Fiber Optic Partnerships
WAPA-wide customer meeting

Aug. 29, 2019 | Lakewood, CO

WAPA Emcee: Kirsten McClure
Welcome

Kirsten McClure
Fiber Optic Feasibility Assessment
Project Manager
Meeting overview

• Value of fiber assessment
• Current state of WAPA’s fiber
• Customer input
• Next steps
Hello! Where are you joining us from today?
Value of Fiber Assessment

Mark A. Gabriel
Administrator and CEO
Strategic Roadmap 2024

Evolution of Services
Mutually Beneficial Partnerships
Business, Technology and Organizational Excellence

Mission
Market and deliver clean, renewable, reliable, cost-based Federal hydroelectric power and related services
Tactical Action Plan

- Mission Critical Customer Services in an Evolving Industry
  - Preparing for Markets
  - Organizational Approach to Markets

- Grid Resilience
  - Physical Security
  - Cybersecurity
  - Emergency Management
  - Strategic Transformer Management
  - Fiber Partnerships

- Asset Management 2.0
  - Life Cycle Management of Major Assets
  - Life Cycle Management of Additional Assets
  - Data as a Strategic Asset

- People and Organization
  - Human Performance and Just Culture
  - Leadership Development
  - Program and Budget Integration
  - Acquisition Management

Business, Technology and Organizational Excellence
Mutually Beneficial Partnerships
Evolution of Services

Western Area Power Administration
“...will complete a feasibility assessment ... to determine if WAPA and SWPA excess fiber can be leased to their customers and broadband service providers... [by December 2019]”
Our goals

• Improved capabilities for utility operations
• Protect customers’ investments
• Support customer needs for expanded services
Current state of WAPA’s Fiber

Kevin Hogg
WAPA RM Lead
Telecommunications Engineer
WAPA-owned fiber optic lines

*Note: This map only shows the WAPA-owned part of the fiber optic network. Other neighboring entities, not shown here, operate and maintain their portion of the fiber optic network. Fiber route buildout is based primarily on planned maintenance and replacements to minimize cost.
WAPA fiber & partnerships for grid resilience

• Over 20 years of utility fiber planning, installation and maintenance

• Installed more than 5,000 miles of fiber across WAPA

• Partnerships crafted for mutual benefit

• Agreements reflect specific project & regional needs

• Opportunity: WAPA-wide best practices
Optical Ground Wire (OPGW)
Fiber Optic Partnership Overview

Business Driver: Increasing data needs to support WAPA operations

Currently: Partnerships in place in all WAPA regions

Future: Evaluating partnership requests and WAPA communication needs
Fiber Partnerships

• Explore additional opportunities to use WAPA’s fiber assets.

• **WAPA will explore leveraging its fiber assets to:**
  
  – *Improve its communication capacity to support current and future technologies.*
  
  – *Improve support to customers.*
  
  – *Support grid resilience with the Departments of Energy and Defense.*
  
  – *Support the Presidential Broadband Initiative.*
Fiber Optic Partnerships

Feasibility Assessment

Ensure WAPA fiber continues to meet power delivery and transmission system needs

Maintain “the beneficiary pays” principles

Address fiber optic partnership requests consistently

Support American Broadband Initiative & seek customer input

WAPA Feasibility Assessment Principles
Feasibility Assessment Elements

- Cost Accounting and Allocation
- Grid Resilience
- Legal Authorities
- Fiber Asset Inventory
- Lands and Rights of Way
- Reliability Compliance
- Current Agreement Best Practice
- Outage Issues

Fiber Optic Partnerships Feasibility Assessment
Your turn: Customer Input

Facilitators: Brent Osiek and Leah Shapiro
Fiber Optic Partnership
Customer Input

Interest and opportunities for new partnerships

• Could aid connectivity to rural areas
• Partnerships on new lines and installations
• Increase redundancy and resiliency of existing networks
• Enable cost-sharing and partnerships on tribal lands
• Additional fiber build-out could also support wireless deployment
• May make communication services more accessible
Interest in future fiber partnerships: What opportunities come to mind for future fiber partnerships with WAPA?
Fiber Optic Partnership

Customer Input

Customers’ priorities and/or goals for fiber partnership

*What is a “win” for a new partnership from the Customer view?*

- Ensure that any effort does not impact delivery of power
- Maintain existing relationships and fiber partnerships
- Follow beneficiary pays principles
- Should benefit WAPA’s mission and operations
- No impact to existing fiber use or fiber partnerships
- Opportunity to inventory existing partnerships
Thinking about future fiber partnerships with WAPA, what are your utility's goals/priorities?
Fiber Optic Partnership
Customer Input

Challenges and concerns with new partnerships

• Authority to enter into fiber partnerships or expansion

• Existing right-of-way contracts

• Physical and logical access and security for systems and equipment

• Determining cost allocation between users
Thinking about future Fiber partnerships, what challenges or concerns do you see?
Feasibility Assessment Elements
Fiber Optic Partnership
Customer Input

Gaps in feasibility assessment elements

• Service level agreements
• How can partners with common interests come together
• How will WAPA coordinate increased use of its fiber
• Should address how access guidance will be developed
• Need to characterize the existing fiber network
What is missing? Is there a gap in the elements we are assessing?
Next Steps

Kevin Howard
WAPA Executive VP and COO
Fiber Optic Assessment
Next Steps

Increase WAPA’s fiber communication capacity & improve support to customers
Fiber Optic Partnership Discussion

Next Steps

- **Fall 2019**: Draft and finalize the assessment
- **December 2019**: Submit assessment report to DOE
- **Winter 2020**: DOE and administration review of assessment
- **Spring 2020**: Discussions & determination of next steps
**Fiber Optic Partnership**

**Customer Information**

- **Project information**
  - [https://www.wapa.gov/About/keytopics/Pages/fiber-feasibility-assessment.aspx](https://www.wapa.gov/About/keytopics/Pages/fiber-feasibility-assessment.aspx)

- **Send additional input**
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- **Contacts**
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