BoulderFiber Meeting Notes - 7/19/12

Attendees:
Jeff Custard (UCAR/FRGP)
Fabian Guererro (UCAR/FRGP)
Jerry Janssen (NOAA-Boulder)
Marla Meehl (UCAR/FRGP)
Perry Movick (EAGLE-Net)
Mark Mutz (NOAA-Boulder)
Alan Schoenfeld (BVSD)
Paul Williams (City of Boulder)
David Wood (CU-Boulder)

Action Items:
- **Look alternate route from RMMA for UCAR** - Marla/Fabian
- **Look at 910 15th and 1850 Pearl diverse path** - Marla/Jeff/Fabian
- **Fibael mapping should be a primary goal of BoulderFiber**
- **Need to look at options to get 36 fiber to Boulder/BRAN** - Marla
- **Get testing details for “kink” issue to finish testing** - Paul/Fabian
- **Draft a BVSD/BRAN outage/testing proposal** - Fabian
- **Run BRAN emergency test** - Paul/Fabian
- **Review BRAN emergency document** - Paul/Fabian/Marla
- **UNAVCO - schedule meeting for BVSD and FRGP** - Marla
- **NEON - contact Krista about networking** - Marla
- **Send poll for next meeting in January for February 2013 meeting** - Marla

1. EAGLE-Net (EN) update
   - Review [fiber design map](#)
     - Balloons are CAI named in the grant
       - One connection at every school district in the state (178)
         - 178 K-12 school districts with over 1,700 schools and 830,000 students
         - 12 Boards of Cooperative Educational Services (BOCES)
         - 15 community colleges
         - 3 higher education institutions
         - 26 libraries
       - Purple balloons being serviced by USDA grant now instead of EN
       - Yellow routes are construction (125 should be yellow not green)
       - Green are IRUs
     - Status of fiber builds, purchases
       - 2 year point in the grant
       - 60-65% fiber miles by August and 70% of funding spending
       - 2000-2200 miles of IRUs in grant and at 1600 miles now
       - 300 miles brought over from CBOCES
       - 800 or 1200 miles of fiber builds designed
       - 500 of 800 will be built by end of August
       - Senate Bill 152 restricting direct sales to non-government entities
   - **Boulder specific**
     - EN using some BVSD fiber
       - 4 strands throughout the ring and to Longmont and Nederland
       - **Look alternate route from RMMA for UCAR**
       - **Look at 910 15th and 1850 Pearl diverse path**
       - Discussed Nederland connectivity (City of Nederland, Watershed, CU Mountain Research Center)
         - BVSD dropped fiber to a number of City locations but has never been activated
- Aggregated map of Boulder and State
  - Boulder County map
  - State mapping project
  - **Mapping should be a primary goal**

- I25 and other BoulderFiber related plans
  - Building up I25
    - Scheduled to be complete by end of August 2012
    - Starts south to north at 112th and I25
    - Connect to Zayo there south into Denver
    - Discussing possible CDOT connection for redundancy into Denver
  - Looking at building into downtown Cheyenne instead of the NWSC
  - Looking at closing ring west from Greeley to I25
  - Landing at active cabinets or collocation spaces - patch points
- Integration into BiSON
  - Once I25 design finalized, will have to do optics design
- Estimated activation of all of EN when grant ends
  - August 2013

2. BiSON
   - Build to NWSC
     - Completed redundant builds and active since January 2012
   - Upgrade of hardware
     - Complete with NSF ARI grant and member contributions
     - 10G lambda activations for all BiSON members and redundant 10Gs for all but CU
     - Will need to invest more to go to 100G
   - Long term hardware upgrade plans
     - Working with ADVA on road map
     - ADVA has announced end of life of hardware in 2017
     - Setting aside capital funds for replacement

3. BVSD
   - Recent fiber moves, status
     - Arapahoe
     - Highway 119 construction
   - Planned fiber moves
     - US 36 at Wadsworth and 88th
       - **Need to look at options to get this to Boulder/ BRAN**
       - CSU options with CDOT
       - BVSD/EN options with CDOT
     - **Look at RMMA diverse fiber options for UCAR**
   - BRAN use of BVSD fiber
     - An agreed notification period prior to scheduled work
       - As much notice as possible
     - Expected turnaround for post-work test results
       - As soon as possible
     - **Fabian and Paul will get testing details for "kink" issue to finish testing**
     - Minimum required testing standard
       - In emergency, unidirectional testing
     - **Fabian will draft a BVSD/ BRAN outage/ testing proposal**
     - Run BRAN emergency test
     - Review BRAN emergency document

4. BRAN
   - Recent work on splice cabinets
     - Replaced a couple of splice enclosures on the east path of BRAN
   - Lessons learned after 10 years
     - Will probably not replace all the fiber, but will have to replace the "moving" parts
     - Keeping baseline and changing test results is an ongoing and complicated documentation task
     - Maintaining documentation of fiber plant also ongoing and complicated
5. Other
   ○ Fiber to Denver Convention Center for SC '13
     ■ 14th and Champa handholds - Level3, Zayo, and Smart City (conduit to here)
     ■ Bob Brenner/Duke may know about fiber in downtown Denver
   ○ Knights of the Round Table activities
     ■ Brian Sheppard works for OIT
     ■ Broadband strategic plan
     ■ Involving CDOT going forward
   ○ Next Meeting
     ■ To have one?
       ■ Yes
     ■ Host/when
       ■ Every 6 months
       ■ February 2013
   ○ UNAVCO - Marla will schedule meeting for BVSD and FRGP
   ○ NEON - Marla will contact Krista about networking