# NC DIT

**NORTH CAROLINA DEPARTMENT OF INFORMATION TECHNOLOGY**

## NC DIT GREAT Program
### Growing Rural Economies with Access to Technology Program

## Applicant Information

| | |
|---|---|
| Company Name | Balsam West |
| Address | 35, Bonnie Lane<br>Sylva, NC  28779 |
| Website | www.balsamwest.net |
| Federal Tax ID | ▮▮▮▮▮▮ |
| DUNS # | N/A |
| System Award Management (SAM.Gov) ID | CDWWYVMJZLV5 |

| Authorized Representative | | Authorized Representative (Alternative) | |
|---|---|---|---|
| Full Name | Ryan Sherby | Full Name | Jerry Weikle |
| Contact Title | CEO | Contact Title | Consultant |
| Phone Number | 828-341-5567 | Phone Number | 704-699-9451 |
| E-Mail | rsherby@balsamwest.net | E-Mail | jweikle@windstream.net |

### Grant Administrator & Company Name(if applicable):

| | |
|---|---|
| Full Name | |
| Contact Title | |
| Telephone | |
| E-Mail | |
| Website | |
| Federal Tax ID | |
| Address | |

## Project Information

| | | | |
|---|---|---|---|
| Project Title | Cherokee County Broadband Expansion Proj | | |
| Project Cost | $4,032,097 | | |
| County | Cherokee | Tier # | 001 |
| Estimated # of Households with improved access | | | 856 |
| Estimated # of businesses with improved access | | | 52 |
| Base Speed - Minimum Download/Upload | | | Greater than 100:100 Mbp |

### Project Description (provide a brief summary of the project

The application is for a Fiber to the Home (FTTH) solution from BalsamWest FiberNET LLC (BalsamWest) to provide last mile broadband, managed WiFi, and voice services to households, businesses, and community anchor institutions in unserved areas.  The project involves placement of approximately 34 miles of new fiber optic cable passing 908 homes and businesses that will connect to the existing BalsamWest network.  This will allow customers to receive reliable 1Gig/500Mbps service that will be scalable to 5 Gbps.  The service will be low latency, between 40 and 80ms, which will allow customers to take advantage of real-time, interactive applications at affordable rates compared FCC benchmark rates.

The project involves using single mode fiber optic glass that will transport many wavelengths of light. The limiting factor for speed is the optoelectronics used to transmit the light waves over the fiber.  This same passive optic network (PON) network can be overlaid with a wavelength operating at 10Gbps/10Gbps. As optoelectronics improve, speeds of 100Gbps can be transmitted over the same optical glass into PONs.  This allows the network to be scalable over time to meet increased customer speed demands.

The project area is in various parts of Cherokee County ("County").  The County is in the rugged mountainous and rural area of far western North Carolina.

The most densely populated portions of the county are currently served with broadband.  BalsamWest has built out its core fiber ring network through areas of the county as well as last mile fiber facilities in some areas of the county.  The areas to be served by this project are more expensive to serve outlier areas away from currently served areas.  The locations chosen can easily be added to BalsamWest's nearby existing fiber network.

The fiber network will be built in existing utility right of ways along these roads to serve two non-contiguous pockets of the county.  It is expected that most construction will be placement of aerial fiber on existing utility poles with some ancillary placement of buried fiber in the public right of ways along road shoulders, or underneath roads.  For a project of this scale and in the rugged, rocky, mountainous terrain, it is more cost effective with a faster construction period to install aerial cable as much as possible with buried cable in limited situations.  Based on the age of the existing pole infrastructure in the proposed service area, it is expected that a number of poles will need to be replaced before fiber can be attached.  Pole make ready work may add considerable time and expense to the project.  BalsamWest has pole attachment agreements in place with all applicable pole owners.

This project would be undertaken and completed by a partnership built on trust and accountability. BalsamWest is partnering with the County on this project. Has the applicant entered into a partnership for this project as defined in S.L. 2019-230?       Yes

## Checklist Details

**1) Statement of Qualifications (Please provide a detailed description of qualifications and experience with the deployment of broadband):**

BalsamWest FiberNET LLC

BalsamWest is a private competitive local exchange carrier (CLEC) that is invested in the deployment of broadband and the economic future of Western North Carolina. Its corporate headquarters and data center are in Sylva, NC. BalsamWest was established in 2003, in response to the lack of reliable internet access in the area, with a mission to provide reliable fiber delivered telecommunications services in the Tri-State area of Western North Carolina, East Tennessee and Northeast Georgia. BalsamWest began as a community partnership between the Eastern Band of Cherokee Indians (EBCI) and Drake Enterprises, Ltd. (Drake), with in-kind technical support donated by Southwestern Community College, to deliver a resilient telecommunications and broadband infrastructure otherwise not available in the area.

The initial deployment connected locations used by Drake, EBCI, 70 rural schools, universities, and community colleges. BalsamWest has been fortunate to receive tremendous community support especially with a variety of foundation and public partnerships. Over time this has resulted in a 400 plus mile ringed network which is over 99% buried providing a protected reliable network. BalsamWest has grown into serving over 4,500 customers including hospitals, regional lending institutions, governments (state, county and local), other competitive local exchange carriers, cable TV providers, cellular towers, wireless internet service providers, small businesses, and residential communities with Fiber to the Home (FTTH). Even though it is a private company, it has a spirit and culture seen in cooperatives that focus on providing service to neighbors. BalsamWest has been providing broadband since 2003.

BalsamWest is partnering with the County on this application. BalsamWest is also partnering with Haywood Electric Membership Cooperative. Little T Broadband, Inc., a local non-profit that provides advocacy and support for the development of high-speed broadband in rural Western North Carolina provided data analysis and mapping support. More information on the partnerships is in Section 12.

Project Staffing
BalsamWest has experience with providing reliable broadband service and with large fiber build projects. BalsamWest also has experience completing broadband grant funded projects. BalsamWest is a growing company that likes to hire, train, and retain local talent. It has 45 full time employees that provide technical, customer service, field operations, sales, marketing, accounting, human resources, and executive functions. It uses local and regional talent to supplement staffing needs when needed, for example fiber network construction.

BalsamWest has performed rough engineering of this project for cost estimating. BalsamWest will be responsible for the overall design, construction, and maintenance functions for this FTTH network. Final engineering and construction services will be outsourced to nearby contractors. Project management and customer activations will be completed by in-house staff.

Project Key Personnel
BalsamWest continues to add experienced and qualified staff to its committed team to support its growth trajectory. The project will be led by an experienced, multifaceted team consisting of the following staff:

Ryan Sherby – CEO. Ryan has been with BW for five years with two years as CEO. Prior to joining BW, Ryan was the executive director of the Southwestern North Carolina Planning and Economic Development Commission.

Lester Brackett - VP of Technical Operations. Prior to joining BW three years ago, Lester worked in a variety of positions at Spectrum, Charter and NuVox primarily focused on telephony and network transport engineering. Broad-based knowledge of telephony solutions, cell backhaul, core IP networks including MPLS/VPLS, IT, Data Centers, security, M&A, capacity management, network planning, TDM, SD-WAN, SONET, DOCSIS, passive and active WDM, transport, wireless, power and facility management, HFC networks and video products, call centers, and customer service.

William Howell – Director of Voice Operations. Bill has been with BW for 12 years. Bill has approximately 40 years of telecommunications and networking experience for industry leaders such as Excel Communications, Level 3, Williams Communications and WilTel Communications. His experience ranges from Director of IT, overseeing LAN and WAN communications for 150 office locations for Williams Communications (now WilTel/Level3), to Director of Sales Engineering, overseeing engineers nationwide-covering DWDM, IP, Voice, Private Line, Frame Relay, SONET and ATM products for WilTel. While at Excel Communication and Transcom Communications he coordinated all sales activity and focused operational activity to turn up high revenue generating accounts.

Jim Brown – Director of Network Operations. Jim has been with BW for 10 years. Jim has 35 years of IP Network Engineering experience focused in the areas of IP routing and switching, VoIP network troubleshooting, QoS, BGP and OSPF design and operations. He also has a strong background in building reliable, fault-tolerant networks and IP security.

Danny Haines – Director of Outside Plant Operations. Danny has been with BW for 16 years. Danny has 38 years of telecommunication experience focused in the areas of design, engineering, construction. Danny has been working with Fiber Optics since his first deployment in 1991.

Jeremy Rome – Wireless Project Manager. Prior to joining BW, Jeremy has spent 10 years in the wireless field. As a Wireless Network Manager for Verso, he has experience in customer service, planning and completing POP build outs on building structures and towers, configuring routers and switches, exploring new wireless technologies and seeking opportunities to provide affordable wireless service that is efficient and effective.

Shannon Powell – VP of Residential Operations. Shannon has been with BW for 7 years and served in a variety of roles including leading FTTH home installations, managing the day to day wireless unit, finance and regulatory reporting.

Jason Maples - VP of Sales and Marketing. Prior to joining BW 3 years ago, Jason spent 19 years at Charter Communications in multiple sales, business development and management roles in the residential, commercial and carrier market segments.

| Checklist Details |
|---|

| **2) Assessment of the current level of broadband access in the proposed deployment area – supporting data may be uploaded if applicable:** |
|---|

According to the 2021-2022 GREAT Grant Program Guidance Document, Appendix E – Estimate of Unserved Households (HH) per County, 17.48% of County households are unserved. A primary factor for such a high number of unserved is the higher cost to build out networks in this county. Many of the unserved locations may have copper-based DSL services available even though 477 data may reflect otherwise. This application seeks funding to serve a subset of the unserved households with a reliable FTTH network.

The Appendix E data does not consider areas that are ineligible and are projected to be served through prior GREAT awards other Federal and regional grant programs. When these numbers are considered and removed then the unserved percentage drops from the 17.48% in Appendix E of the Guidance Document to 15.04%.

Because of limited funding available for the entire state in this round, a smaller number of unserved households in the County was chosen for this application. The proposed deployment area contains unserved households from AddressNCData. The area was chosen due to its proximity to existing fiber ring facilities that will be tapped into.

An attached document describes the process used to use the AddressNC Data. This application seeks to serve 28.3% of the remaining 15.04% of unserved households.

| **3)Description of Proposed Services, Advertised Speeds, and Pricing Structure for proposed broadband recipients in the eligible project area:** |
|---|

The FTTH network to be designed, constructed, and operated to offer 1Gig/500Mbps service that can be scaled to 10G PON. The service will be low latency, between 40 and 80ms, which will allow customers to take advantage of real-time, interactive applications at affordable rates compared to FCC benchmark rates. A range of broadband speed tiers with no data caps will be offered to give customers choices of speed and price. In addition to broadband, the complementary services of managed WiFi, and voice services will be offered.

Complementary Services

Managed WiFi
In addition to broadband, BalsamWest will design, implement, and maintain a Mesh Wireless WiFi as an option for customers. Mesh Wi-Fi systems are a level above the typical wireless extenders because they do more than just repeat the signal. They coordinate with the other access points in the network to make one seamless network as you move through your home. BalsamWest will take care of all the engineering and effort with finding the best place to install access points.

Voice Services
In addition to broadband, voice services will be made available to customers. BalsamWest uses a Cisco BroadSoft Voice over IP (VoIP) SoftSwitch to provide voice services. The network is fully redundant with dual network uplinks, backup servers, diverse routing with overflow and failover trunking. BalsamWest utilizes Sansay VoIP Session Border Controllers and a Taqua T7000 gateway from Ribbons Communication. The network is interconnected with four other carriers which allows for diversity in traffic routing, 911 call routing, and completion of local and long-distance calls.

Broadband Services and Prices
BalsamWest Residential Pricing

| Broadband Speed | Monthly Pricing |
|---|---|
| 25/25 Mbps | $50.00 |
| 50/50 | $60.00 |
| 100/100 | $80.00 |
| 300/300 | $100.00 |
| 500/500 | $120.00 |
| 1000/500 | $140.00 |

BalsamWest Business Pricing

| Broadband Speed | Monthly Pricing |
|---|---|
| 25/5 Mbps | $50.00 |
| 50/10 | $75.00 |
| 100/100 | $115.00 |
| 300/300 | $150.00 |
| 500/500 | $250.00 |
| 1000/500 | $300.00 |

AFFORDABILITY OF SERVICES OFFERED
BalsamWest offers competitive pricing on broadband services. Prices are compared to FCC urban benchmark rates for reasonableness. BalsamWest has committed to keeping the lower two-tier prices well below the FCC Benchmark rates to keep them more affordable in the county. BalsamWest has been approved to participate in the FCC's Affordable Connectivity Program.

BalsamWest Residential Pricing Compared to FCC Benchmarks

| Broadband Speed | Monthly Pricing | FCC Rate Benchmarks | Delta $ | Delta % |
|---|---|---|---|---|
| 25/25 Mbps | $50.00 | $102.15 | $(52.15) | -51.1% |
| 50/50 | $60.00 | $105.57 | $(45.57) | -43.2% |
| 100/100 | $80.00 | $102.80 | $(22.80) | -22.2% |
| 300/300 | $100.00 | $112.81 | $(12.81) | -11.4% |

| Checklist Details | | | | |
|---|---|---|---|---|
| 500/500 | $120.00 | $119.63 | $0.37 | 0.3% |
| 1000/500 | $140.00 | $140.80 | $(0.80) | -0.6% |

**4) Description of Adoption Plan:**

BalsamWest will use communication campaigns to educate the public on availability and encourage adoption of the services in the proposed funding area. The campaigns will include the following:

• www.balsamwest.net is BalsamWest's online resource that provides frequently asked questions, contact information, and product information. In addition, the site will allow customers to pre-register for service. As service becomes available in each area, BalsamWest will contact pre-registered customers to advise them of service availability and schedule installation.
• BalsamWest's call center will inform prospective customers that call to inquire about service that they will be notified of when and how to sign up for service.
• BalsamWest will host community education forums. The forums will take place outside of regular work hours for ease of attendance. Each household within the proposed service area will be invited to learn about available services, project timelines, the construction process, and pricing options, and provide time for questions and answers.
• BalsamWest will also utilize direct mail campaigns to notify households within the proposed grant application area to inform them initially that fiber optic delivered broadband will be coming to their area, and subsequently of its availability. These mail pieces will direct customers to our website and call center where they can get information about broadband offerings and pre-register for service.
• BalsamWest will utilize local newspapers and community newsletters to promote the availability of service through press releases and advertising.
• Door tags may also be used to notify prospective customers that service is available.

**By checking the appropriate box, you will upload the following documents:**

| | |
|---|---|
| 5) Description of Project Area, Identification of locations to be served, relevant maps and mapping files: | ☒ |
| 6) If submitting other data sources, including field data, to identify unserved locations (households and businesses) outside of the fully unserved census blocks provided on the NC One Map, please provide a narrative describing your methodology for determining the proposed funding area is unserved and eligible for funding in this round. | ☒ |
| 7) Excel Spreadsheet (NO PDF) that itemizes the eligible activities and cost estimates. Please provide an explanation of how you estimated the costs: | ☒ |
| 8) Please provide your methodology or explanation of how you calculated cost per location (Households/Businesses): | ☒ |
| 9) Proof of Financial Solvency | ☒ |
| 10) Technical Report | ☒ |
| 11) Evidence of Support for the Project (i.e. Letter of Support) | ☒ |
| 12) Evidence or proof a partnership based on the definition in the guidance document and the authorizing legislation | ☒ |

*SCORING*

*The GREAT Program is a competitive grant program. Applications shall be scored based upon a system that awards a single point for criteria considered to be the minimum level for the provision of broadband service, with additional points awarded to criteria that exceed minimum levels. Applications receiving the highest score shall receive priority status for the awarding of grants.*

*The tool below is being provided to Applicants so that they may estimate their score to determine estimated match requirements. All final and official scores will be determined by the BIO during the review process.*

| | Reviewer | Score |
|---|---|---|
| **a1) Partnership –** One point shall be given for a proposed partnership that will make available existing infrastructure that has been installed for the partner's enterprise, non-consumer broadband purposes, or any other property, buildings, or structures owned by the partner, for a proposed project. | Choose One | 0 |
| **a2) Partnership –** A county or nonprofit entity that proposes to provide a financial match shall be given one point. Notwithstanding Article 8 of Chapter 143 of the General Statutes, or any provision of law to the contrary, a county may use unrestricted general funds or federal American Rescue Plan Act (P.L. 117 1) funds allocated to it for the purpose of improving broadband infrastructure for a financial match. | Choose One | 0 |
| **a3) Partnership –** An applicant shall receive two additional points for a proposed partnership where the county's financial match is comprised entirely from federal American Rescue Plan Act (P.L. 117 2) funds intended for broadband infrastructure. | Choose One | 0 |
| **b) Unserved Households(HH) –** Using most recent FCC Data or other information or supporting data, **estimated number of unserved households within the eligible county (TIER ONE)** | 500 or Less | 1 |

| | | |
|---|---|---|
| c) **Unserved Households (HH) to be Served** – Using most recent FCC Data or other information supporting data, **the percentage of the total unserved households with the eligible project area** | Less than 15% | 1 |
| d) **Unserved Business** – Using most recent FCC Data or other information by NC BIO, provide broadband service to unserved business within eligible county (TIER ONE) and project area (Documentation) | 1 and 4 | 1 |
| e1) **Piedmont or Coastal Plain Region** | Choose One | |
| e2) **Mountain Region** | Choose One | |
| f) **Base Speed – Min Download : Upload** | 100:20 Mbps to 100:100 Mbps | 1.00 |
| | Total Score | 3 |
| g) **Community Broadband Plan defined by NCBIO** | No | 0 |
| h1) For counties that received an aggregate of eight million dollars ($8,000,000) or more directly from the federal government, the following points shall be added to the application score: | Choose One | |
| h2) For counties that (i) received less than an aggregate of eight million dollars ($8,000,000) directly from the federal government from the American Rescue Plan Act (P.L. 117 2) and (ii) are providing a portion of a project's matching funds using the entirety of the federal funds the county received, together with any other unrestricted general fund monies, if needed, the following points shall be added to the application score: | Choose One | |
| i1) Are the matching funds partially comprised of ARPA funds a county received directly from US Treasury? | Choose One | |
| i2) Are the matching funds entirely comprised of ARPA funds a county received directly from US Treasury? | Choose One | |
| | Final Score | 3 |

*List all expenses related to the project, the amount of each expense, and the corresponding funding source(s) in the table below. The table should include all of the eligible costs such as: installation, acquiring or updating easements, equipment, fiber, construction, backhaul infrastructure for the end user, and testing costs. Ineligible costs should not be included in the project budget. The table should clearly show all planned expenditures and all funding sources for the project.*

| | | | |
|---|---|---|---|
| Reviewer Score: | 3 | Matching Requirement (%): | 50% |
| | Based on your scoring matrix, Your minimum match requirements: | | $2,016,048.5 |
| Total Project Cost: | $4,032,097 | Grant Amount Requested ($): | $0 |

| | | |
|---|---|---|
| Please indicate which documents were submitted with your application, by checking the appropriate box. ~ Reference guidelines booklet for document details ~ | | |
| 1) **Excel Spreadsheet (NO PDF)** that itemizes the eligible activities and cost estimates. Please provide an explanation of how you estimated the costs | | ☐ |
| 2) What is the total cost per location for the project? Please provide your methodology or explanation of how you calculated cost per location (Households/Businesses) | | ☐ |
| 3) Proof of Financial Solvency | | ☐ |

| Project Expense | GREAT Funds | Matching Funds | Total |
|---|---|---|---|
| Easements (one-time fees) | | | 0 |
| Materials (fiber, equipment, etc.) | | | 0 |
| Construction/Installation | | | 0 |
| Testing | | | 0 |
| Engineering | | | 0 |
| Lease/Collocation Fees (one-time fees) | | | 0 |
| Other 1 | | | 0 |
| Other 2 | | | 0 |
| Other 3 | | | 0 |
| Total Eligible Project Cost | | | 0 |

**Company Certifications**

| 1 | Overdue Tax Debts | Does the Company or the Related Member(s) currently have any overdue tax debts with any City, Town or County in, or with the State of North Carolina? | No |
|---|---|---|---|
| 2 | Occupational Safety and Health Act Violations | Does the Company, or the Related Member(s) have any citation under the Occupational Safety and Health Act that have become a final order within the past three years for willful serious violations or for failing to abate serious violations? | No |
| 3 | Loan Defaults | Is the Company, or the Related Member(s) currently in default on any loan or grant previously made by the State of North Carolina? | No |
| 4 | Incentive History | Has the Company, or Related Member(s) ever defaulted on an economic development grant or incentive or been sued by a grantor with respect to an economic development grant or incentive from the State of North Carolina? | No |
| 5 | Creditor Losses, Litigation, Government Investigations | Has any member of management or any principal of the Company, or the Related Member(s) been involved in a financial reorganization, a bankruptcy, or other situation that led to losses by creditors or bond buyers, investor lawsuits, or government investigation alleging fraud or impropriety? | No |
| 6 | Pending or Threatened Litigation | Is the Company, or Related Member(s) subject to any claim, suit, action, proceeding, or government investigation that is pending or threatened that, individually or in the aggregate, would reasonably be expected to have a material adverse effect on the proposed grantee's finances or operations or the ability to conduct the proposed project, or that would reasonably be expected to impact the NC DIT's decision to award a grant? | No |

## Internet Service Provider (ISP) Certification and Attestation

The attached statements and exhibits are hereby made part of this application, and the undersigned representative of the applicant certifies that the information in this application and the attached statements and exhibits are true, correct, and complete to the best of the signatory's knowledge and belief. The signatory further certifies:

1. as Authorized Representative, the signatory has been authorized to file this application by formal action of the governing body;

2. agrees that if a grant is awarded, the applicant will provide proper and timely submittal of all documentation requested by the Grantor Agency;

3. that the applicant has substantially complied with or will comply with all federal, state, and local laws, rules, regulations, and ordinances as applicable to this project;

4. that the applicant certifies the financial and organizational strength regarding the ability to successfully meet the terms of the grant requirements and the ability to meet the potential for repayment of grant funds; and

5. attests that the proposed project area is eligible.

### Authorized Representative

| Name: | Ryan Sherby | Title: | CEO | Date: | 05/04/2022 |
|---|---|---|---|---|---|