATION</th>
<th>AVG. DAYS FOR INSTALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>12,240</td>
<td>41.50%</td>
<td>N/A</td>
<td>31</td>
</tr>
<tr>
<td>2013</td>
<td>12,434</td>
<td>41.80%</td>
<td>N/A</td>
<td>27</td>
</tr>
<tr>
<td>2014</td>
<td>12,859</td>
<td>42.60%</td>
<td>76.25%</td>
<td>20</td>
</tr>
<tr>
<td>2015</td>
<td>13,346</td>
<td>43.90%</td>
<td>75.94%</td>
<td>26</td>
</tr>
<tr>
<td>2016</td>
<td>14,060</td>
<td>45.10%</td>
<td>76.73%</td>
<td>13</td>
</tr>
<tr>
<td>2017</td>
<td>14,829</td>
<td>45.40%</td>
<td>77.19%</td>
<td>11</td>
</tr>
</tbody>
</table>
2017 Public Power Benefit Accomplishments

1068 YTD new premises passed
1798 total PPB premises passed
73% County coverage
273 New connections in PPB areas
Expansion areas in 2017
  - Merry Canyon, Granite Ridge, Yaksum Canyon, Manson, Riverside 9, Mission Creek and Brender Canyon

Infill areas in 2017
  - Sunnyslope, Chelan, Cashmere

Preliminary design for 2018
2017 Customer Survey

Purpose of the study was to evaluate customer’s attitudes, awareness and perceptions about fiber service in their area.

**Two big questions:**

- If fiber was available, were they signed up?
  - If so, were they happy with their service?
  - If not, why?
- If fiber was coming to their area, were they going to sign up?
2017 Customer Survey

Key Findings

Most common reason for not signing up was non-awareness of availability.

Only 1 in 9 reported having heard or seen any promotions for Chelan fiber in the past 30 days (Date of survey: Mid-July)

The majority (55%) of those without internet service (62 of the 405 surveyed) reported they simply did not need it.

4 in 5 internet customers rated their satisfaction above the mid-point on the satisfaction scale.
What we are doing in 2018

Fiber Network Projects
Telecom Projects
Fiber Marketing Plan
Asset Management Strategy
  - Long Range Technology Plan
Public Power Benefit expansion
  - Collaboration with Customer Utilities
Fiber Network Projects in 2018

Optical Line Terminal (OLT) upgrade for managing existing OLT end of life; adding enhanced IP-TV functionality; improving equipment density

Bandwidth Management Project

- Phase I of network re-architect
  - Enhance capacity in core and high speed optics for links

Service Portal Express implementation

Improves network monitoring and reporting to improve customer service

Network to Network interface upgrades to provide higher capacity, redundancy and resiliency for service providers

Asset Management Strategy
2018 Asset Management Strategy

Continue to build framework and hierarchy

Asset families

- Fiber cable, connectors, passive devices
- Vehicles, computers, software
- Active electronics

Active Electronics are managed through the Long Range Technology Plan (LRTP)

- Focused on obtaining maximum value from investments while managing the network to capacity, functionality, reliability and resiliency goals.
- 8-10 year forward look analyzing physical, functional and vendor driven obsolescence cycles
Telecom Projects in 2018

Start implementation of new Digital Mobile Radio (DMR) system

New microwave network implementation

Fault Management System
- Management of DMR and Microwave systems
  - Status and alarms
  - Site environmental conditions
  - Intrusion detection
  - Power conditions
2017 PUD Fiber Marketing Program

iPad Incentive Drawing – 15,000th customer
Proposed 2018 Marketing & Promotions

Initiate PUD-driven marketing using:

- Radio ads
- Direct mail
- Increased social media strategy/e-campaign
- Customer Relations staff offering fiber services during routine customer calls (up-sell)
- Print ads
- Movie theatre :30 video ads
- Bilingual

Target audience: adults 25 - 55
Public Power Benefit Program for 2018

Expansion Areas
- Chumstick Highway/Merry Canyon
- Completion of Brender Canyon & Manson Blvd

Infill Areas
- Cashmere
- Chelan
- Plain

2018 new premises passed: 814
Carryover from 2017: 245
Total number of 2018 premises expected: 1,059
Summary

Broadband Network was stable and reliable

We are approaching 15,000 active connections

Passed 1068 new premises and 1798 total under the PPB program

Our goal in 2018 is 814 new premises with 245 carried over from 2017 for a total of 1059 premises passed.

Launching a marketing plan in 2018 for better awareness of our fiber broadband network

Continue projects to improve or upgrade our Fiber and Telecom assets
Questions?