Project THOR Fact Sheet

MEMBER JURISDICTIONS
City of Glenwood Springs
City of Steamboat Springs

EAGLE COUNTY
Avon
Basalt
Eagle
Gypsum
Minturn
Red Cliff
Vail

GRAND COUNTY
Fraser
Granby
Grand Lake
Hot Sulphur Springs
Kremmling
Winter Park

JACKSON COUNTY
Walden

PITKIN COUNTY
Aspen
Snowmass Village

SUMMIT COUNTY
Breckenridge
Blue River
Dillon
Frisco
Montezuma

Project THOR network
- Is a cooperative, middle-mile network connecting 10 Counties in NW Colorado
- Is owned by NWCCOG, with access contracted to local partners,
- Is operated by Mammoth Networks
- Is a carrier-grade 100-gigabyte fiber loop (expandable to 200 gigs)
- Is comprised of 400 miles of leased segments of existing public and private fiber
- Is leasing 178 miles of CDOT fiber from Denver to Glenwood Springs
- Is a “resilient” loop with equipment designed to reroute if cut occurs
- Is bringing front range bandwidth at front range prices to local partners
- To deliver reliable, resilient, affordable broadband to rural communities

Partners in the Co-Op
- Nine municipal and county governments, a special district and a Rural Electric Co-Op
- Hosting a local connection to the network through a Meet Me Center Access Point
- From that Access Point, local partners have a variety of options for ISP service
- Some will provide local broadband service, others will negotiate with private partners

Why Project THOR
- Numerous outages across region completely cut off communities impacting governments, schools, businesses and public safety.
- Non-competitive pricing compared to front range frustrates local customers
- Local jurisdictions have no leverage currently to get incumbents to improve services
- Rural area economics and quality of life are deeply impacted by poor broadband
- Resolves issues of a single fiber cut or single service provider outage cutting off entire region from access to the internet and other non-voice essential services
- Towns and population centers are rural, distant and dispersed rural broadband market is not profitable for most providers and suffers for a lack of private investment
- Public dollars and local governments have power to change that equation through THOR
- Glenwood springs, Rio Blanco County and others already operate public networks which lack reliable middle mile services to connect them
- Many jurisdictions are already paying more for non-resilient middle mile today

Data Points
- Project THOR has the potential to reach 20% of landmass of state: 233,191 people
- The 10 Counties have 23% of non-front range population - 4% of total state population
- NWCCOG received $ 1 M from State of Colorado Department of Local Affairs for Startup
- Project THOR first three years of CDOT Fiber lease is paid by a grant from DOLA
- All fiber leases are directly with NWCCOG, CDOT lease is at +/- 50% discount
- Startup costs are matched by approximately $1.5 M in local community dollars
- Monthly recurring costs paid to NWCCOG by jurisdictions keep project operational

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THOR Project Partners
- Government (Meet-Me-Center Hosts)
  - City of Aspen
  - City of Glenwood Springs
  - Clear Creek County
  - Town of Eagle
  - Town of Breckenridge (with Summit County)
  - Town of Vail
  - Summit County
  - Routt County and NW Colorado Broadband
  - Town of Steamboat Springs
  - Rio Blanco County
- Special Districts and Rural Electric Cooperatives (Meet-Me-Center-Hosts)
  - Middle Park Health
  - Yampa Valley Electric Association
- Funding Partners
  - Colorado Department of Transportation (CDOT) with reduced fiber lease costs
  - Colorado Department of Local Affairs with Startup Grant Funding
  - NWCCOG Membership and Broadband Partner Counties (Routt, Rio Blanco and Moffat Counties) funded NWCCOG Broadband program and 2 years of preliminary planning for Project THOR.

NWCCOG Executive Director Statement:
Project THOR is a collaborative project spearheaded by local governments who wish to better serve their organizations and their communities by leveraging Project THOR's robust, resilient, affordable, middle-mile network infrastructure to actively seek local last-mile broadband solutions. Project THOR puts local governments in the "drivers’ seat" to deliver local solutions to fill this rural broadband gap. NWCCOG exists to serve the membership of local governments and to provide innovative regional solutions and services. Project THOR is governed by a committee comprised of each participating jurisdiction. NWCCOG is the network owner on behalf of participating entities. It has contracted with Mammoth Networks (Visionary Communications) to operate Project THOR and to offer the option of competitive pricing of internet through the aggregation of bandwidth of all local partners. Partners are not obligated to contract with Mammoth for internet through Project THOR. Project THOR is a net neutral and open access network within terms established by local jurisdictions. Other carriers may access Project THOR by agreement with local partners. Mammoth may not gain any unreasonable advantages over other carriers through it’s operation of the network. Contracts for circuits are with NWCCOG. NWCCOG makes no percentage or "profit" from owning Project THOR. Project THOR strives to seek additional redundancies and seek additional partners in order to drive down the costs to each participating entity over time while delivering the highest quality middle-mile service possible.

Contacts:
Nate Walowitz, NWCCOG Broadband Program Director, nwalowitz@nwccog.org
Jon Stavney, NWCCOG Executive Director, jstawney@nwccog.org