



Fiber Optic System Overview

Loveland Utilities Commission | July 18, 2018

The Energy We Live By™

Our Mission

Provide safe, reliable, environmentally responsible, and competitively-priced energy and services.

Our Vision

As a respected leader and responsible energy partner, improve the quality of life for the citizens served by our owner communities.

Our Values

Safety
Operational Excellence
Integrity
Sustainability
Customer Service
Respect
Innovation

About

Platte River Power Authority

Platte River Power Authority is a not-for-profit wholesale electricity generation and transmission provider that delivers safe, reliable, environmentally responsible, and competitively priced energy and services to its owner communities of **Estes Park, Fort Collins, Longmont, and Loveland** for delivery to their utility customers.

Began operations: 1973

General Manager: Jason Frisbie

Governance: Platte River is governed by an eight-person board of directors designed to bring relevant expertise to the decision-making process. The board includes two members from each of the owner municipalities.

The organization: Platte River is a not-for-profit political subdivision of the State of Colorado


Employees: 252

Peak municipal demand: 661 MW on July 19, 2017


Projected deliveries of energy (2018): 4,133,000 MWh

Projected deliveries of energy to munis (2018): 3,340,000 MWh




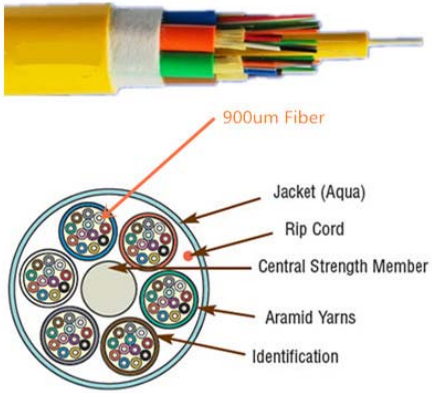


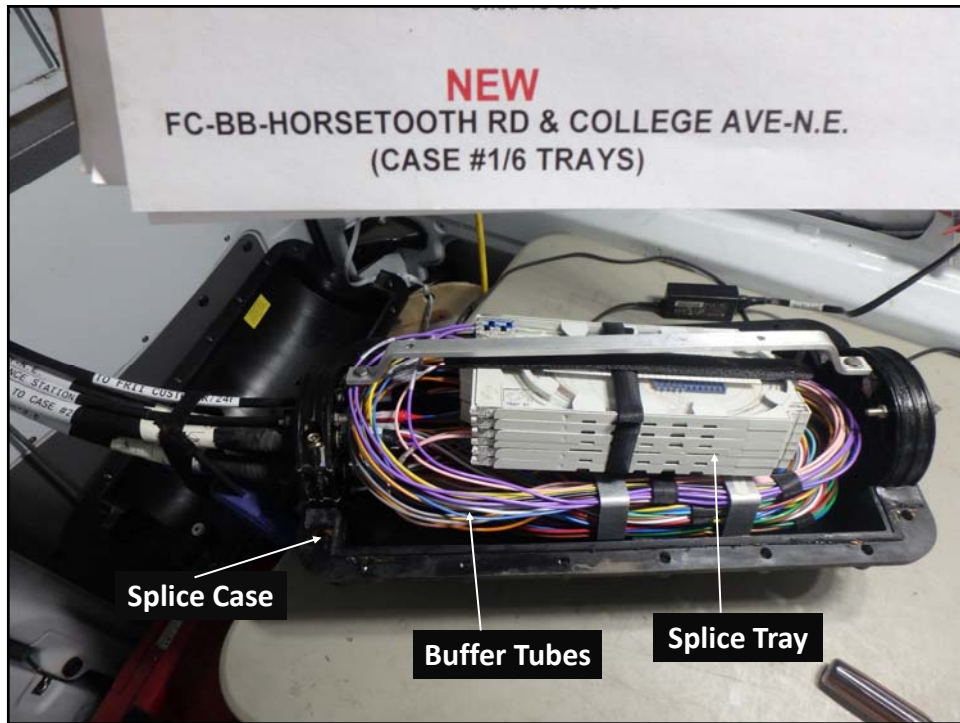
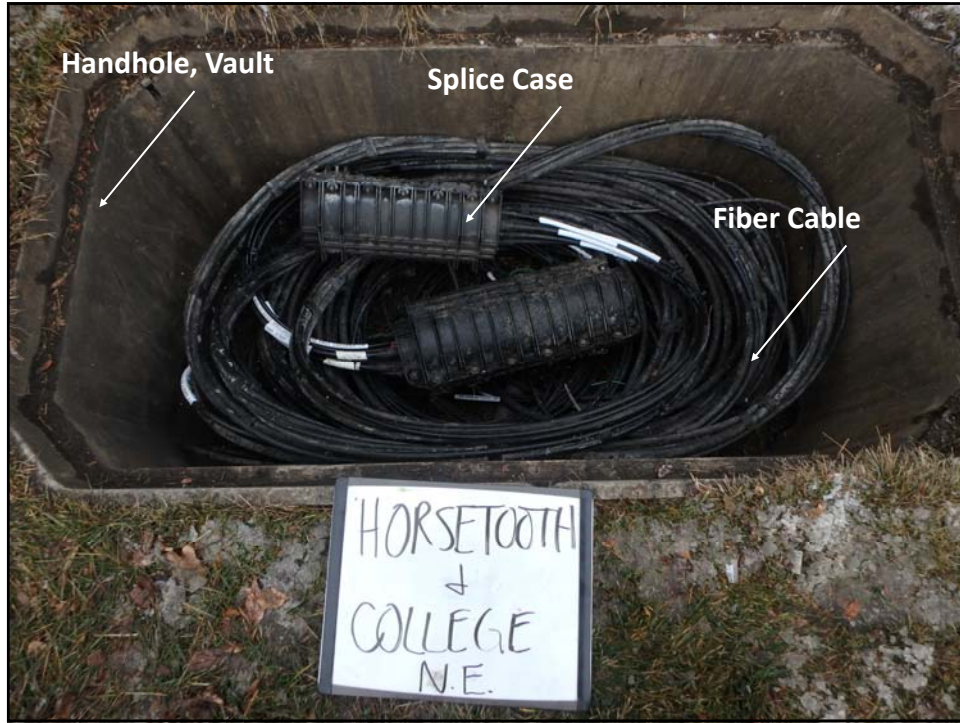
Fiber System Components

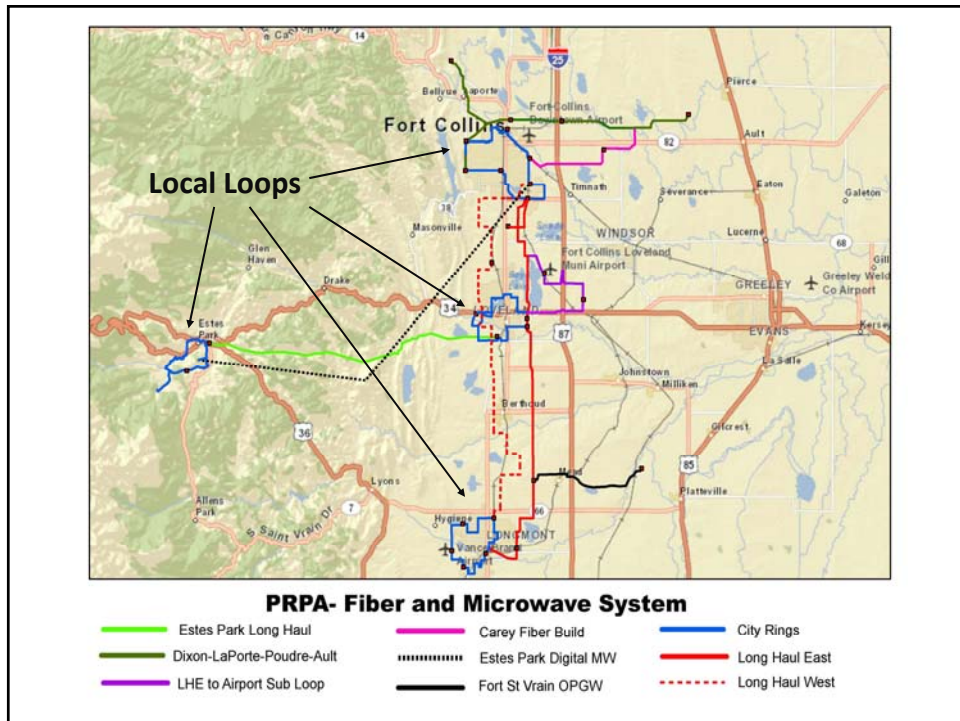
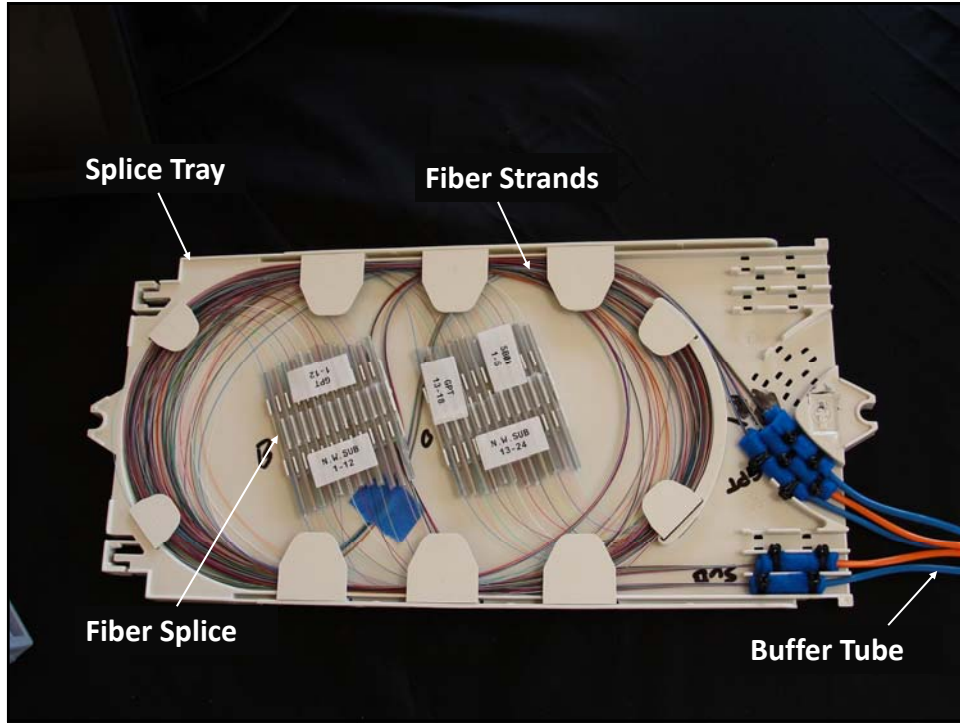


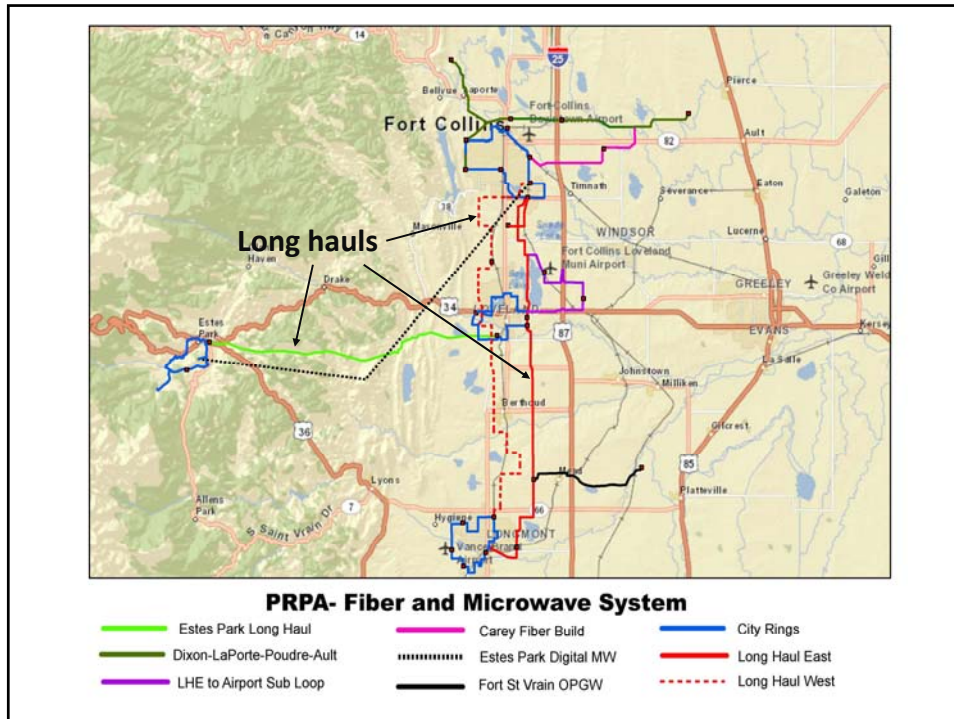
Fiber optic cable

- Fiber optic consists of
 - Jacket (the cable)
 - Buffer tubes
 - Individual fibers
- Buffer tubes commonly contain 12 or 24 fiber strands
- Loveland's local loop cable contains 144 fibers within 12 buffer tubes



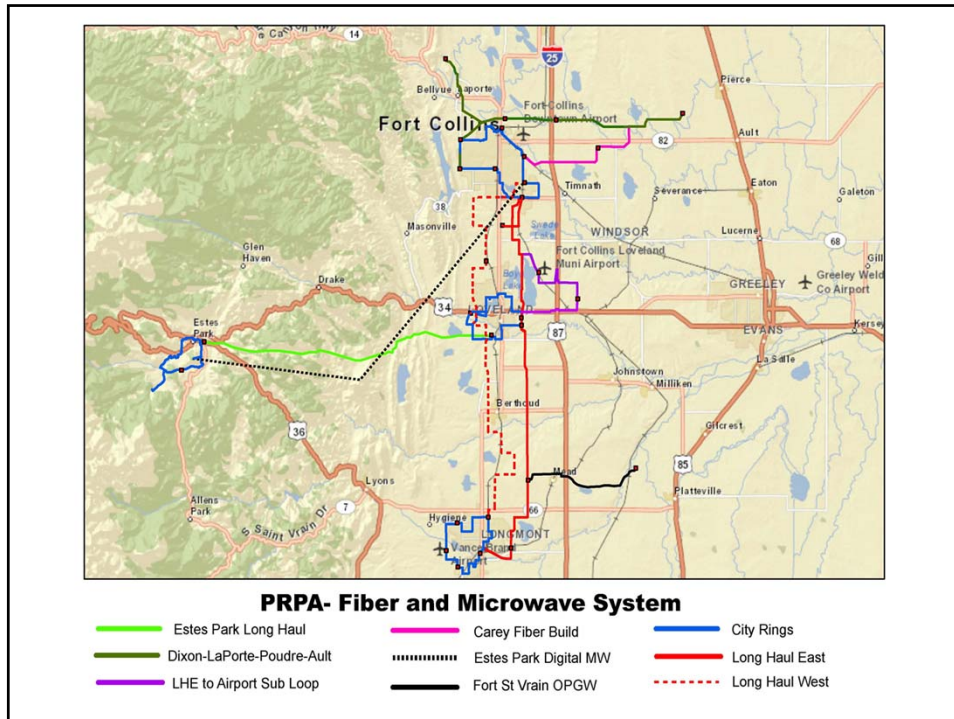






Fiber overview

- In the late 1990s, Platte River identified a need to modernize its electric operations communication
- At the same time, municipality staff members were considering the installation of fiber cable in their cities
- In April 1997, the Board appropriated funds to begin the fiber project



Fiber overview

- Between April 1997 and April 1998, the concept of turning “the balance of the fiber over the to the respective cities” had changed
- Longmont took ownership of their 132 fibers
- Estes Park, Fort Collins and Loveland requested that their extra capacity be owned by Platte River and that Platte River lease dark fiber on their behalf

Fiber overview – current ownership

- **Platte River owns**
 - Twelve fibers in the Estes Park, Fort Collins, Loveland and Longmont rings
 - Extra capacity fibers in Estes Park, Fort Collins and Loveland
 - Long haul cables
 - Discussions on how and when to transfer fiber assets to the Estes Park, Fort Collins and Loveland
- **Longmont owns**
 - 132 fiber strands of extra capacity in the Longmont fiber optic loop

Current uses of the Loveland ring

- **City of Loveland**
 - IT – Data communications to city facilities
 - SCADA – Substation monitoring and control
 - Traffic – Traffic lights and signs
- **Platte River**
 - SCADA – Substation monitoring and control
 - Protective relaying
 - Metering

Current uses of the Loveland ring

- **Third-party users**
 - LETA – 911 call routing
 - State of Colorado – 800MHz emergency radios (PRPA SONET)
 - Larimer County – Internal communication
 - UCHealth – Internal communication
 - WAPA – Electric operations
 - Tri-State – Electric operations
 - Level 3/CenturyLink
 - Skybeam
 - FRII

Fiber Optic Network Accounting Policy

- Platte River is responsible for:
- Capital costs on the Fiber Optic Network, regardless of fiber strand ownership, for (1) additions to the Fiber Optic Network; and (2) replacement of the Fiber Optic Network after the original installation.
- Operations and maintenance costs associated with the Fiber Optic Network, regardless of fiber strand ownership.

Questions