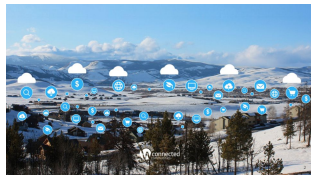


Digital Workforce
Development
Center



Open Access
Regional Network



ForestTech Center



REGION 12 DIGITAL ECONOMIC INNOVATION CORRIDOR & RESILIENCE PROGRAM

Build Back Better EDA Presentation

October 17, 2021

About:

WRC is an independent nonprofit dedicated to driving technosocial solutions to create jobs and improve communities.

WRC's chamber for antenna and wireless-device testing
COLBY KATZ FOR THE WALL STREET JOURNAL

WRC Team

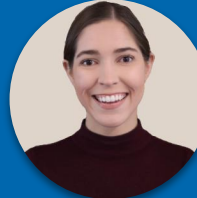
United by our experience and
passion to make a difference

Gerard Hayes, Ph.D.
President and Founder

Matthew Bauer
Vice President
Connected Communities,
Executive Director

Jeremy Kennell
Program Director,
Connected Communities Digital Hubs

Tom Snyder
Vice President
R!OT, Executive Director





Economic Resilience Program could bring workforce training, research center to Grand

News [FOLLOW NEWS](#) | June 2, 2021

Amy Golden [FOLLOW](#)
agoldien@skyhinews.com

SKY-HI NEWS

Broadband Workforce Development Center



ForestTech Center

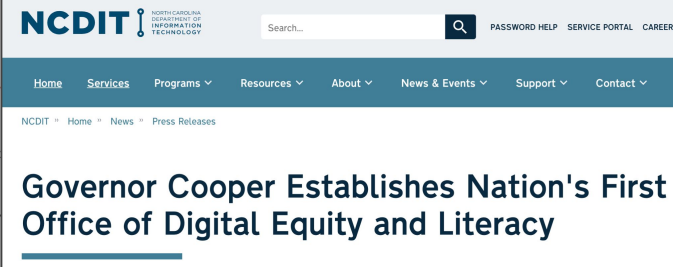
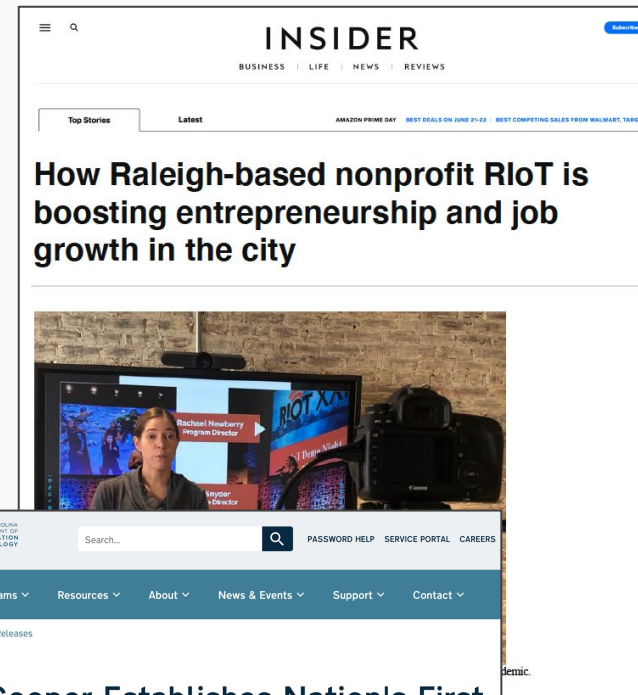


Open Access Regional Network

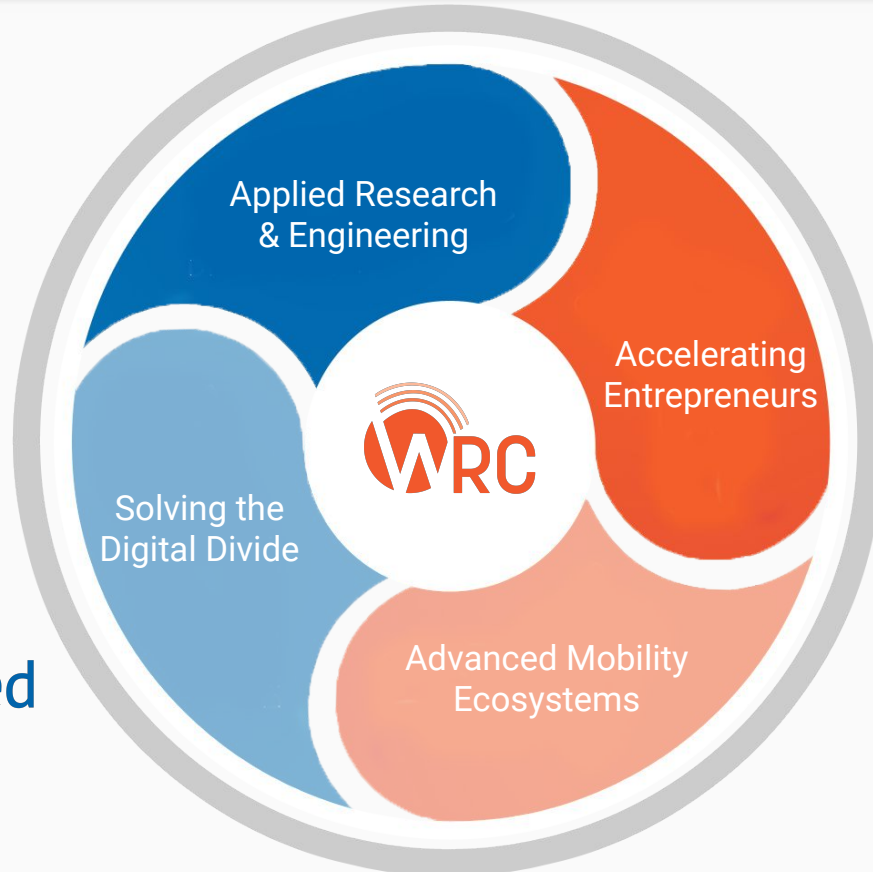


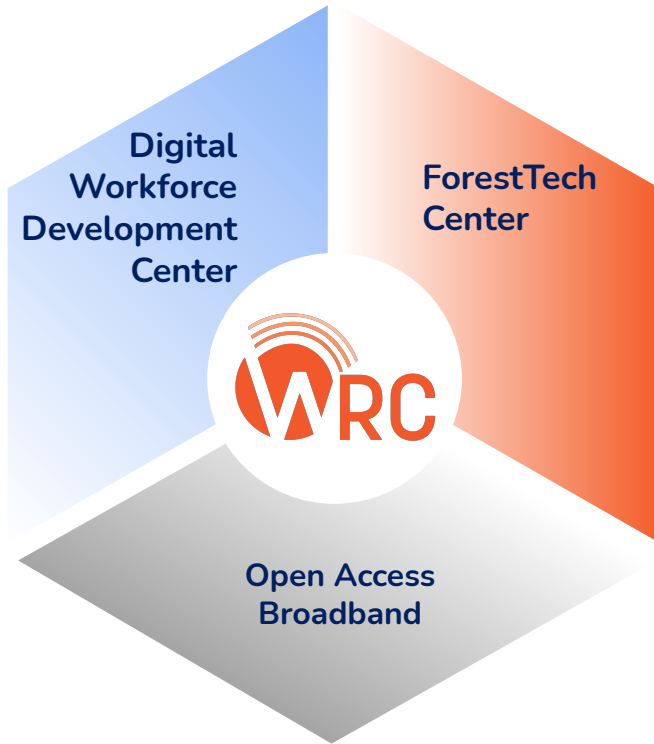
GRAND COUNTY DIGITAL RESILIENCE PROGRAM

Grand County Commissioners and Community Presentation
June 1, 2021



National and Local Press from May/June 2021





Digital Workforce Development Center

- **Digital workforce training programs** & certifications.
- New **digital career paths** or update current skills
- **Incubating and accelerating entrepreneurs**
- **Trade Center** for continued learning, **healthcare + Business Process Outsourcing**

Open Access Broadband

- Advocate, help coordinate and build enhanced and resilient broadband in Region 12
- Backbone for both the Digital Workforce Development Center and the ForestTech Centers with benefits for all residents and businesses in the region

Advanced Mobility Collective ForestTech Center

- **Wildfire mitigation, suppression, and resiliency**
- **Create trusted regional/national ecosystem** with key stakeholders (DOI, FEMA, CoE, State/Local, etc.)
- **Integrate, prove and deploy “Smart Forest” Technologies** (communications, sensors, autonomous vehicles, robotics, wearables, data analytics, etc.)
- **Transform the way we manage our forests**

Strong Regional Support



(Partial List)





Current trends all point to an unprecedented moment to improve livelihoods, the economy and society

Economic / Jobs Development: In 2019, nearly 7M jobs went unfilled largely due to a growing skills gap, combined with millions of low skill workers who lost their jobs due to COVID-19 creates the perfect storm and opportunity. [Source: CNBC]

Remote Work: Over 1/3rd NOW working remote - COVID-19 thrust business community into new paradigm, remote work opportunities have skyrocketed, expected to be permanent. [Source: Gallup]

Education: Millions of youth already in challenged situations low income / in poverty, have been thrust to learn from home where they do not have access to necessary resources.

Broadband Connectivity: Upwards of 150M Americans are unserved or underserved either due to physical access, affordability or both. [Source: NC@High Speed research, Microsoft, Various]

TeleHealth: Healthcare, insurance and health policy have been catapulted years forward due to COVID-19 while millions remain unable to access due to poor Internet connectivity, training and affordability.



Problem:

There is an entire swath of rural America, 60 million people strong, which has been overshoot by the economic prosperity brought by the information technology era. ~84% of jobs in Region 12, directly or indirectly, touch the tourism industry leaving little resilience due to economic changes while lacking in high paying jobs.

Solution:

The data is clear. Extreme flexibility and hybrid work will define the post-pandemic workplace - - retooling Region 12's workforce as remote workers, IT professionals, while leveraging our workforce to take advantage of the myriad of current opportunities is a MUST to compete in today's world.

Benefit:

Revitalizing Region 12, helping people see beyond their current situation toward a better way of life, restoring hope and dignity to our communities, while providing regional and national/international companies and organizations desperate for digitally skilled employees a great source in Region 12.



Developing a new and robust digital workforce in Region 12 while providing ongoing support for graduates as they continue to create primary jobs in Region 12.



Digital Workforce Training Programs: A Digital Workforce Training Center will provide digital training and certifications to Region 12 residents while attracting new digital workers. Including training individuals in work-ready skills and up-training local businesses to become more efficient and effective in the digital marketplace. The Center will offer training in multiple regions of Grand County to allow access for learners.



Digital Workforce Trade Organization: A Digital Workforce Trade Organization provides ongoing training, upskilling, and community amongst Digital Workers while allowing access to attainable health care for individuals and their families.



Digital BPO: A Business Processing and Outsourcing organization that connects Graduates of the Workforce Training Center to remote digital jobs.

Training, Upscaling, Professional Development, and Job Sourcing

Development & Testing

- C#, VB.NET
- Java
- LAMP – Linux, Apache, MySQL, PHP
- Cobol & Other Legacy Languages
- Web Forms Application
- MVC Web Application
- SharePoint Webparts
- Automated Testing
- User Experience Certification

Data Services

- Exploratory Data Mining
- ETL Services/Data Aggregation
- Business Intelligence/Data Warehousing
- Oracle PL/SQL
- MS SQL Server/Reporting Services
- Information Management/Data Visualization
- Unix/Shell Scripting
- Business Objects Support

Business Process Outsourcing

- Outbound Call Center
- IT/Call Center Support
- Policy & Process definition
- Metrics development
- Contract/Lease Abstraction
- I-9 Verification
- Vendor Maintenance
- Access & Entitlements

Maintenance & Support

- End User Support Services (Service Desk)
- Infrastructure Support
- NOCC Support
- Production Support/Emergency Fixes
- Application Continuity/Monitoring
- Server Administration/Backup/Patches
- Operational Security Auditing

Modern, Digital Certifications, Career Paths & Job Pairing



Technology/Training Partners

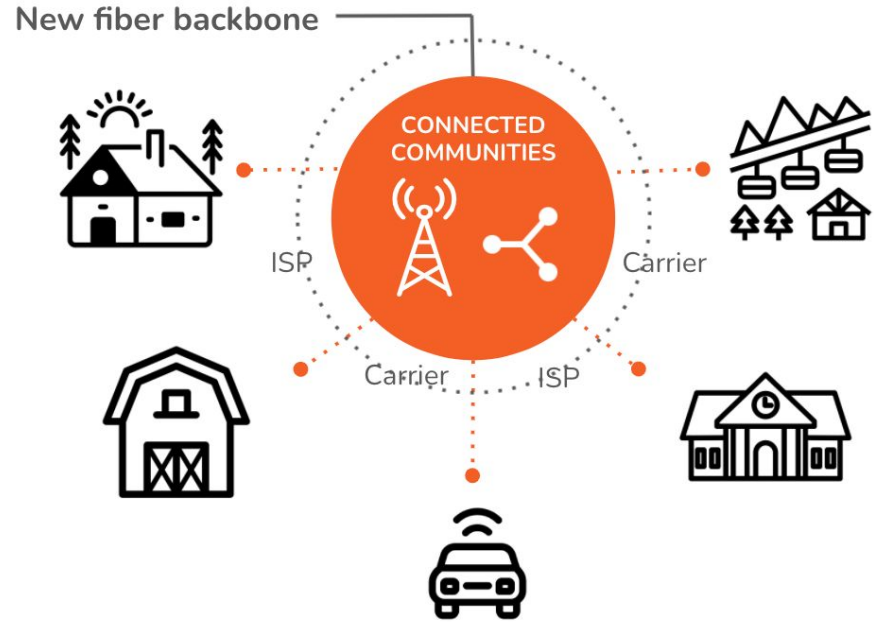


Job Pairing/Procurement Partners



Local/Regional Partners





A new high-performance, open access, broadband network that moves Region 12 to digital leadership

Region 12 in CO has fallen behind when it comes to digital access. But if we all work together to build community broadband with open access, we can achieve high-performance, more affordable Internet for all of us.



The Open-Access Model Changes Everything

Think: Autobahn for the Internet

Similar to a unified road system, an open access network shares transport in the same way. Open-access networks unbundle transport of the services and function as a *local transport provider*, or *LTP* with 4 primary components:

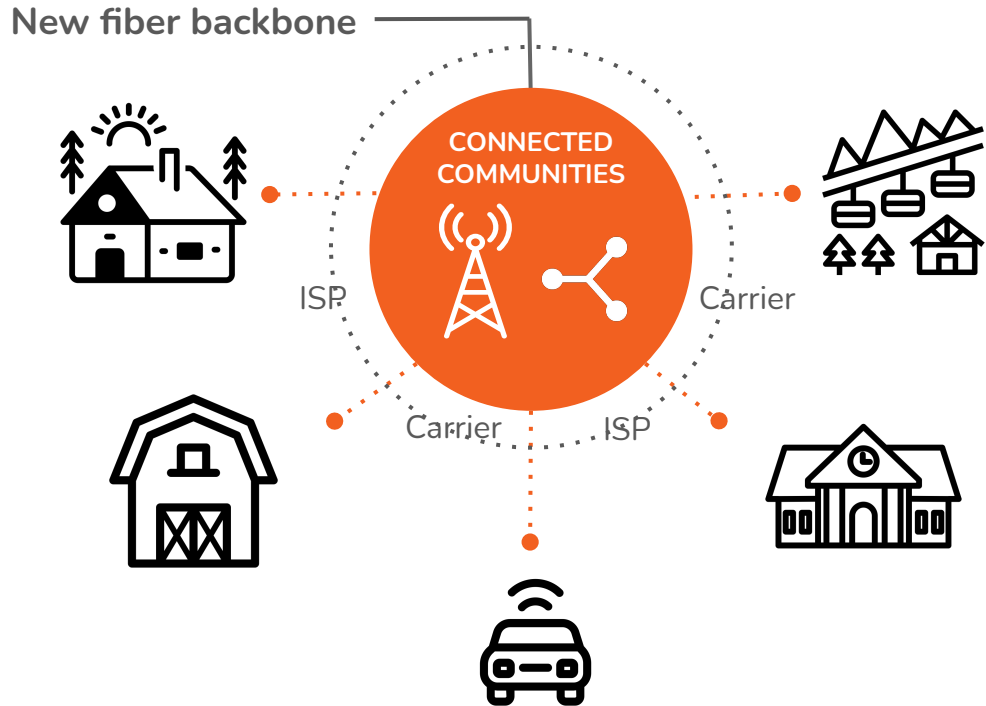
1. **Passive network infrastructure + network electronics** delivers services from service providers to customers.
2. **The LTP manages the network infrastructure** and ensures that each service provider has adequate bandwidth and network quality of service (QoS)
3. **Service providers contract to use the network infrastructure**
4. **End-users buy services of their choice** from one or more service providers

Holistic Solution



Moving Region 12 to Digital Leadership

As a middle-mile carrier, we're creating a vibrant and innovative market and maximizing opportunities for Region 12's connected communities to learn, work and play.







Advanced Mobility Collective Focus Areas

About The Advanced Mobility Collective (AMC): AMC is a global collective bringing together leading companies, nonprofits and government agencies to create the world's first systems-level deployments of advanced / autonomous mobility and serving as a catalyst for innovation and economic development.

Our Mission: To drive the design and development of economically sustainable operations by interconnecting the essential components of advanced mobility to deliver impactful outcomes.

Disaster Management & Resiliency

- Wildfire prevention, suppression and management to replanting forests
- Flood mitigation and recovery

Healthcare

- Intermodal transfer of goods within and between hospital campuses
- Movement of specialists to underserved areas

AMC's World-Leading Partners and Advisors



Partners



*Partial List

Advisors



Ben Miller

Strong advocate for the use of technology in firefighting - Director of the CO Center of Excellence for Advanced Aerial Firefighting.



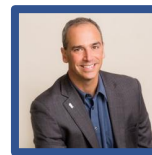
Lee dePalo

VP of Strategic Partnerships for Disaster Tech, providing emergency managers with tools to mitigate risk. Formerly Regional Administrator for FEMA Region VIII.



Colleen Reiche, PhD

Dr. Reiche is a Lead Scientist at QS-2 with over 12 years of experience (FAA, NASA in weather data collection and analytics).



Kyle Snyder

Robotics Program Manager for Cherokee Nation Strategic Programs supporting Dept. of Homeland Security with robotics testing and integration. Over 20 yrs. in robotics development.

*Partial List

ForestTech Components

- Autonomous Instant Response and Mitigation
- Autonomous Flight Pods
- Aerial Support
- AI Fire Sensing Camera
- Enhanced Communications Infrastructure
- Conventional Ground Support
- Autonomous Ground Support
- ForestTech Network Operations Center (NOC)
- LEO/GEO Satellites
- Real Time Satellite Imagery



Services Needed

Point to Point	Network	5G Overlay	Towers	Managed Sites

= New Fiber Backbone, MPEI

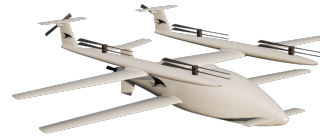
ForestTech – Building, Interconnecting and Managing Systems



LEO/GEO Satellites



Aerial Support



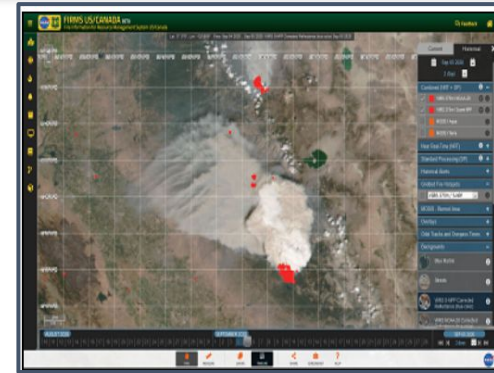
Autonomous Flying Fire Trucks



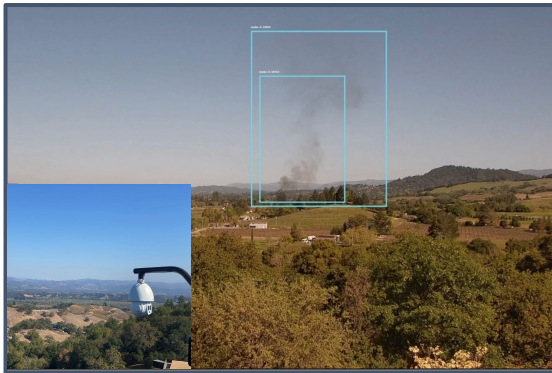
Autonomous Instant Response and Mitigation



Data Storage, Management and live Analysis



Real Time Satellite Imagery



AI Powered Cameras, Heat and Smoke Signature Detection



Conventional Ground Support



Autonomous Ground Support Saves Lives



Enhanced Communications Infrastructure

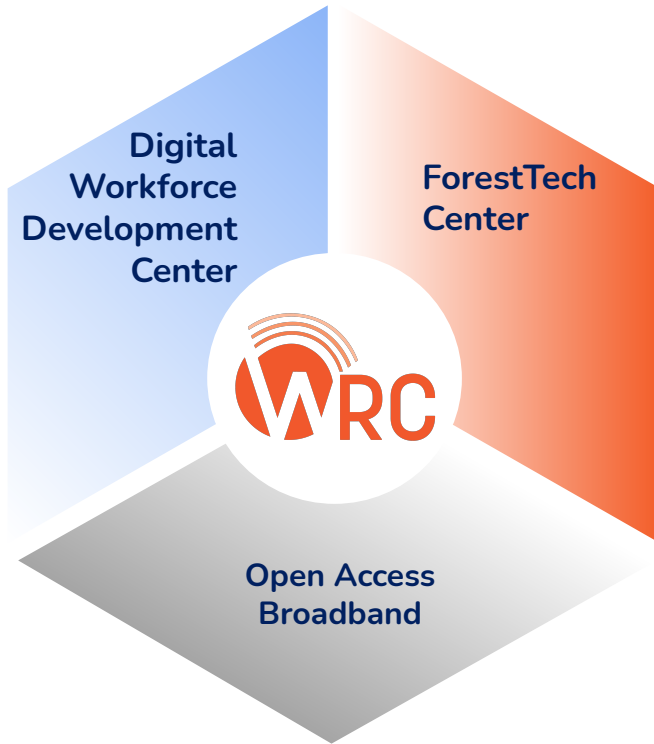


ForestTech Network Operations Center (NOC)



-
- ✓ **Robust workforce and economic development**
 - ✓ **Supporting a more year-round economy**
 - ✓ **Bring high paying jobs and careers**
 - ✓ **Spurs broadband buildout and access**
 - ✓ **Stopping wildfires in their tracks!**
-

- Greatly reduce the risk of wildfires in Region 12 while serving as a massive economic boon and stimulus for the county
- Establishing Colorado as the leader changing how the world manages fires, natural disasters and forests, forever.
- Capture millions of dollars in federal and corporate funding for Region 12
- Establish an economically sustainable tech-ecosystem (companies / funding / talent) that transforms the way we manage forests
- Management of wildfire outcomes and associated watershed impacts
- Design and deployment of infrastructure that supports Smart Forests



Digital Workforce Development Center

- **Digital workforce training programs** & certifications.
- New **digital career paths** or update current skills
- **Incubating and accelerating entrepreneurs**
- **Trade Center** for continued learning, **healthcare + Business Process Outsourcing**

Open Access Broadband

- Advocate, help coordinate and build enhanced and resilient broadband in Region 12
- Backbone for both the Digital Workforce Development Center and the ForestTech Centers with benefits for all residents and businesses in the region

Advanced Mobility Collective ForestTech Center

- **Wildfire mitigation, suppression, and resiliency**
- **Create trusted regional/national ecosystem** with key stakeholders (DOI, FEMA, CoE, State/Local, etc.)
- **Integrate, prove and deploy “Smart Forest” Technologies** (communications, sensors, autonomous vehicles, robotics, wearables, data analytics, etc.)
- **Transform the way we manage our forests**

Digital Workforce
Development
Center



Open Access
Regional Network



ForestTech Center



REGION 12 DIGITAL ECONOMIC INNOVATION CORRIDOR & RESILIENCE PROGRAM

Build Back Better EDA Presentation
October 17, 2021