

Lander County Rural Areas Battle Mountain and Austin

Enhancement Request for Proposal

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1. Request for Information (RFI)

- June 4, 2020 RFI is released
- June 18, 2020 Initial Vendor Questions e-mailed to:
broadbandrfp@landercountynv.org
- June 29, 2020 Vendor Meeting
- July 2, 2020 Final Vendor Questions
- July 7, 2020 Q&A posted
- August 7, 2020 Responses due at 5 PM PT; E-mailed to:
broadbandrfp@landercountynv.org

2. Lander County Background and History

Lander County and County Seat Battle Mountain, Census Designated Places: Austin and Kingston.

Lander County

Located in north central Nevada, Lander County encompasses 5,621 square miles. Over 85 percent of the County is currently public land managed by federal agencies.

Mining

Lander County is ideally situated in the center of Nevada's gold mining district which accounts for 75 percent of the total U.S. gold production. Lander with great access to major highway and rail corridors, is also central to mines which produce a significant amount of silver, copper, iron, magnetite, lithium, barite, sepiolite, saponite, limestone, sand, gravel, diatomite, molybdenum, perlite, salt, semiprecious gemstones, and mercury.

Agriculture

Lander County's 124 farms are focused on beef cattle and grass forage materials, including irrigated alfalfa hay, Nevada's No. 1 cash crop. Nevada has some of the best in the world because growing conditions yield a high protein feed and silage.

These operations require large tracts of land and public grazing allotments afforded by the Great Basin topography and managed through the Bureau of Land Management or the U.S. Forest Service. The average size of Lander County farm operations is 2,500 acres. The 2012 market value of Lander County crops nearly doubled between 2007 and 2012, closing in on \$40 million according to the [US Department of Agriculture's 2012 Census of Agriculture](#).

Other Economic Attributes

With abundant sunshine, active geothermal resources and wind-energy potential, Lander County is poised to become a clean energy hub with Interstate 80, rail line and spur with unlimited aviation and inland port potential with two 7,300-foot airport runways.

Lander County has several advantages for economic growth and development:

- Locations with redundant fiber potential
- A motivated, cost competitive workforce
- Lower land and competitive energy costs
- Low overall cost of doing business
- Nearby, diverse recreation opportunities
- A small town pace and quality of life
- A vibrant, growing region
- A range of unique communities
- Unique tax advantages
- A leading player in mining and natural resources production
- A modern community infrastructure built for expansion

History

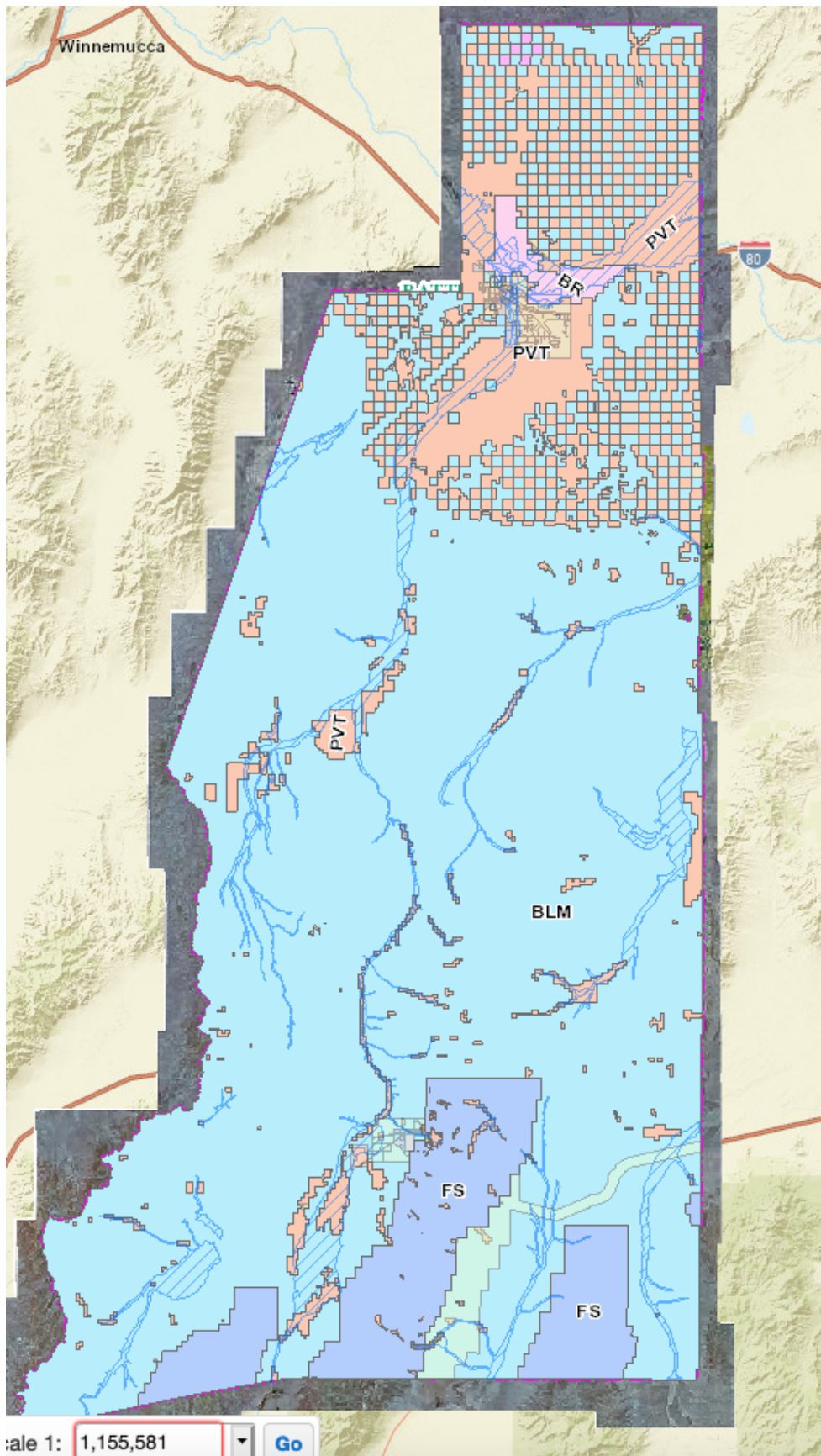
Lander County was created in 1862. It was one of the 11 counties in Nevada when it became a state in 1864. It was named for Frederick W. Lander, chief engineer of a federal wagon route through the area in 1857.

Te-Moak Tribe of the Western Shoshone

The Te-Moak Tribe of the Western Shoshone reservation is located on the west side of the city limits of the town of Battle Mountain, Nevada in Lander County. It consists of two separate parcels of land totaling 683.3 acres. The original 677.05-acre reservation was established by Executive Order on June 18, 1917, for Shoshones living near Winnemucca and Battle Mountain. By an Act of Congress on August 21, 1967, an additional 6.25 acres were added to colony lands. The total reservation population is 165.

Lander County Interactive Map

[Lander County Interactive Map](#)



Lander County Population

July 1, 2018 5575
Housing Units: 2717
Households: 2183
Median Household Value: \$151,900
Households with a computer: 82.5%
Households with broadband subscription: 69.1%
Median Household Income: \$79,865
Total Businesses with employees >2: 94
Total Businesses: 268

County Land Area:

Land area: 5519 sq. mi.
Water area: 29 sq. mi.

County Seat: Battle Mountain

Battle Mountain the county seat for Lander County.

Population in 2018: 3,113
Estimated median household income in 2016: \$83,456
Median Property Value: \$138,000
Land area: 3.6 square miles.
Population density: 905 people per square mile



Austin

Note that the Austin School is served by a fiber optic connection. This fiber connection runs from the existing ATT Point of Presence in Austin (Lat/Long: 39.45171, -117.05381) to the Austin School (approximately 1.2 miles). This puts a new fiber optic link along US50 through the center of Austin and North on NV305 to the school. The owner of this fiber connection has expressed interest in directly providing last mile broadband service in Austin or working with last mile providers to enhance service to Austin residents.

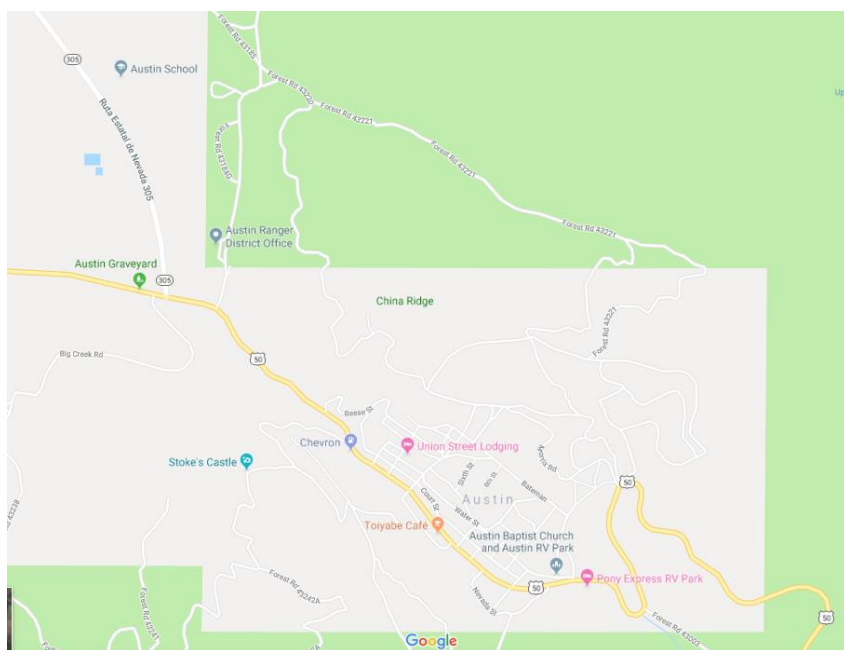
Population in 2018: 417

Estimated median household income in 2016: \$59,708

Median Property Value: \$99,792

Land area: 1.1 square miles.

Population density: 170 people per square mile



Kingston

Population in 2018: 164

Estimated median household income in 2016: \$81,145

Median Property Value: \$160,250

Land area: 4.1 square miles.

Population density: 40 people per square mile

The Kingston Health Center is a vital community anchor institution in Kingston. The clinic provides the only access to healthcare in the community. The need for a better broadband connection to the clinic is a major need in the community. Kingston, NV is a prime location

to establish a robust Telehealth Clinic, but due to a grossly underserved community, that is not possible at this time. The address of the clinic is: **99 Toiyabe Rd. , Kingston, Nevada.**

3. Lander County Location Map

This map depicts both telecommunications assets and public sector locations.

Telecommunications assets are orange markers and government facilities are in blue.

Location Map Lander County

4. Problem Statement and Statement of Need

Lander County (including the census designated places), the Battle Mountain Colony and Battle Mountain, Austin and other census designated places have formed the Lander Broadband Action Committee (LBAC) to address the lack of scalable broadband access in the county. This lack of scalable broadband access is prevalent in both high density population and remote/rural areas of Lander County. Access to education, access to healthcare, communication with public safety, school work, economic vitality, business innovation, entertainment, tourism and other critical services are increasingly delivered over a broadband Internet connection.

The lack of scalable broadband infrastructure and broadband services in Lander County will limit the county's ability to:

- Retain jobs and existing business
- Increase tourism and destination location opportunities
- Promote Economic Development efforts to attract and expand commercial business
- Conduct business without fear of Internet connectivity loss
- Provide life-long "K to Gray" education for its citizens
- Advance the capability for digital and distance learning
- Provide leading edge healthcare
- Ensure the timely delivery of government services to Lander County, Battle Mountain, Austin and other areas of Lander County
- Ensure timely and seamless public safety communication throughout Lander County
- Benefit from cloud-based/streaming services currently rendered inoperable by poor broadband
- Expand home business capability

Goals of the LBAC:

The LBAC set Several Goals for its work:

1. Throughout Lander County create a scalable network solution to foster diversity and innovation, drive job retention and creation, stimulate economic growth, and serve new areas of development in the community; by providing service for a minimum of twenty (20) years from the date of first operation.

2. While the LBAC prefers that the broadband solutions proposed by providers/vendors network be fiber based; **all technologies will be considered, especially in lower density unserved/underserved areas.**
3. Provide a flexible menu of broadband services, that improve service to the following eligible service areas:
 - a. Service in Battle Mountain and Austin - Offer enhanced service along key business and high-density residential corridors in Battle Mountain and Austin's higher density areas.
 - b. Unserved/Underserved/oversubscribed areas - Offer new or enhanced service in underserved and unserved areas of the county
 - c. Government facilities – Offer lit or dark fiber services to meet the administrative and public safety needs of Lander County Government and any other government facilities.

Note that the LBAC owns no assets nor is the LBAC a decision-making body. The LBAC is a coordination body that allows service providers to coordinate efforts with one organization that represents all bodies (called *Lander Affiliates*) who possess jurisdictional authority over areas of Lander County. An example of affiliates are the Lander County Commissioners, the Battle Mountain Indian Colony Tribal Council, Battle Mountain, and Austin.

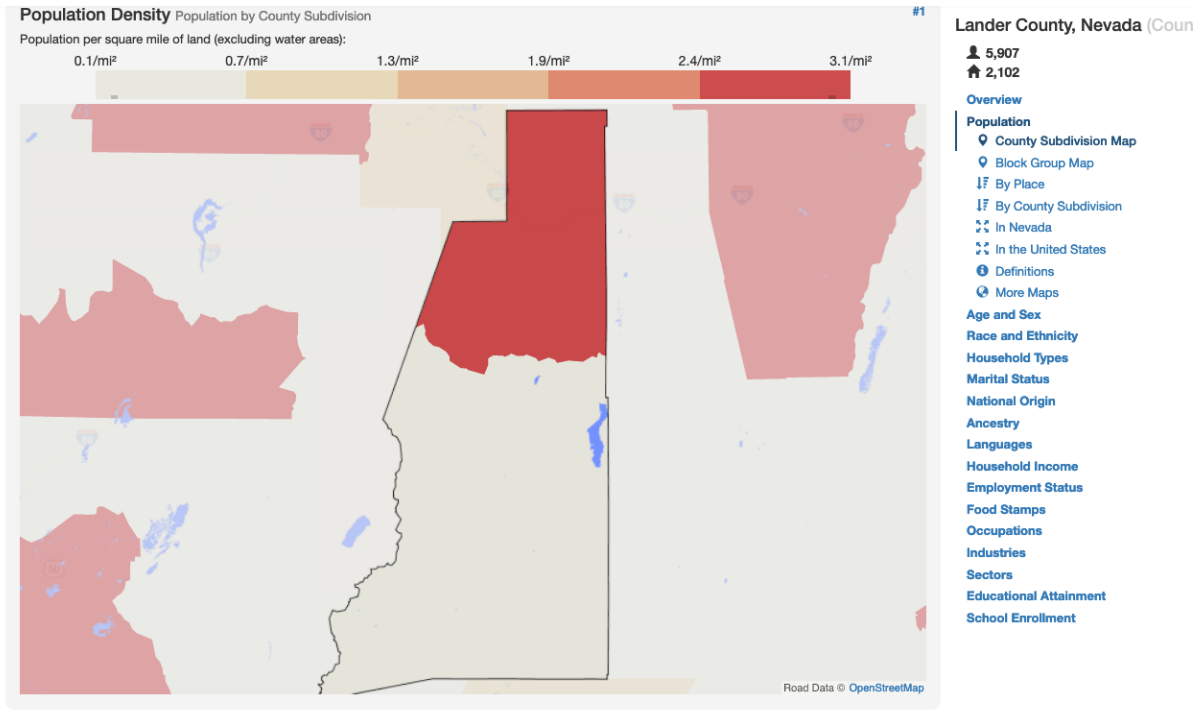
The Lander Affiliate with jurisdictional authority over a proposed service area is the only organization with the authority to enter into service agreements, subsidy agreements or other agreements with service providers.

5. Areas of Need

The Lander Affiliates have identified three areas in need of new or improved service. Battle Mountain and Austin services to residents, businesses and Government Facilities. Unserved areas (Mapped in section 2A) (See descriptions in introduction and in 2B).

Description of Services for Battle Mountain and Austin High Density Areas

High density areas within Battle Mountain and Austin are as follows:



The LBAC will consider one type proposal to serve Battle Mountain.

Fully Managed Service

The one service option that will be considered to serve the areas within Battle Mountain and Austin with a fully managed service with the infrastructure owned by the vendor/service provider will be considered.

For these areas in Battle Mountain and Austin, the vendor/service provider will take responsibility to design, engineer, construct, project manage and, if providing a fully managed service, equip the Network(s).

Network(s) access and/or network construction proposals should include building up to the end user drop point or the end user Network(s) interface device. In addition, the Vendor(s) will bear all the operating and maintenance costs, including insurance costs and relevant taxes of the Network(s). Vendor(s) should also demonstrate a clear and continuous upgrade path for the Network(s) to meet future consumer demand, business demand, community anchor institution demand, and service developments.

- SPEED: At initial service introduction, minimum 25Mbps download /3Mbps upload for business and consumers within Battle Mountain and Austin with availability of service packages up to 1Gbps symmetrical. As part of the respondent’s proposal,

please outline how the service will scale to a minimum of 100Mbps/20Mbps minimum service up to 10Gbps maximum service by 2024.

- SERVICE REQUIRED: For fiber-to-the-premise proposals, Active Ethernet, GPON, and/or WDM/PON technologies to provide services to households, businesses, governments, and institutions throughout the Service Area are all acceptable technologies. This Network(s) must include all active and passive infrastructure, including fiber cabling, active repeater equipment, uninterruptible power supplies, Network(s) cross-connections, software, and ancillary equipment.
- PREFERRED TECHNOLOGY:
 - **Lit Fiber Service**-Service provider owned fiber with a fully managed lit service at a minimum of 25Mbps download/3Mbps upload for business and consumers within the Battle Mountain and/or Austin limits with availability of service packages up to 1 Gbps symmetrical. As part of the respondent's proposal, please outline how the service will scale to a minimum of 100Mbps/20Mbps minimum service up to 10 Gbps maximum service by 2024.
- OTHER TECHNOLOGY OPTIONS (no incentive for these technologies will be offered):
 - **Lit Point to Point Fixed wireless service** - Service provider owned fixed wireless with a fully managed, bundled (transport and access included) service at a minimum of 25Mbps download /3Mbps upload for business and consumers within Battle Mountain and Austin with availability of service packages up to 1 Gbps symmetrical. As part of the respondent's proposal, please outline how the service will scale to a minimum of 100Mbps/20Mbps minimum service up to 10 Gbps maximum service by 2024.
 - **Mobile Broadband Service using existing wireless networks** – Preferred using LTE or other current generation fully managed, bundled (transport and access included) service at a minimum of 25Mbps download/3Mbps upload for business and consumers within the Battle Mountain and/or Austin limits with availability of service packages up to 1 Gbps symmetrical. As part of the respondent's proposal, please outline how the service will scale to a minimum of 100Mbps/20Mbps minimum service up to 10 Gbps maximum service by 2024.
 - Others proposed by vendors
- SERVICE LEVEL AGREEMENT
 - For all services wired or wireless provided in high density areas, the following service specifications should be met for all connections:
 - 99.99% circuit uptime
 - Frame/packet loss .25% commitment
 - 35ms Network Latency Commitment (last mile circuit only)
 - 5ms Network Jitter Commitment
 - Rate limiting and throttling will be reported to customer

- Credits for outages according to the following schedule:

Length of Service Outage	Credit is the following percentage of Monthly Recurring Cost
Less than 45 minutes	No Credit
Forty-five (45) min. to four (4) Hours	5%
Greater than four (4) hours and less than eight (8) hours	10%
Greater than eight (8) hours and less than twelve (12) hours	15%
Greater than twelve (12) hours and less than sixteen (16) hours	20%
Greater than sixteen (16) hours and less than twenty-four (24) Hours	35%
Greater than twenty-four (24) hours	50%

- INCENTIVE CONSIDERATION FOR FIBER VENDORS ONLY: **For a fiber to the premise (FTTP service)**, the Lander County Commissioners (or some combination of governing bodies with jurisdictional authority for the area of proposed FTTP service) willing to consider offering the following incentives if a bid meets the present and future bandwidth and service specifications:
 - Potential cash grants to assist with construction to business and residential locations
 - Serving Lander County Government administration locations
 - County and cities/areas will consider waiving existing permit and other fees for up to the first 5 years of operation
 - Single point of contact for Lander County Right of Way permits and other administrative processes
 - County consider expediting permits
 - Promotion of the service by LBAC Affiliates to businesses and residences
 - Any County, Battle Mountain or Austin or Tribal offer of a subsidy may be on a per household or per business subsidy for deployment of a fiber-to-the-premise service. Any subsidy is contingent upon approval and funding by the Affiliate who has jurisdiction over the area of proposed service.

- INCENTIVE CONSIDERATIONS FOR ALL VENDORS FIBER OR WIRELESS:
No rental fee access to Lander Affiliates owned or controlled towers, utility poles and buildings for attachment of fiber or antennas. This does not include access to third party owned utility poles. Any rental fee waiver is contingent upon approval by the Affiliate who has jurisdiction over the area of proposed service.

Service Providers will have to negotiate use agreements for these assets with the asset owner's jurisdictional agency. Depending on the asset, the agency could be the Lander County Commissioners, Tribal Council or another agency.

- SERVICE PERIOD: Up to 20 years from date of first operation
- EXPANSION: Provides a comprehensive broadband infrastructure that can be expanded upon to serve other areas of Lander County, including those outside the high density areas, when deemed practical
- ACCESS TO ASSETS: Access to other broadband delivery assets owned or controlled by the Lander County and other entities. There will be a consideration to enter into service contracts with prospective vendors. This means, County facilities currently subscribing to broadband service will consider options for service proposed by respondents. Any access to assets is contingent upon approval by the Affiliate who has jurisdiction over the area of proposed service.
- OPEN ACCESS: open access solution is preferred; the main network vendor offers lit and dark fiber services to other service providers, but proposals that have some variance on this preferred solution may be considered
- GRANT ASSISTANCE: Providers may seek Federal or State Grant assistance to serve these "higher density" areas. The Governor's Office of Science, Innovation, and Technology can advise and provide resource avenues. This could include:
 - Grants available to Federally Recognized Tribal Organizations
 - Universal Service reimbursement funds
 - Anticipated Federal Infrastructure Investment Funds
- PRICING:
Service for government may be priced as;
 - Transport only
 - Transport and access (bundled) package
Service for business may be priced as:
 - Transport only
 - Transport and access (bundled) package

Service for residences may be priced as:

- Transport and access (bundled) package

Government Services

The Community Anchor Institutions located in Lander County and listed in the **Government Facilities table** would be interested in receiving quotes for broadband service.

Lander County has internal Information Technology staff that coordinate their purchases, but prospective vendors can be introduced to the individuals who recommend broadband services purchases to their respective governing bodies.

The desired Service Level Agreement and Service Credits are outlined on the following schedule.

- For all services wired or wireless provided in high density areas, the following service specifications should be met for all connections:
 - 99.99% circuit uptime
 - Frame/packet loss .25% commitment
 - 25 ms Network Latency Commitment (last mile only)
 - 5 ms Network Jitter Commitment
 - Rate limiting and throttling will be reported to customer
 - Credits for outages according to the following schedule:

Length of Service Outage	Credit is the following percentage of Monthly Recurring Cost
Less than 45 minutes	No Credit
Forty-five (45) min. to four (4) Hours	5%
Greater than four (4) hours and less than eight (8) hours	10%
Greater than eight (8) hours and less than twelve (12) hours	15%
Greater than twelve (12) hours and less than sixteen (16) hours	20%

Greater than sixteen (16) hours and less than twenty-four (24) hours	35%
Greater than twenty-four (24) hours	50%

Government Facilities – Lander County –Existing contracts are in place for the Lander County locations and for other facilities, but service providers offering a fully managed service should consider future service to these locations in their bid submission.

Bolded entries indicate possible Universal Service Fund reimbursement eligibility.

Facility	Address or Lat Long	Government Owner
Lander County Public Works	550 W 2nd St, Battle Mountain, NV 89820	Lander County
Lander County Courthouse and Administration	50 NV-305, Battle Mountain, NV 89820	Lander County
Lander County Commissioners	825 N 2nd St, Battle Mountain, NV 89820	Lander County
Lander County Animal Control	1 N 2nd St, Battle Mountain, NV 89820	Lander County
Lander County Records Retention	15 E 2nd St, Battle Mountain, NV 89820	Lander County
Lander County Social Services	315 S Humboldt St, Battle Mountain, NV 89820	Lander County
Battle Mountain General Hospital	535 S Humboldt St, Battle Mountain, NV 89820	Non-Profit
Lander County Sheriff	124 Main Street, Austin, NV 89310	Lander County
BLM Battle Mountain Office	50 Bastian Rd, Battle Mountain, NV 89820	United States Government
Nevada Department of Wildlife	113 Carson Rd, Battle Mountain, NV 89820	State of Nevada
Battle Mountain High School	425 Weaver Ave, Battle Mountain, NV 89820	Lander County School District
Lander County Convention and Tourism	470 S Broad St, Battle Mountain, NV 89820	Non-Profit
Battle Mountain Elementary School	650 Altenburg Ave, Battle Mountain, NV 89820	Lander County School District
Lander County School District Central Office	450 E 6th St, Battle Mountain, NV 89820	Lander County School District

Eleanor Lemaire Junior High	985 W Humboldt St, Battle Mountain, NV 89820	Lander County School District
Nevada Department of Transportation	350 E 4th St, Battle Mountain, NV 89820	State of Nevada
Battle Mountain Water and Sewer	550 W 2nd St, Battle Mountain, NV 89820	Battle Mountain
NV Department of Transportation and Nevada Rangers Office	39.502945, -117.083541	State of Nevada
Kingston Town Board	112 Gold Knob Rd, Austin, NV 89310	Kingston
Austin Medical Center	121 Main Street, Austin, NV 89310	Non-Profit
Lander County Library	625 S Broad St, Battle Mountain, NV 89820	Elko-Lander-Eureka Library District and Lander County
Lander County Library	88 Main Street, Austin, NV 89310	Elko-Lander-Eureka Library District and Lander County
Austin Youth Center	67 Main Street, Austin, NV 89310	Austin NV
Te-Moak Tribe of the Western Shoshone-Battle Mountain Colony	35 Mountain View Dr, Battle Mountain, NV 89820	Te-Moak Tribe of the Western Shoshone
Battle Mountain Airport	1080 Airport Rd, Battle Mountain, NV 89820	Lander County

Lander County Locations

This Google Map displays government facility and communications asset locations. **Lander County School District** – Lander County School District is currently under contract with ATT for the Schools within Battle Mountain for T1 and DSL service for the schools in Battle Mountain and for Fiber Service with Sky Fiber to the School in Austin. Lander County School District will consider broadband service options through an E-rate procurement but will accept information from Service Providers interested in serving the broadband requirements of Lander County School District through this process. The Lander County Library Locations in Battle Mountain and Austin are served by high-capacity fiber connections from Sky Fiber.

Fiber Construction- If new fiber is constructed to serve any of these locations, use the preferred construction specifications located in Appendix B.

Access to county assets: The Community Anchor Institution facilities listed above as well as county properties listed in Appendix C are considered “broadband assets” of the county and

available for use by vendors upon negotiation of terms and conditions of access with the County.

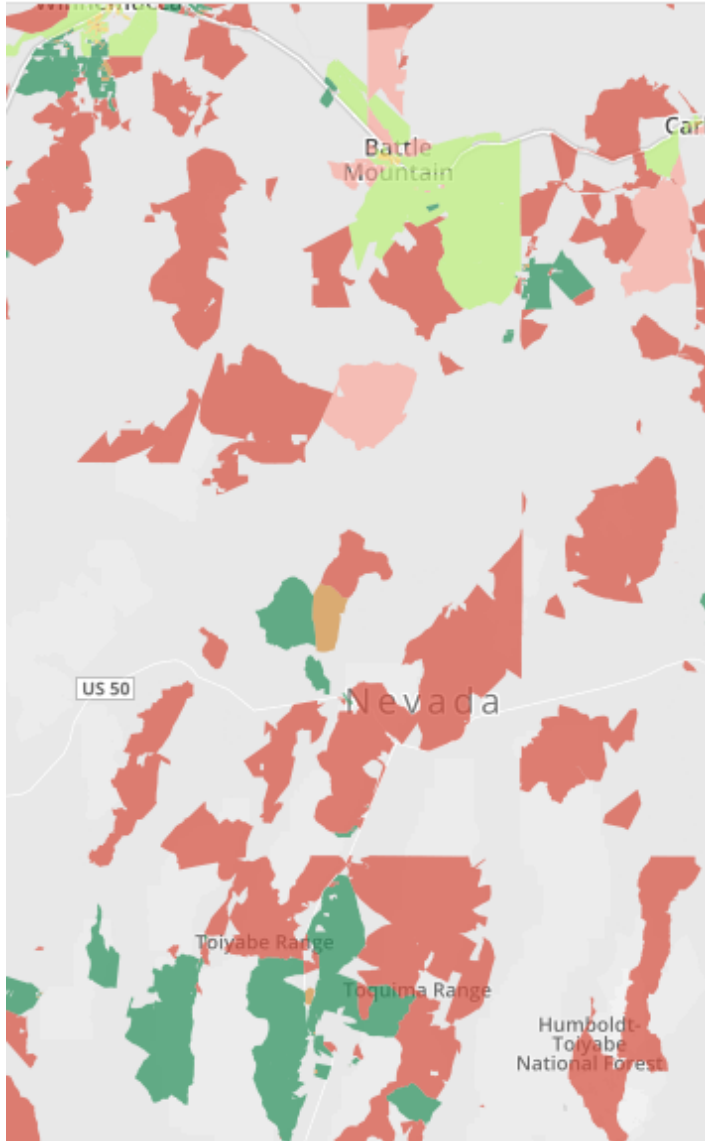
County Water Project: The county has a planned water line project that will trench under in Battle Mountain I-80 in the next few months. The County would consider providing trench access for a broadband provider to install conduit and/or fiber.

NDOT Project

NDOT has a planned project coming through Austin, NV along Highway 50 in the next few months, where access conduit will be placed. The county will align with NDOT for a planned Water and Sewer project. Broadband providers can enter into a Master license agreement with NDOT to reserve one of the access conduits. IRU is for 20 years.

Unserved/Underserved Areas

According to the Federal Communications Commission's (FCC) Connect America Fund (CAF) map the areas in red in Lander County are unserved and the green areas in Lander County are underserved. The greenish-yellow areas are served.

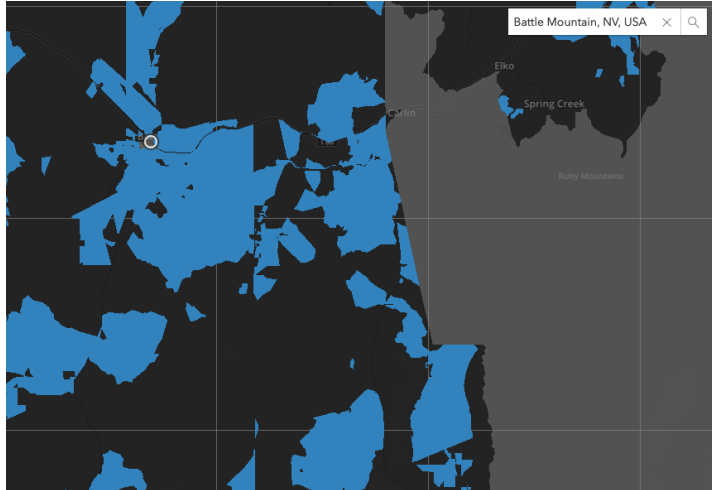


In all, there were 252 unserved and underserved locations in incumbent territories Lander County with \$177,238.07 of support. None of this funding was accepted by the incumbent provider.

In the FCC's Connect America Fund Phase II Auction, which concluded in late August 2018, Fixed Wireless and Fiber vendor CommNet, accepted support in significant areas of Lander County. CommNet accepted \$251,668.30 to serve 979 locations in incumbent territories and areas of Lander County with no incumbent provider.

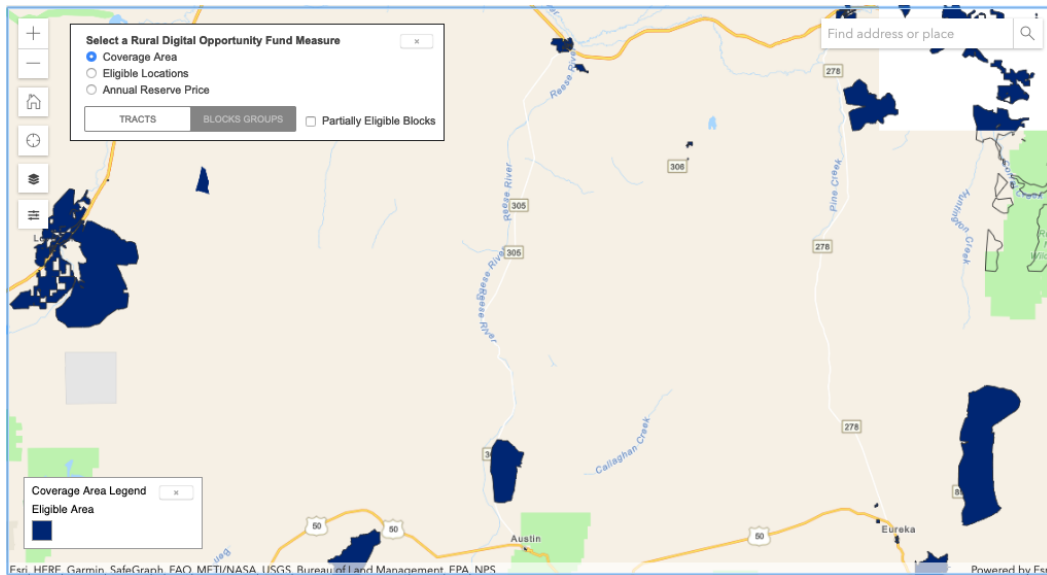
This commitment means CommNet will supply a minimum of 10Mbps download and 1Mbps upload broadband service in these areas (areas where CommNet accepted funding are in blue and gray areas are areas of Lander County where Connect America Fund support is available but was left unclaimed for Phase II (through 2023) or areas where there is no

incumbent carrier. Note that United States Department of Agriculture (USDA) Community Connect Grant funding may be available in the gray areas. The Lander Broadband Action Committee and Lander County are interested in collaborating or entering into public private partnerships to seek USDA support for these areas.



Rural Digital Opportunity Fund

The FCC recently released eligible areas for its next round of subsidies. Subsidies for the new Rural Digital Opportunity Fund (RDOF) will be awarded via a reverse auction that is scheduled to begin October 22nd, 2020. In Lander, there are 1659 locations eligible for up to \$2.54 Million in total subsidies over a 10 year period.



Description of Services for rural and/or underserved areas of Lander County

Based on residential and business survey feedback, these Connect America Fund areas and other rural areas of the County appear to still lack appropriate broadband service, the County is seeking other options for service in unserved or underserved areas.

The Lander Affiliates have developed the following specifications for broadband service providers interested in offering service in these regions. The Lander Affiliates will interact with providers who are interested in providing solutions that meet the technical specifications for one or more rural and/or underserved areas.

Provider(s) of the broadband services in the unserved/underserved areas will take responsibility to design, engineer, construct, project manage and equip the Network(s). Network(s) access should include building up to the end user drop point or the end user Network(s) interface device. In addition, the Vendor(s) will bear all the operating and maintenance costs, including insurance costs and relevant taxes of the Network(s). Vendor(s) should also demonstrate a clear and continuous upgrade path for the Network(s) to meet future consumer demand, business demand, community anchor institution demand, and service developments.

- SPEED: 25Mbps download (down) and 3Mbps upload (up) wired or wireless solutions, scaling to 50Mbps/10Mbps over the majority of rural areas of Lander County by 2024. Preference will be given to Vendors offering higher network speeds.
- SERVICES REQUIRED: high quality voice, data, and video services, and tele-health solutions.
- PREFERRED TECHNOLOGY absent fiber infrastructure:
 - Lit Point to Point Fixed Wireless service - Service provider owned fixed wireless with a fully managed, bundled (transport and access included) service at a minimum 25Mbps download/3Mbps upload initially scaling to 50Mbps/10Mbps symmetrical service by 2024.
 - Mobile Broadband Service using existing wireless networks – Preferred using LTE or other current generation fully managed, bundled (transport and access included) service at a minimum 25Mbps download/3Mbps upload initially scaling to 50Mbps/10Mbps symmetrical service by 2024.
 - Others proposed by vendors
- TECHNICAL SPECIFICATIONS:
 - **Fixed Wireless-** The vendor shall engineer, design, and implement high-availability fixed wireless paths that have path reliabilities of not less than 99.95% and a fade margin of not less than 30 dB for all fixed

wireless paths. The contractor shall apply for, coordinate and obtain FCC licenses for all fixed wireless paths requiring licensing.

- **Mobile wireless solutions** – The vendor can propose to utilize an existing mobile network for delivery of last mile mobile to the premise solutions. An LTE platform or equivalent mobile wireless broadband technology should be proposed. The vendor should illustrate the existing capacity of the mobile network to be used for last mile broadband and the amount of oversubscription planned in the last mile, in the transport to a POP and at the POP.
- **Mesh mobile network solutions or other innovative solutions**-Given the rapid pace of innovation in the wireless space, Lander Affiliates are willing to consider other solutions for the last mile. In all proposals of this kind, the vendor(s) should illustrate the existing capacity of the mobile network to be used for last mile broadband and the amount of oversubscription planned in the last mile, in the transport to a POP and at the POP.
- **SERVICE LEVEL AGREEMENT**
 - For all services wired or wireless provided in high density areas, the following service specifications should be met for all connections:
 - 99.99% circuit uptime
 - Frame/packet loss .50% commitment
 - 50 ms Network Latency Commitment transport portion only
 - 10 ms Network Jitter Commitment
 - Rate limiting and throttling will be reported to customer
 - Credits for outages according to the following schedule:

Length of Service Outage	Credit is the following percentage of Monthly Recurring Cost
Less than 2 hours	No Credit
Two (2) to four (4) hours	5%
Greater than four (4) hours and less than eight (8) hours	10%
Greater than eight (8) hours and less than twelve (12) hours	15%
Greater than twelve (12) hours and less than sixteen (16) hours	20%

Greaterthansixteen(16) hours and less than twenty-four (24) hours	35%
Greater than twenty-four (24) hours	50%

- SUPPORT FOR BROADBAND AVAILABILITY: Depending on the location to which the service provider is interested in providing service, the Lander Affiliates will coordinate all conversations with various agencies. These are the agencies of jurisdiction in specific areas of the service region. These governing entities may consider small amounts of subsidy funding for deployment of enhanced terrestrial or wireless service into these unserved and underserved areas of the county. For example, the county may offer a per household or per business subsidy for deployment of terrestrial service or may support service to underserved areas by providing or funding the construction of towers required to bring wireless signal coverage and service availability to these underserved areas of Lander County. Any subsidy is contingent upon approval and funding by the specific Affiliate for the area of proposed service.

The amount of subsidy, if any, will be determined at the sole discretion by the specific governing bodies for the areas of the proposed service. In no case will exceed 25% of the capital deployment costs (construction materials, construction labor, engineering, project management, core/edge/premise equipment) necessary to deliver broadband service to businesses and residences. Vendors requesting a subsidy, must provide detailed/line-item invoices of costs. Subsidies will be divided and paid on a per household or per business basis with proof of subscription.

- SERVICE PERIOD: Up to 20 years from date of first operation
- EXPANSION: Provides a comprehensive broadband infrastructure that can be expanded upon to serve other areas of Lander County when deemed practical
- GRANT ASSISTANCE: Providers may seek Federal or State Grant assistance to serve these “higher density” areas. The Governor’s Office of Science, Innovation, and Technology can advise and provide resource avenues. This could include:
 - Grants available to Federally Recognized Tribal Organizations
 - Universal Service reimbursement funds
 - Anticipated Federal Infrastructure Investment Funds
 - Future rounds of Connect America Funding
 - USDA Re-Connect and Community Connect Grant and Loan Funding
- ACCESS TO ASSETS: Access to other broadband delivery assets owned or controlled by the Lander Affiliates that are detailed in Section 3A. Lander Affiliates will also

consider entering into service contracts with prospective vendors to meet Lander Affiliate member needs. Service Providers will have to negotiate use agreements for these assets with the asset owner's jurisdictional agency. Depending on the asset, the agency could be the Lander County Commissioners or another agency.

6. Survey Results (as of 3/4/2020)

Surveys for both residential and business broadband were distributed. The response to the surveys from both residents and businesses was strong. The highlights of the survey results were as follows:

207 Residential Responses

- 55.07% Dissatisfied or very dissatisfied with current service- 26.08% are satisfied or very satisfied
- Service Interruptions 61.45% and slow speeds 70.95% are the most common reasons for dissatisfaction
- 81.64% of users experience buffering
- 98.07% interested in faster broadband speeds
- 97.58% of respondents want Government to become involved to help attract better broadband service
 - 70.05% pay \$50-99 per month for service

Business survey 43 responses

- 83.72% of businesses have a single connection
- 53.49% are dissatisfied or very dissatisfied with current service
 - 1 respondent is very satisfied with current service
- Too slow is cited by 60.47% of users and service interruptions are cited by over 39.53% of respondents as reasons for dissatisfaction
- 93.02% are interested in faster service
- 60.47% are interested in a 1G or more service
- 72.09% experience daily buffering
- 100% say the County should be involved in attracting better service

7. Characteristics of desired construction vendors/investment partners/service providers

Eligible vendors will meet the following requirements:

- A Private For-Profit business licensed to operate as a broadband service provider in NV
- Vendors must have a minimum of three years of operations providing high-speed Internet service
- Vendors must be in good financial standing. Vendors should have a positive cash flow, and a positive credit history. Financial documents that must be submitted along with this application are outlined in Section 11.4.

Each Vendor will be an independent contractor that provides all or some of the following design, finance, construction, and operation services of broadband network(s). Agency of government who has jurisdiction will have no ownership in the Vendor(s) that owns and operates the Network(s). Lander Affiliates' contract(s) with the Vendor(s) do not constitute franchise(s). Agency of government who has jurisdiction do not plan to regulate generally Vendor(s) business activities, nor to grant Vendor(s) a franchise for its activities and operations. Agency of government who has jurisdiction expect that the contracts and property instruments associated with this effort shall establish terms and conditions governing the use of public assets that are utilized by Vendor(s) in its service delivery to its customers.

8. County Offerings to construction companies and service providers

Buried Fiber in Conduit

There is no county owned fiber in Lander County.

Tower and Building Attachment Access

Access to space on towers that are owned by Lander County or one of the Lander Affiliates is possible by request for any respondent.

Any access to towers contingent upon approval by the agency of government who has jurisdiction over the area of proposed service.

A tower map and additional information about tower locations is at the following link:

[Lander County Government Facilities and Tower Locations](#)

Rights of Way

Construction and the installation of equipment in affiliated government entities rights-of-way will be subject to the applicable requirements and ordinances of the agency of government who has jurisdiction. Subject to existing rights-of way and easements, the Affiliates will allow Vendor(s) to have access to necessary rights-of-way on property owned by an Affiliate and property on which it has an easement and authority to allow such access.

Access will be provided in accordance with the applicable requirements or ordinances, but generally access will be provided during regular business hours for non-emergency work and 24 hours a day, 7 days a week in the event of an emergency. Access includes permission to perform construction work on Lander Affiliates property, including construction in the streets as needed for the Network(s), subject to any permit requirements that the Agency of government who has jurisdiction. The agency of government who has jurisdiction will assist in obtaining on a timely basis the required approvals to allow such work in said rights-of-way. Any right of way access is contingent upon approval by the Affiliate who has jurisdiction over the area of proposed service.

If requested, the agency of government who has jurisdiction will also cooperate with Vendor(s) in efforts to allow Vendor(s) to gain access to rights-of-way owned or controlled by third parties within the Service Area.

Planned street maintenance could be utilized to coordinate any proposed work with preexisting construction schedules and these schedules may have certain flexibility to align with a potential network rollout.

Pole Attachment Rights

Lander Affiliates may provide Vendor(s) with access to existing utility poles owned or controlled by its Affiliates. The mechanisms by which its Affiliates will provide such access to the poles, along with fees that will be charged, are listed in the will be subject to negotiation with the pole owner. Any pole attachment right is contingent upon approval by the Affiliate who has jurisdiction over the area of proposed service.

If requested, The Nevada Governor's Office of Science, Innovation and Technology (OSIT) will cooperate with Vendor(s) in its efforts to gain access to poles owned or controlled by third parties within the Service Area.

Co-location Space and Power

The agency of government who has jurisdiction may provide access to segregated, secured spaces for telecommunications and network equipment within facilities owned or leased by the agency of government who has jurisdiction; this space may exist in telecom closets or equipment huts at tower sites, fire stations, municipal buildings, or other locations. This space is typically not tiered data center space, and is generally unconditioned beyond standard building climate control. Some locations may contain generator/UPS backup for electrical utility service, although the agency of government who has jurisdiction is open to proposals from Vendor(s) to add redundant services. Vendor(s) may choose to segregate their equipment within the shared space. The agency of government who has jurisdiction will provide reasonable 24x7 access to the space for equipment maintenance and repair. The intent of the agency of government who has jurisdiction is to make space available through a leasehold interest that matches the term of service. Any access to these facilities is contingent upon approval of the Affiliate who has jurisdiction over the area of proposed service.

Access to a segregated, secured space within a data center facility or computer room owned or leased by the agency of government who has jurisdiction can be used for servers, telecommunications, and/or network equipment may also be made available. LBAC or its Affiliates may provide access to the space through routine IT operations processes or through accompanied access to the space; alternatively, Vendor(s) may choose to segregate Vendor(s) and LBAC and its Affiliates' equipment from each other in order for the agency of government who has jurisdiction to provide full access by Vendor(s) into the facility without escort. The agency of government who has jurisdiction will ensure data center is capable of receiving electrical service, computer room air conditioning, and customary facility monitoring services. The agency of government who has jurisdiction will provide reasonable

24x7 access to the space for equipment maintenance and repair. Vendor(s) will be required to adhere to municipal security policies and practices for working in such a space.

Note that Service Providers will have to negotiate use agreements for these assets with the asset owner's jurisdictional agency. Depending on the asset, the agency could be the Lander County Commissioners or another Lander Affiliate.

Service to Underserved Areas of Lander County- The Lander Affiliate with jurisdiction over a proposed service area may consider small amounts of subsidy funding for deployment of enhanced terrestrial or wireless service into unserved and underserved areas of the county.

For example, the county may offer a per household or per business subsidy for deployment of terrestrial service or may support service to underserved areas by providing or funding the construction of towers required to bring wireless signal coverage and service availability to these underserved areas of Lander County. Any subsidy is contingent upon approval and funding by the Affiliate who has jurisdiction over the area of proposed service.

The amount of subsidy, if any, will be determined at the sole discretion the official governing body of the proposed service area and in no case will exceed 20% of the capital deployment costs (construction materials, construction labor, engineering, project management, core/edge/premise equipment) necessary to deliver broadband service to businesses and residences. Vendors requesting a subsidy, must provide detailed/line-item invoices of costs. Subsidies will be divided and paid on a per household or per business basis with proof of subscription.

Fiber to the premise service to higher density residential areas in Battle Mountain and/or Austin (FTTP service), The Lander County Commissioners or another entity who has jurisdiction over the area of high population density where service is proposed, may be willing to consider offering the following incentives if a bid meets the present and future bandwidth and service specifications:

- Potential cash grants from the governing body, to assist with construction to business and residential locations
- Serving Lander County Government administration locations.
- Single point of contact for Lander County Right of Way permits and other administrative processes
- Promotion of the service by Lander Economic Development entities and/or Lander County Convention and Tourism Authority members to businesses and residences
- Any subsidy is contingent upon approval and funding by the Affiliate who has jurisdiction over the area of proposed service

Funding restrictions

All governing entities in Lander County have agreed **not** to award grants to substitute for lost government appropriations or cover pre-existing operating expenses for established organizations or pre-existing deployment to any of the Eligible Service Areas.

Assistance in Identifying and Generating Demand

All governing entities within Lander County, to include Lander Affiliates with jurisdiction over proposed service areas may negotiate individual commitments to purchase Network(s) services needed for its operations (e.g., transmission capacity, Internet access, voice, video, security monitoring, cloud computing and storage) through the Network(s).

If requested, governing organizations will provide Vendor(s) with publicly available information as to entities in the Service Area that are candidates to enter into contracts for fiber or Network(s) services. Such potential end-users may include educational institutions, large/medium/small employers, and governments. An initial list of such entities and contact information for key personnel may be listed in the Schedules for each individual community.

The agencies of government who have jurisdiction may each publicize the proposed Network offerings in the same manner as other private economic development announcements.

9. Proposal Content Fully Managed Service Provider Solutions

Looking for innovative solutions which may entail one or more Vendors collaborating to create a turn-key system that involves:

- A solution provided by a service provider that would provide enhanced broadband service in either Battle Mountain and/or Austin and rural areas of Lander County

All service descriptions, for a service provider managed solution must include:

- Complete construction plans
- Lander Affiliate proposed subsidies for service provider fully managed solutions
- Complete System Design
- Engineering, Project Management and design plans

For fully managed, service provider owned solutions, proposals must include:

- Proposed service packages for business and residential customers including all monthly recurring and on-time installation costs
- Plans for maintenance of the network
- Service level agreements for business and residential customers
- Detailed plans for installation, provisioning, maintenance, support of business and residential connections
- Detailed plans for periodic upgrade of the network

The Network(s) rollout will be based upon demonstrated demand by community residents, institutions, governments and businesses, and the availability of necessary infrastructure. The Network(s) design and operation should preferably provide an open access framework that maximizes wholesale and retail service delivery and competition.

10. Glossary of Terms

<p>Lander Broadband Action Committee (LBAC)</p>	<p>An effort led by the Lander County Commissioners and affiliates in Battle Mountain, Austin and the Battle Mountain Indian Colony with jurisdiction over areas of Lander County and supported by its citizens and business to bring faster, more reliable, higher value, scalable broadband service to Lander County, NV. LBAC includes affiliate organizations that have agreed to support the effort to bring enhanced broadband service to LBAC.</p> <p>The LBAC has no decision-making authority on its own but works with the governing organizations of Lander County to provide seamless coordination of efforts between these governing organizations. All decisions regarding formal agreements with proposed service providers are the responsibility of the governing organization(s) for the area of proposed service.</p> <p>The goal of this effort is 3-fold:</p> <ol style="list-style-type: none"> 1. Reach underserved areas of the county with more and better broadband service 2. Provide scalable broadband infrastructure within Lander County that will allow private sector service providers to offer enhanced services to business and consumers within the “high density” business corridors of the county and relatively high density residential corridors of the county. This includes Battle Mountain and Austin 3. Meet LBAC member administrative, public safety, public health and other area needs for scalable broadband service for at least the next 20 years
<p>Affiliate</p>	<p>An LBAC member that possess jurisdictional authority over a proposed service area. An affiliate with jurisdictional authority is the only formal body with the authority to enter into contractual agreements regarding service, subsidies, access to assets for its area of jurisdiction.</p>

<p>Advanced Network</p>	<p>A comprehensive approach to meeting the goals of</p> <ol style="list-style-type: none"> 1. Better broadband access for the underserved areas of Lander County 2. Enhanced broadband access for key business/economic development and high density residential corridors 3. An efficient way to meet the broadband needs of government, residents and businesses for the foreseeable future <p>Last mile solutions can be fiber, coax, mobile wireless or fixed wireless. Solution that provide 25Mbps download/3Mbps upload immediately and 100Mbps/20Mbps service by 2024 in high density areas and 50Mbps/10Mbps in rural areas by 2024. For last mile solutions in higher density areas the LBAC prefers fiber based solutions.</p>
<p>Open Access</p>	<p>The Lander County Commissioners and other affiliates with jurisdiction over proposed service areas prefer that the chosen vendor (s), if the vendors operate a wholesale network (sell access to other service providers), will have reasonable and non-discriminatory access arrangements that (i) ensure equivalence of price and non-price terms and conditions for all retail service providers and (ii) permit such providers to differentiate their product offerings. In addition, the Vendor(s) may not limit the ability of retail service providers or their customers to run applications, use services, and connect devices of their choice to the Network(s).</p>
<p>Service Area:</p>	<p>The LBAC service area includes Lander County and the following higher density areas (including Battle Mountain and Austin) and the outlying areas of Lander County, NV.</p>
<p>Vendor(s):</p>	<p>Business entity or entities which respond to LBAC needs</p>

11. Evaluation Criteria

Proposals will be evaluated according to the following criteria:

Fully Managed Service Provider Solutions

% Weight	Criteria
20%	Cost of business and residential broadband packages and the terms and conditions ¹
15%	Complete bid submission ²
10%	Ability to support requirements of this RFP including the ability to adhere to service level agreement standards in RFP ³
15%	Proposed contract terms and conditions ⁴
15%	Request for Subsidy ⁵
5%	Respondent references on similar projects ⁶
20%	Selection of local partner ⁷

1. **This is the total cost of broadband subscriptions for business and residential subscribers**-The package offerings will be evaluated for their costs; their term of the commitment necessary to receive the rate; the adherence to service level agreement standards in the RFP; installation, special construction, and other one-time charges.
2. **Bid Submission**-Did the respondent meet all the response requirements of the RFP with special attention to:
 - i. The inclusion of prices and terms for broadband subscription packages for businesses and consumers
 - ii. The adherence to terms and conditions of the service level agreement
 - iii. Detailed request for subsidy assistance from the affiliates
 - iv. Detailed request for access to facilities owned by affiliates (towers, colocation, etc.)
 - v. Detailed request for permit, easement and right-of-way assistance from the affiliates
3. **Demonstrated ability to meet all terms and conditions of the RFP**
4. **Proposed contract terms and conditions:** Proposed contract has flexibility and terms desired by Lander Affiliates

5. **Request for Subsidy:** A detailed request for subsidy that also outlines the respondent's investment
6. **Provider references:** response included references that were similar in size and scope to this project
7. **Formation of Partnership with a local service providers:** Having a local presence is vital to the uptake and support of service. The evaluation criteria gives significant weight to the formation of a local partnership to assist the service provider in delivery of a fully managed service.
 - i. Lander Affiliates will evaluate the history of a respondent already offering broadband service to residential, business, education, healthcare entities in Lander County. The service reputation of existing service providers is very important.

Appendix A – Access to Assets

The affiliate of jurisdiction will provide Vendor(s) with access to a common pool of the assets, services and infrastructure to the extent available and needed by the Vendor(s) for deployment of the Network(s). Infrastructure may include, but will not be limited to, conduit, fiber, poles, substations, rack space, nodes, buildings, facilities, central office or switch locations, available land, and other assets and services identified below. Ownership of any and all such assets used by the Vendor(s) shall remain with the owner unless provided for otherwise by contract. Any network elements added by the Vendor(s) shall belong to the Vendor(s) but may be purchased at the end of the term by the affiliate at reasonable, depreciated market value. If such network elements are not so purchased and are no longer in use, the Vendor(s) shall remove such elements at the affiliate's request. the affiliate may also offer access to additional assets, services, and infrastructure at their discretion, this will be determined during the negotiation process with the vendor.

The Affiliate may charge Vendor(s) as may be authorized or required by law for access to Affiliate assets and infrastructure as set forth herein or as otherwise may be required by law. If the response from the vendor indicates funds are required for the design, construction, engineering, project management of the aggregation network or last mile services, the Affiliate of jurisdiction, subject to applicable Nevada law, will consider provision of these funds.

Appendix B: Fiber Construction Specifications

The following are general terms that apply to the construction of fiber to the premise within the or in the area surrounding the cities or higher density unincorporated areas for routes to connect Lander County Government Offices or affiliate offices.

These build specifications apply to all new fiber builds contained in this RFP whether directly owned by the Affiliate, leased dark strands by the Affiliate or within the high density and unincorporated areas and owned by a vendor to serve the citizens, businesses and government.

Colocation Space Availability

An Lander Affiliate may decide lease rack or caged spaced at (interconnection address) to house electronics for traffic that will go upstream from the Lander Affiliate Hub. Vendors should provide detailed information on access and cross-connect policies and arrangements for power and telephone service at (interconnection address).

Meet-me Hole and Mid-Span Interconnection Splicing

It is possible that the Lander Affiliate may want to interconnect with the existing or newly planned carrier facilities at meet-me manholes or mid- span splice locations. Vendors should detail policies and guidelines that document meet-me manhole and mid-span interconnection procedures along with detailed costs for these activities.

Dark Fiber Performance

Lander Affiliates prefer newly built fiber that contains a homogenous fiber type throughout the entire build. It is currently anticipated that fiber utilized for the self-provisioned fiber proposal will be G.652.D fiber.

New Build Fiber Specification.

If newly constructed fiber is part of any service offering, the Lander Affiliates prefer the following fiber construction specifications/or more stringent ones be used:

Project Management

- Selected contractor and its subcontractors will provide all project management to accomplish the installation of all project work as outlined in the Statement of Work.
- Provide engineer(s), certified on selected fiber system specifications and procedures to manage all phases of project as outlined in this proposal. This includes ordering and managing the bill of materials as outlined below, directing and managing cable placement and restoration, directing and managing splicing crews and providing detailed documentation at the end of the project.
- Selected contractor and its subcontractors will develop a project management plan, which will include a milestone chart. The milestone chart will outline any critical path events and then track these with the appropriate agency/organization whether; selected contractor, a selected contractor subcontractor or (Vendor name)

Material Management

- Selected contractor and its subcontractors will provide all material management to ensure that the project remains on track according to the project milestones.
- Selected contractor and its subcontractors will develop in conjunction with selected contractor plants and other suppliers a material

management plan.

Property Restoration

- All cable routes, which are plowed, will be restored to original condition.

Install overhead and underground fiber optic cable.

- Micro-trenching is allowed and encouraged for fiber deployment in areas where the ROW is not often disturbed and relocation potential is limited
- Bore approximately 3 feet of fiber optic cable through inner duct/conduit/hand hole system
- Plow approximately 3 feet of fiber optic cable in accordance with selected contractor installation specifications.
- Install customer approved hand-holes and place marker/locator posts.
- Customer will provide entry/exit holes into buildings for routing cables to distribution frames unless otherwise noted.
- (Vendor name) will provide specific details of cable placement using aerial photography and cad drawings.

Install and Splice Hardware at Head Ends and in the Field

- Install optical hardware and splice field cable to equipment tail at head ends and splice tail to pre-stubbed hardware with SC pigtails.
- Prep closures, cables, fibers and splice fibers at all field locations
- Fiber to fiber fusion splicing of optical fibers at each point including head ends.
- Individual splice loss will be ≤ 0.10 dB for single-mode unless after 3 attempts these values cannot be achieved, then the fibers will be re-spliced until a splice loss within 0.05 dB of the lowest previous attempts is achieved. Splice loss acceptance testing will be based on the fusion splicer's splice loss estimator.

Total Project Splices: (number)

Final Testing

- In addition to splice loss testing, selected contractor will perform end-to-end insertion loss testing of single-mode fibers at 1310 nm and 1550 nm from one direction for each terminated fiber span in accordance with TIA/EIA-526-7 (OFSTP 7). For spans greater than 300 feet, each tested span must test to a value less than or equal to the value determined by calculating a link loss budget.
- Inspect each terminated single-mode fiber span for continuity and anomalies with an OTDR at 1550 nm from one direction in accordance with OTDR operating manual.

Documentation

- Provide final documentation consisting of:
 - Route “As-Built” Maps/Diagrams
 - End-to-End Insertion Loss Data
 - OTDR Traces
 - Individual Splice Loss Data

General Scope of Work (Description of all routes)

- Placing approximately (Number of Feet) of new (fiber count) Singlemode (SM) cable to provide bored fiber connectivity in route that is used to provide connectivity to (Vendor’s eligible facility).
- Placing approximately (Number of Feet) of (fiber count) SM underground cable along Wildlife Road from the route to Vendors Eligible Facility to reach (vendor eligible facility).
- Placing approximately (number of feet) of buried (fiber count) SM fiber from an existing handhold at (address) to vendor eligible facility.
- Placing approximately (number of feet) of buried (fiber count) SM fiber from an existing handhold at (address) to vendor eligible facility.
- Placing of associated hand holes, marker posts, locator posts, inner duct, and miscellaneous materials.
- Splicing of fiber optic cables as specified.
- Procuring and Provisioning of hand holes and miscellaneous materials required to accomplish the above.

Bid Specifications

- All fiber will be bid separately by the Owner in addition to turn-key including fiber and construction.
- All splicing shall be by the fusion method.
- All splicing enclosures and Hand Holes shall be of a type to be determined by the owner.
- All Hand Holes shall be NV DOT approved, 45,000 lb. load rated CDR or comparable enclosures.
- All plowed cables shall be placed at a depth of 36” along roadways and 24” on private property.
- All road and driveway bores shall be at a depth of 36” and will have a 2” inner duct placed within.
- All buried splice locations will be marked with a locator post and a copper ground wire shall be attached to the splice closure/cable sheath.
- Buried marker posts shall be placed every 1500’.
- A warning tape shall be placed 12” above the buried cable.
- All highway shoulders, schoolyards, and ditch lines will be compacted and restored to satisfactory condition.
- All DOT encroachment permits, railroad encroachment permits, and

National Park Service; Bureau of Land Management and other permits shall be submitted by (Vendor) in accordance with the permitting agency requirements.

- The vendor shall be responsible for the payment of any permitting fees and shall be the owner of said facilities.
- Contractor shall furnish an as-built drawing to the owner.
- Contractor shall perform an end-to-end continuity and loss test on each spliced fiber segment and provide the owner with the db loss of each fiber segment.
- Contractor shall be responsible for submitting the appropriate ULOCO locate requests.
- The vendor, the (Vendor) of (name) and the municipalities of (name) and (name) shall grant contractor right of way permission for municipal-owned properties and roadways.
- All cables to buildings shall be fusion spliced within a minimum of 50' of entering a building at a location to be determined by the owner with an existing single mode fiber and terminated at customers rack.
- A minimum of 100' coil of cable shall be left in each Hand Hole/Building for splicing use.
- The (Vendor) shall provide the contractor with secured space to store materials and equipment if needed.

Right-of-Way Acquisition & Permitting

- Vendor is responsible to ensure that all cable routes have approved access & rights-of-way for all proposed cables installations.
- Vendor will provide any information or points of contact to allow selected contractor and its subcontractors to facilitate the route prep "Make-ready" and actual cable installation.
- Vendor is responsible for pulling all required construction permits. Selected contractor and its subcontractors will provide officials at (Vendor) with any information necessary to pull these permits in a timely fashion.

Route Maps

- Vendor is responsible for providing; maps, drawings or aerial photographs of the route.

Termination and Splicing locations

- Vendor will in conjunction with selected contractor designate/decide on all termination locations, whether in-building, outside plant or in customer premises. This will include all hand-hole or manhole locations
- Vendor will in conjunction with selected contractor designate/decide on all field splice locations, in-building splice locations (if applicable), or other splice locations necessary to connect the network.

Cable and Hardware Approval

- Vendor will approve all cable and hardware prior to ordering or installation. Selected contractor will provide any required consultation to assist vendor in this effort.
- Vendor will approve all hand-hole or building entrance hardware prior to ordering or installation. Selected contractor will provide any required consultation to assist vendor in this effort.

Material Delivery, Receipt & Storage

- Vendor will provide warehouse or yard space to accommodate all materials provided by contractor to accomplish this project. Vendor will inspect, receive and issue any materials to provide accountability. This will reduce the overall cost to the vendor with no added costs being placed into the proposal to cover the receipt and storage.

Final Inspection

- Vendor will provide at their discretion a person(s) to witness any final testing or construction verification. The person designated by Vendor will be required to initial/provide acceptance of any results. This person(s) will represent Vendor during any and all acceptance testing. This does not relieve the selected contractor from providing agreed upon documentation or absolve the selected contractor of any warranty support.

Communications

- Vendor is responsible for all communications with its customers or other interested parties concerning the proposed construction. Notification of any person(s) affected by this construction is the responsibility of Vendor. Selected contractor will work directly with any persons designated to handle project communications to facilitate awareness and reduce turmoil in the Vendor. Selected contractor will provide consultation to assist in the development of a communications plan as required.

Appendix D: Tower Locations

[Tower Locations](#) Map