



2017 FIBER & TELECOM UPDATE

DECEMBER 4, 2017
NO ACTION REQUIRED

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

YEAR	CONNECTIONS	TAKE RATE	EQUIPMENT UTILIZATION	AVG. DAYS FOR INSTALL
2012	12,240	41.50%	N/A	31
2013	12,434	41.80%	N/A	27
2014	12,859	42.60%	76.25%	20
2015	13,346	43.90%	75.94%	26
2016	14,060	45.10%	76.73%	13
2017	14,829	45.40%	77.19%	11

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

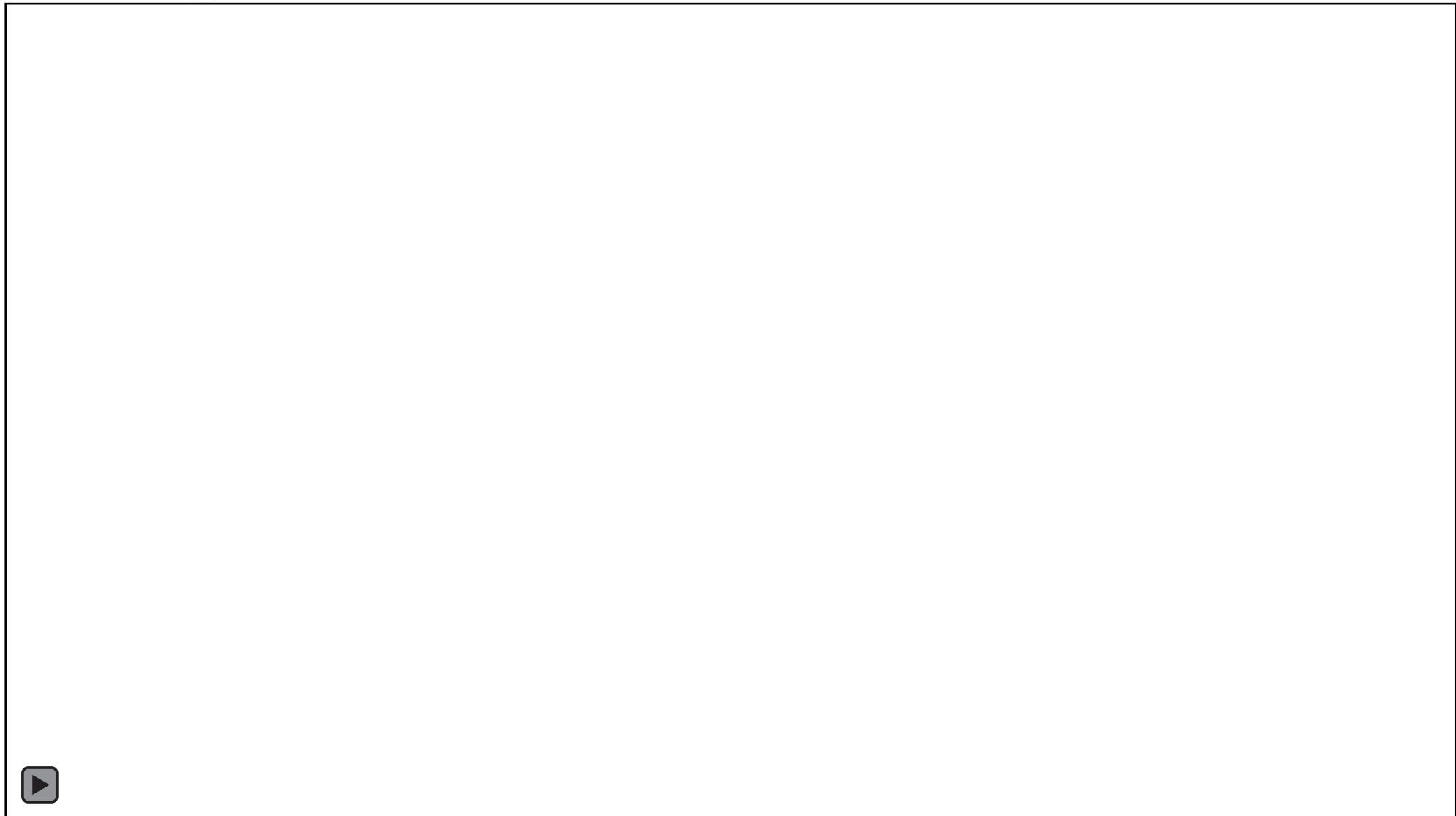
New microwave network implementation

Start implementation of new Digital Mobile Radio (DMR) system

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?

