



COLORADO

Broadband Office

Governor's Office of Information Technology

**Colorado Telecommunications Association
Winter Conference
February 14, 2023**



Universal Broadband Access for Colorado

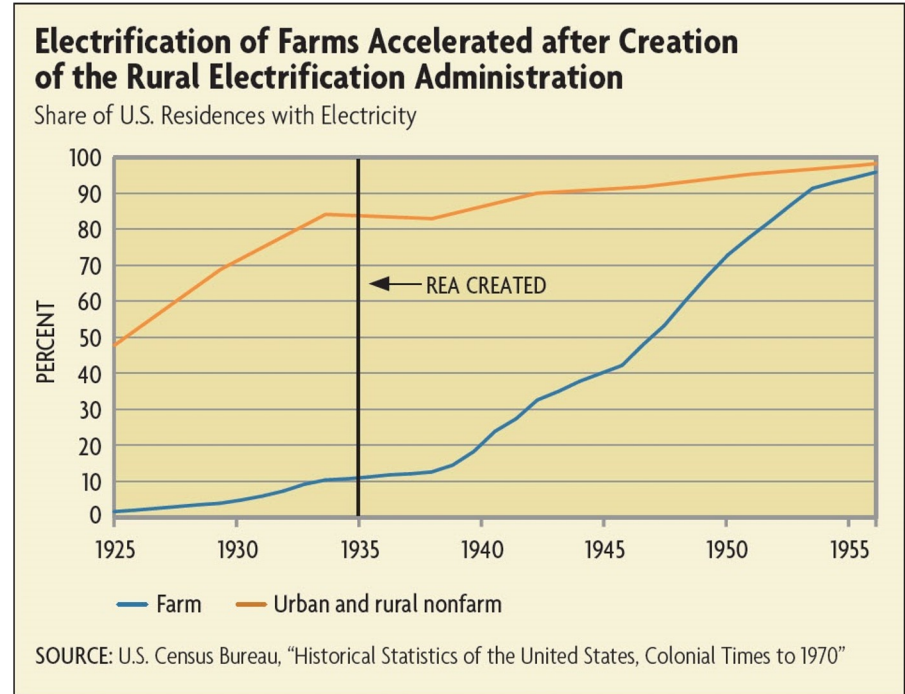
Mark Colwell

Senior Manager, Broadband Programs



History Lesson: Rural Electrification

- In 1930, less than 10% of farms had access to electricity
- REA passed in 1935 - \$100M (\$1.88B in 2020 dollars)
- By 1955, over 90% of farms had access to electricity
- Broadband is our generation's infrastructure opportunity





Executive Order on Broadband

- Gov. Polis signed [Executive Order D 2023 023](#), 99% of Colorado households to high-speed broadband by December 31, 2027
 - 100/100 Mbps service
 - or 100/20 Mbps minimum service scalable to 100/100 Mbps
- Appoints Colorado Broadband Office to lead efforts and develop a [Broadband Roadmap](#), a five-year strategic plan for investing millions of federal funding to expand fast, reliable and affordable broadband across Colorado

The Broadband Roadmap



Connecting 99% of Colorado households to high-speed internet by 2027



Build a network for future generations

Prioritize fiber, the fastest, most-reliable broadband

Invest in mapping and analytics to assess areas of critical need

Support the industry by expanding workforce development programs and addressing labor shortages



Strengthen resilience across Colorado communities through broadband

Foster stakeholder engagement

Share broadband networks

Encourage public-private partnerships



Expand digital inclusion & adoption to achieve affordability, access and digital literacy

Promote programs that make high-speed internet more affordable

Invest in programs that supply devices and educate residents on how to use them



Enable Colorado to thrive by fostering and supporting a digital economy

Foster a culture of innovation and efficiency among government agencies

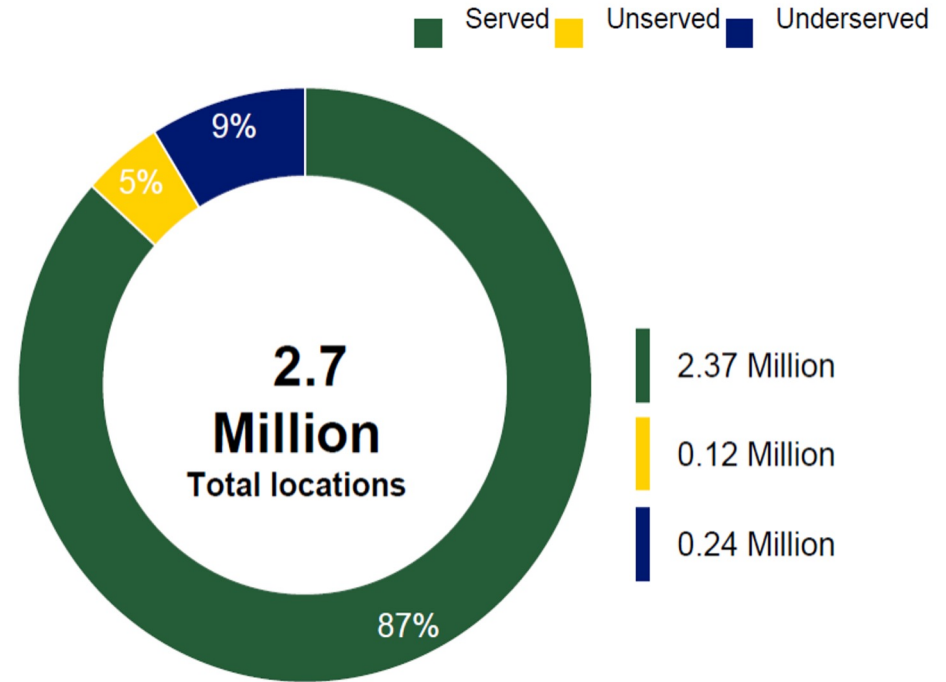
Leverage technology and improve government services



Broadband Access By Locations

2022 Report:

- 14% of locations in Colorado are unserved or underserved
- 360,000 locations lacking adequate access to broadband





How Colorado Compares



23rd

...in terms of **high-speed internet availability**, with 89% of households having access to 100/20 or greater speeds¹



7th

...in **high-speed internet adoption**, with 76% of households in CO subscribed to high-speed internet²



2nd

...in **device access**, with 85% of households having a computer at-home²



20th

...in **access to affordable plans**, with 87% of households having access to plans 25/3 mbps or higher for \$60/mo. or less³



11th

...in **equitable access for African Americans**, with a 2.5 percentage points gap in adoption between White and Black; however, CO ranks 41st for Latinos with a gap of 5.4 percentage points²

Sources:

- [1] FCC Form 477 data (2019); Potential overstatement of CO performance given limitations of FCC data
- [2] U.S. Census Bureau, American Communities Survey (ACS), 2020. High-speed adoption includes cellular data plans.
- [3] BroadbandNow; <https://broadbandnow.com/research/q3-broadband-report-2021> (2021)

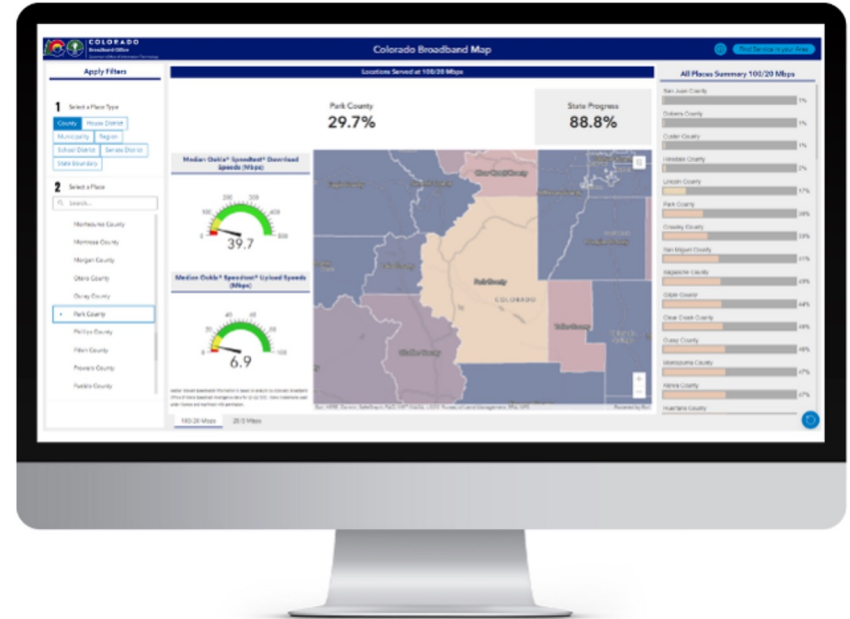


Delivering on the 99% Goal



Mapping Colorado Broadband

- Broadband Mapping Hub Launches Today!
 - [New Colorado Broadband Map](#)
 - [Grant Awards Dashboard](#)
 - [Grant Discovery Portal](#)
- FCC Challenge Process
 - 13,000 location challenges submitted
 - 6,700 location challenges accepted
 - 1,500 speed challenges submitted
 - New deadline March 15, 2023
- CBO Data Collection
 - Deadline March 10, 2023
 - New data published mid-May



broadbandhub.colorado.gov

American Rescue Plan Act (ARPA)

Direct to Agency Funding

\$75M

State and Local Fiscal Recovery
HB21-1289, ARPA, Sec 602

\$171M

Capital Project Funds
ARPA, Sec 604

Infrastructure Investment and Jobs Act (IIJA)

Direct to Agency Funding

\$400-\$700M

Broadband Equity, Access and
Deployment (BEAD)

\$21M

State Digital Equity Grant Program

\$5M - \$100M

Middle Mile Grant Program

State of Colorado will have grants for funding using all these federal funding sources



Advance Colorado Broadband Grant Program



CBO's grant program to deploy:

- Capital Project Funds (2023)
- Broadband Equity Access and Deployment (2024)
- Website: [Advance Colorado Broadband](#)



CBO Capital Project Fund Plan (Treasury)

- CBO Goal: Connect at least 18,000 unserved households
- Colorado will deploy \$162 million:
 - Tier 1: \$121.5M to most unserved counties
 - Tier 2: \$40.5M to any unserved locations
 - Match requirement: 25% for Tier 1, 50% for Tier 2
- Treasury encourages:
 - Investments in fiber
 - Speeds of 100/100 Mbps*
 - Projects that involve “broadband networks owned, operated by or affiliated with local governments, non-profits, and co-operatives – providers with less pressure to generate profits and with a commitment to serving entire communities”



CBO BEAD Update (Dept. of Commerce)

- Received \$5M planning grant in December
- Colorado to receive \$400-700M
- Timeline Highlights
 - April 19-20, 2023 → Local Coordination Event
 - June 30, 2023 → Allocation announced for all states
 - August 28, 2023 → BEAD 5-Year Action Plan due
 - December 27, 2023 → Initial Proposal due
 - After Initial Proposal → Challenge Process
- Grant program to open in 2024



SAVE THE DATE FOR THE

INTERNET FOR ALL: COLORADO BROADBAND SUMMIT

APRIL 19 – 20, 2023

THE WESTIN WESTMINSTER
WESTMINSTER, COLORADO

This day and a half long event will bring together local governments, community leaders, industry, state and federal representatives, and other critical partners from around the state to learn about and discuss key programs that are aimed at expanding broadband infrastructure and promoting digital equity for our residents.

STAY TUNED FOR MORE INFO



INTERNET
FOR ALL



Individuals with disabilities requiring an accommodation to attend this event should contact Julia Pulidindi at jpulidindi@ntia.gov.



Broadband Deployment Board

- BDB was created in 2016 to fund last-mile projects
- Since inception, BDB has funded:
 - \$51M in awards
 - 63 projects
 - 29,024 homes connected
- Summary of 2022 Cycle:
 - 16 awards for \$25.3M serving 5,410 households



USDA ReConnect Round 3 Winners

Entity	Award	Locations Served
San Luis Valley Rural Electric Cooperative	\$1.99 M	129 people (~63 households) 8 businesses 1 school 20 farms
Delta-Montrose Electric Association (DMEA)	\$13.88 M	3,577 people (~1,747 households) 148 businesses 1 school 765 farms
Eastern Slope Rural Telephone Association	\$18.7 M	2,284 people (~914 households) 110 businesses 17 educational facilities 898 farms



Tribal Broadband Connect Program

- Ute Mountain Ute Tribe (UMU)
 - \$22.7M awarded October 11, 2022
 - Fiber connecting 104 homes, businesses and Tribal Government
 - 2 middle mile routes
- Southern Ute Indian Tribe (SUIT)
 - \$43.7M awarded
 - Fiber connecting 1,798 homes, 14 businesses, and 16 anchor institutions



Digital Equity



Digital Equity Plan

- Colorado Broadband Office (CBO), Office of the Future of Work (OFW) and the Office of eHealth Innovation (OeHI) will create a digital equity plan for the state by November 30, 2023
 - CBO focused on equitable access
 - Digital Equity Plan focused on adoption
- Capacity grant funding in 2024 will allow Colorado to implement
- Currently engaging stakeholders and establishing equitable data collection methods.



Affordable Connectivity Program (ACP)

- ~89% of CO HH have access, just 76% adopt broadband
- FCC program offer \$30 subsidy for mobile or fixed
- Participation required for all federal grant programs (CPF, SLFRF, BEAD)
- CBO welcomes feedback on how to increase participation

CO Households Eligible	~ 761,000*
CO Households Enrolled	180,123
Percentage Enrolled	23.7%



Broadband Readiness



Colorado Broadband Workforce

Workforce Development is essential!

50% of deployment-related roles in CO could have workforce shortages

Key Takeaways

- Manual roles are typically the occupations where the largest gaps are expected
- Labor could cross state lines to address gaps

Roles with highest 2026 gaps

(percent of total gap)

- Laborers: ~1200 (~34%)
- Foreman: ~650 (~18%)
- Locators: ~650 (~18%)
- Restoration crew: ~450 (~13%)
- Safety leads: ~160 (~5%)



Broadband Readiness Program

- *Broadband Ready Community Checklist* (BRCC) - a set of voluntary tangible tasks that will help local communities and their partners successfully plan and execute broadband projects
- The checklist is available at [Advance Colorado Broadband](#) page
- Become designated by CBO as a *Broadband Ready Certified Community!*
 - First deadline June 15, 2023



What Providers Can Do Now

- Work with local communities to understand needs
- Apply for a UEI number on [SAM.gov](https://sam.gov)
- Study funding source documentation
 - CPF (Treasury)
 - BEAD (NTIA, Dept. of Commerce)
- Review the federal procurement requirements
- Read Buy America/Domestic Preference requirements
- Assess need for environmental review and permitting (NEPA)



Stakeholder Engagement

- Roundtables
 - Industry and Community Roundtables
 - Bi-monthly
 - Next Industry Roundtable is March 21 at 9:30 pm
- Stay informed
 - CBO newsletter
 - CBO in the News
 - Twitter: [@CO_Broadband](#)
 - Email: OIT_broadband@state.co.us
 - Website: broadband.colorado.gov





CBO Programs Team

Kendall Cramer

Program Specialist - Federal Funding

Kendall.Cramer@state.co.us,

970.732.3071

Haitham Ali

Senior IT Project Manager

Regions 1, 2, 3, 5, 6, 7, 14

Haitham.Ali@state.co.us,

303.941.4557

Michael Murphy

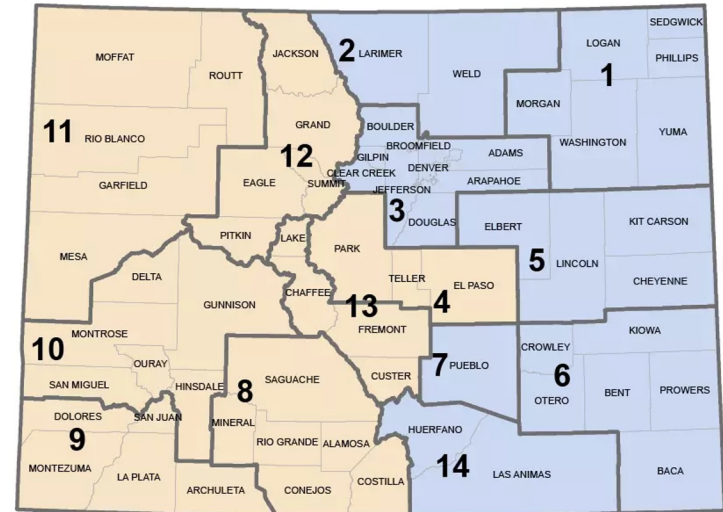
Senior IT Project Manager

Regions 4,8,9,10,11,12,13

Michael.D.Murphy@state.co.us,

720.948.6177

Advance Colorado Broadband Grant Program Planning Regions & Contacts



This map shows the planning regions of Colorado and their correlated Advance Colorado Broadband Grant Program point of contact.



Region Contact

- Haitham Ali haitham.ali@state.co.us, 303.941.4557
- Michael Murphy michael.d.murphy@state.co.us, 720.948.6177



Scale: 1:3,045,600

Data: Colorado Broadband Office
Created by Broadband Data Team
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