NWCCOG Broadband Project Summary - Updated July 31, 2016

Prepared by Nate Walowitz for the NWCCOG Broadband Steering Committee

Regional Impact Projects

1. NWCCOG Regional Broadband Network

Timeframe: CY 2016 Priority: A

 Meeting scheduled with Steering Committee August 12th to begin investigation and definition of a potential NWCCOG Regional Broadband Network project.

2. Broadband Legislation and State Broadband Policy

Timeframe: CY 2016 Priority: A

• Legislature not in session.

3. NWCCOG Service Provider Relationships

Timeframe: CY 2016/2017 Priority: A

- CenturyLink will release county and statewide maps for CAF II funding locations when their buildout is complete. A meeting between CenturyLink, DOLA and OIT in mid-July.
 CenturyLink's CAF II buildout numbers were discussed. CenturyLink asked for continued partnership to leverage state funding.
- CenturyLink has submitted a proposal to the Colorado Broadband Deployment Board for more than the available funds. There are 15 proposers, two of which are in separate NWCCOG areas. Please look at https://www.colorado.gov/pacific/dora/applications-received to view the proposals.
- ForeThought submitted a proposal to the Colorado Broadband Deployment Board for the radio and site infrastructure for middle and last mile for Red Cliff at the Ski Cooper Site. Buildout is scheduled for Spring/Summer 2017.
- ForeThought, Mammoth and South Park Telephone are working with Park County to build a wireless Middle Mile link for Red Cliff, Lake County and Park County through Ski Cooper and to site at Mosquito Pass. This fiber will dynamically route traffic when an outage occurs along either the Ski Cooper – Leadville - Denver or Ski Cooper – Mosquito Pass - Fairplay - Denver paths. This will be a Phase 2 project projected for construction/completion Summer 2017.
- DOLA has approved Park County's application for funds to acquire a multi-county radio communications site on Mosquito Pass. This site will provide Red Cliff, Eagle County, Lake County, and Park County with redundant bandwidth through Fairplay, Como and Leadville fiber connections.

4. DOLA Broadband Grants

Timeframe: CY 2016/2017 Priority: A

- No new applications from our region this DOLA grant cycle
- Fraser and Winter Park are now partnered on a broadband sub-plan for their towns.
 Vantage Point has been selected as their consultant. They are both planning to submit for a DOLA administrative planning grant.
- Summit County selected CTC for their strategic plan and has received a DOLA matching administrative grant.
- Grand County has a draft of an RFP for development of a regional broadband plan. They expect to release this RFP shortly.
- Jackson County is still interested in completing a draft RFP for engineering services. Jim Murphy plans to continue to push and apply for a DOLA planning grant.

5. State of Colorado OIT Broadband Mapping Project

Timeframe: CY 2016/2017 Priority: A

- Megan Chadwick and the State GIS team will be supporting our NWCCOG broadband data collection initiative with database and mapping project in 2016. This information will be included in the Regional CEDS that Rachel Lunney briefed us on during our online meeting in December.
- Online surveys for residences are available shortly. I am working with them on a business and CAI survey.
- Grant Funding USDA, FCC Broadband, FCC CAF, DOLA, Broadband Deployment Board
 Timeframe: CY 2016

 Priority: A
 - CenturyLink has accepted the CAF II statewide funding and now has a plan that they will be presenting for 2016/2017 buildouts. Local meetings were held in Grand and Routt Counties. Jackson and Pitkin Counties will not have money coming in 2016 and projected 2017 at this time.
 - Colorado Telehealth Network (CTN) program funds medical and mental health care provider broadband grant funding from USAC.
 - The Broadband Deployment Board funding is available to providers filing a project application by June 30, 2016. Nate Walowitz is working with Forethought/Brainstorm to submit an application for grant funding of the Ski Cooper and Mosquito Pass broadband sites.

7. Create a new Website with Economic Development that includes broadband data for CEDS.

Timeframe: Q2 - Q4 2016 Priority: B

Vendor has been selected to develop a new NWCCOG economic development website.

8. FirstNet Colorado

Timeframe: CY 2016/2017 Priority: B

- It is time for local governments, County IT, County Commissioners, local officials and public safety officials to get engaged. I will be arranging for a NWCOG/West Slope FirstNet briefing by the FirstNet Colorado team in the near future. To maintain fiscal due diligence, we need to start planning and budgeting for use of site infrastructure, costs, long term public safety communications system investment, potential IT impacts, and long term changes in communication center policies, procedures, and first responder protocols and SOGs.
- FirstNet Colorado continues to evaluate options and network coverage needs to ensure that the FirstNet national proposal responses and FirstNet's design meets the needs around the state.
- FirstNet Colorado is providing training and information seminars around the state.
- FirstNet Colorado has released an RFI to the state managed RAN network, should Colorado choose to manage their own RAN and/or Opt-Out and build a state funded, not federally funded public safety broadband network.
- Work with Estes Park and Grand County on Adams Tunnel Fiber Project
 Timeframe: CY 2016/2017
 Priority: C
 - Adams Tunnel Fiber Project will be built in Fall/Winter 2016/2017.
 - CenturyLink has interest in using this connection to deliver redundant path bandwidth to/from Estes Park and Grand Lake.
 - CenturyLink held its rescheduled meeting and Nate is working to connect them with Bureau of Reclamation to determine if they can use the current/future fiber for commercial use.
 - Nate spoke with Ken Fellman about commercial use of existing utility and WAPA fiber on June 2. He believes that there is some progress one the federal side but there is still no definitive policy for all federal agencies or quasi-public agencies like WAPA on fiber use for commercial broadband applications.
 - DOLA is interested in supporting this initiative and the possibility of creating a regional open fiber network, if possible.

10. Broadband pricing in CenturyTel of Eagle markets

Timeframe: CY 2016 Priority: D

• While this issue is still exists, Eagle County is in the process of partnering with Mammoth Networks to provide an alternate path at very competitive pricing.

Jackson and Routt Counties still have broadband pricing challenges.

11. Shared Data Repository for Cable Franchise Agreements

Timeframe: CY 2016/2017 Priority: D

- NWCCOG solicited and posted Cable Franchise Agreements from local jurisdictions on the NWCCOG Google Drive. This was shared with Local/County government officials and the NWCCOG Broadband Steering Committee. This shared folder will be updated as new agreements are received.
- These files have started to be referenced by Pitkin County.
- If you have any updates, please forward them for posting to the repository.

12. Statewide economic development GIS data project

Timeframe: 2016/2017 Priority: D

- Providing COG perspective on data and mapping requirements for statewide GIS
 integration project. This project is attempting to create a single statewide program that
 can be leveraged by multiple agencies and COGs.
- Updated SIO scoring and Top 4 initiatives selected to begin project implementation.
- Data project with provide mapping of both geocoded and data and non-geocoded data.

13. Ensure Steamboat Springs and Craig fiber connections have carrier-based dynamic routing and redundancy

Timeframe: CLOSED Priority: A

- This issue was reopened based on the July CenturyLink outage.
- CenturyLink updated Routt, County, Grand County and Kremmling on May 10th with the status of these network upgrades/updates.
- Path redundancy for voice and 911 voice operations are completed. No data circuits are included in this network update.

14. NWCCOG Internal Network and Hosted VoIP Phone System

Timeframe: CLOSED Priority: A

- NWCCOG VoIP hosted phone service from Fluent Stream is fully operational.
- The only component remaining is the need for additional training on their reporting package.

County/Local Government Projects

1. Eagle County

Timeframe: CY 2016 Priority: A

 Mammoth has resolved some technical issues with their 10 Gbps wave circuit and Eagle County has been connected.

2. Grand County

Timeframe: CY 2016 Priority: A

- CenturyLink is installing fiber along U.S. 40 in Fraser in support of CAF 2 deployment.
- CenturyLink has proposed the county waiving all Right of Way fees for the CAF II
 construction project. CenturyLink says that they will roll the savings into additional
 resource deployments. County BOCC will need to evaluate and either approve or reject
 this CenturyLink proposal.
- Adams Tunnel project will directly benefit Grand County government, residents, businesses and ISPs. NWCCOG Region will also benefit if CenturyLink supports diverse, redundant routing using this link through Kremmling and potentially into Clear Creek County and I-70.
- CDOT has an interest in developing fiber along the U.S. 40 corridor from Empire through
 Kremmling. Investigating with Comcast to learn how this project could be of mutual
 benefit and potential cost sharing.
- Mountain Parks Electric will be contracting with a consultant to investigate fiber to the home and broadband support.

3. Jackson County

Timeframe: CY 2016 Priority: A

- NWCCOG is assisting in the drafting of an RFP for County-wide broadband engineering services. The RFP will be based on the successful Pitkin County RFP. Jim Murphy needs cooperation from his fellow commissioners and County Manager to complete this effort.
- The Jackson County Economic Revitalization Committee met last Thursday and Nate presented them with the broadband challenges they are facing. Nate emphasized that it will take the community coming together to support a provider or CenturyLink showing interest in providing ANY broadband (25/3) service in the county.
- Mountain Parks Electric will be contracting with a consultant to investigate fiber to the home and broadband support.

4. Kremmling

Timeframe: CY 2016 Priority: A

 CenturyLink has established path diversity that should assist Kremmling in avoiding outages from fiber cuts in the future.

- Comcast continues to work to run fiber to Kremmling from Hot Sulphur Springs, turning over right of way perfection to the retail unit of the company. Project is stalled once again.
- West Grand Schools has a new IT Director. He is examining in-building WiFi infrastructure and better broadband connectivity to the Steamboat Springs School District.
- Mountain Parks Electric will be contracting with a consultant to investigate fiber to the home and broadband support. This could provide the town with the alternate provider and path they need to receive more affordable broadband at front range speeds to every home.

5. Pitkin County

Timeframe: CY 2016 Priority: A

- ForeThought and Mammoth Networks are working on the final report for the Phase II
 engineering study. The results were delivered to the BOCC and the county now has a
 direction to pursue.
- The County will create a multi-use fiber/wireless broadband loop connecting all their mountaintop sites, local government buildings, businesses and residents for public broadband deployment, public safety communications and County IT network redundancy.
- Pitkin County is also working on two additional public safety projects; building out and
 moving their public safety radio communications from VHF to the State DTRS system;
 and relocating their Public Safety Answering Point (PSAP) to a new location due to
 construction at their current county offices.

8. Rio Blanco County

Timeframe: CY 2016 Priority: A

- FTTx Project
 - Meeker/Rangely Revenue customers being added to the system
 - o Lit CAI's Pioneers Medical Center, Meeker School District, Rio Blanco County
- Tower Project
 - Construction on primary towers has begun

9. Routt County

Timeframe: Q3/Q4 2015 Priority: A

- DOLA awarded a grant for fiber extension to connect County Justice Center and Yampa Valley Electric Association to the NCB CNL.
- Routt County is working with selected fiber contractor to install network conduit and fiber.

10. Summit County

Timeframe: CY 2016 Priority: A

- Summit County has been approved for an administrative planning grant from DOLA to have a consultant assist them with broadband strategy in the Lower Blue, the Lower Blue cellular tower site, the Landfill tower site, communications in Summit Cove, the Town of Heeney and the Town of Montezuma.
- CTC has been awarded the contract for broadband planning.
- Summit County and Frisco businesses are interesting in obtaining business class broadband at lower prices. NWCCOG is working with them and the providers to determine best way forward; aggregation, affinity marketing programs, etc.

11. Town of Frisco

Timeframe: Q1/Q2 2016 Priority: B

- Comcast stated that they have an ongoing fiber project in town which can assist Frisco in connecting their government buildings.
- Interest by Frisco/Summit County business community in forming a LTPC. Jack Taylor and Rachel Lunney are working on this with Elevate.

12. Town of Red Cliff

Timeframe: CY 2016 Priority: A

- Red Cliff has taken over the USFS application process to minimize the expenses incurred by ForeThought and allow Red Cliff to control the destiny of broadband for the town.
- NWCCOG, Red Cliff, ForeThought and Mammoth Networks are working with Ski Cooper, to use for ski lift terminal structures as mounting locations for poles to host microwave antennas for links from Red Cliff to Ski Cooper and Ski Cooper to Mosquito Pass.
- Construction on the Red Cliff tower continues. Concrete for tower base, shelter, and guy anchors has been poured awaiting XCEL power pole placement and then tower will be erected. Project to ready for radios and antennas before October 1.

13. Town of Frasier

Timeframe: Q3/Q4 2016 Priority: A

- Fraser and Winter Park will be working together on broadband sub-plan for both towns.
- RFP awarded to Vantage Point Consulting.

14. Towns of Winter Park

Timeframe: Q3/Q4 2016 Priority: A

- Fraser and Winter Park will be working together on broadband sub-plan for both towns.
- RFP awarded to Vantage Point Consulting.
- Working with an HOA for Pole Creek in Frasier Valley advising them on vendors for potential conduit/fiber project. They will release an RFP for fiber and head end infrastructure.