Conceptual Design

October 11, 2012

Mission of the Regional Consortia

Facilitate the development of a plan and the implementation of a cohesive, integrated and robust broadband infrastructure that includes:

- A 16-county regional middle-mile fiber-based infrastructure like what has been previously approved (D395 and CVIN)
- 16 countywide fiber-based backbone systems
- Last-mile community-based fiber and wireless providers that cover all the communities throughout the 16 counties
Investment Vision

Develop and implement broadband infrastructure capabilities that not only meet today’s minimum standards of 6 Mbps download and 1.5 Mbps upload, but have the potential to be expanded over time to meet the National Broadband Plan minimum standards of 100 Mbps download and 50 Mbps upload.

Current State of Broadband Infrastructure in Northern California

- A comprehensive, integrated and truly robust and diverse regional middle-mile infrastructure **DOES NOT EXIST TODAY**
- No other region in the State has a void of this magnitude
- No one Provider has been able to demonstrate, nor will they ever, the ROI to fill the void
Building Blocks to Broadband in Northern California

Key Strategies

- Optimize the use of existing fiber
- Engage the owners of this fiber
- Develop conceptual design for NCRMMI
- Facilitate the formation of Golden Bear Broadband LLC
- Mobilize widespread community support
- Capitalize on CASF Infrastructure funds
- Work with county groups to develop countywide backbone system plans that will link into NCRMMI
Methods Used

- Identified currently installed fiber
- Identified served and unserved areas
- Invited Owners of the fiber to participate in the formation of Golden Bear Broadband, LLC
- Chief Architect and team traveled across region to gather data to formulate the design for NCRMMI

NCRMMI Project Status

- Conceptual Design----completed
- Formation of Golden Bear Broadband----in process
- Capital Cost----projected at $120 million
- Draft Five-Year Business Plan----completed
- Preparation of CASF Grant Application----in process
- Mobilizing community support----in process
- Work on Countywide backbone plans----in process
Covering Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Plumas, Shasta, Siskiyou, Sonoma, Tehama, Trinity, and Yolo Counties
Key Characteristics of NCRMMI

- Five Main Rings
- Five Sub-Rings
- 60 Points of Presence
- Passes through 42 of the 54 Incorporated Communities
- Passes through 52 of the 262 Census Designated Places
- Verifying how many of the 51 Native Lands NCRMMI reaches
- Potential to run fiber to as many as 90 anchor sites
- 62 wireless towers in design to provide 20 Mbps/5 Mbps, out as much as 8 mile reach from backbone

Who Benefits from NCRMMI

- Rural Customers
- Public Safety
- Research and Education
- Fixed/Mobile Service Providers
- Small Business Owners
- Libraries
- Health Care Facilities
- Economic Develop Councils
NCRMMI is about deploying a broadband infrastructure that can deliver to the 1.634 million citizens and communities in Northern California the bandwidth speeds and capacity to meet their growing needs for the next 30 years.