Winncom Fiber Solutions

FISPA Lunch & Learn Webinar

Presentation Overview

BEAD Update: NOFO Volume 2 Progress + Preregistration Process

BABA Certified Solutions: Fiber Eco-Center & Hybrid Solutions

Fiber Deployment Methods: Key considerations and comparative analysis of Aerial VS Burial Fiber

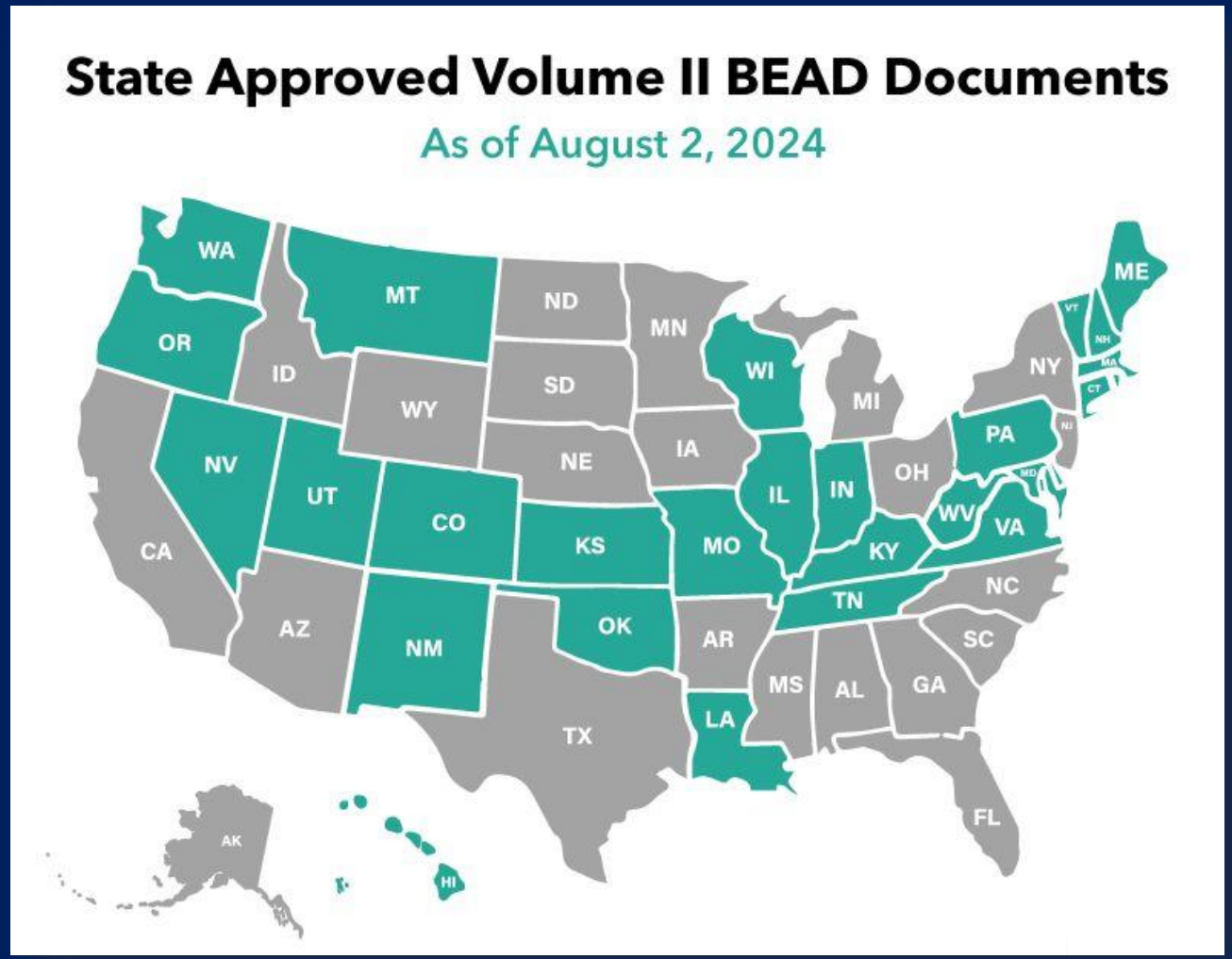
Winncom' s Enhanced BEAD Services: Advanced mapping, high-level fiber designs, grant writing, professional engineering

BEAD Update:

NOFO Volume 2 Progress + Preregistration

All states and territories expected to have full BEAD (Vol. 2) approval by fall

Provisional awards within 365 days of approval in a state



May 2022
NTIA Notice of Funding Opportunity

Fall 2023
LA BEAD Volume 1 Approved by NTIA
and challenge process commences

December 15, 2023
LA BEAD Volume 2 Approved by NTIA

By December 15, 2024
LA provisional awards and final proposal due to NTIA

Q1 2025
LA Est. full approval by NTIA

Q2 2025-2029
LA BEAD projects deployed

BEAD applicants need to select technology vendors early

Buy America compliance means that applicants need to select their technology vendors before the application is submitted

Final V2 approved Kansas BABA requirements

Applications that do not show intent to abide to BABA, NEPA, NHPA, EHP, or approved waivers will be considered ineligible to receive BEAD funding. KOBD will formulate specific intake questions to evaluate the viability and compliance of a proposed application. Prospective subgrantees shall provide plans that show compliance with the acts noted above and will only be eligible to participate in the subgrant process once compliance is determined.

Final V2 BABA requirements in Indiana

The Indiana Broadband Office will incorporate these Build America, Buy America, and Environmental and Historic Preservation requirements into the pre-qualification application round. All prospective subgrantees will be informed of these regulations and will be required to certify their understanding and adherence to these rules. All BABA and EHP requirements will be posted in the application guidance on the IBO website and in the application on Ready.net. The IBO will also provide technical assistance to prospective subgrantees to ensure they can effectively meet all requirements. If any application received violates BABA or EHP requirements, the IBO will throw out the application.

BEAD Pre-Application

- The Pre-Application Process / Pre-Qualification / Pre-Registration Process
  - Will allow applicants to submit information to demonstrate their eligibility and capacity to complete for grants to expand broadband infrastructure to target locations in the State using BEAD funding.
  - Meant to streamline the application process and review of proposed projects.
  - In some States it is elective, while in others its is mandatory.
    - Examples:
      - **KY**: Opens on August 14th , Closes September 13th
      - **IN**: Opens on August 19th, Closes September 18th
      - TN: Accepting LOI now until October 9

General Application Requirements (all states)

Financial Capability

- Certifications
- Letter of Credit (LOC) or alternative
- Audited Financial Statements
- Pro Forma Analyses that includes cash flow and balance sheet projections for at least 3 years of operating cost

Managerial Capability

- Resumes of key management staff
- Organizational chart(s) detailing all parent companies, subsidiaries and affiliates
- Narrative on managerial readiness: qualifications, experience with similar projects, organizational policies

Technical Capability

- Certifications
- Network design and diagram
- Detailed project costs
- Build-out timeline and milestones
- Capital investment schedule

Must be certified by a Professional Engineer (PE)

Compliance with Laws

- Must demonstrate compliance with federal, state and local laws with documentation
- Submit processes, procedures or protocols that are in place to ensure continued compliance

General Application Requirements

• Certification that subgrantee has provided a voice, broadband and/or electric transmission service for at least 2 consecutive years or is a wholly owned subsidiary of such an entity o Certify timely submission of FCC Form 477 and BDC data • New entrants must present evidence to demonstrate readiness and highlight operational capabilities	Operational Capability
• Full disclosure of direct and indirect ownership interests: any parties with 10% or more stake, the nature of the interest, and the inter-relationships with any FCC-regulated entities • Follow the specifics laid out in 47 C.F.R. § 1.2112(a)(1)-(7)	Ownership
• Disclosure of all applications submitted or plans to submit for every broadband deployment project funded by public sources o Details on sources of funding, service speed, coverage area, commitment to serve un/underserved areas, amount of funding used or applied for, consumer service costs, and any matching commitments	Other Public Funding
• Certification of compliance • Documentation on past federal labor and employment compliance with no violations from the last 3 years. o Disclosure of any violations that took place • Plans demonstrating how the subgrantee plans to follow federal labor and employment laws • Information on workplace safety committees • Wage information	Fair Labor Practices

Clear Strategy to Win

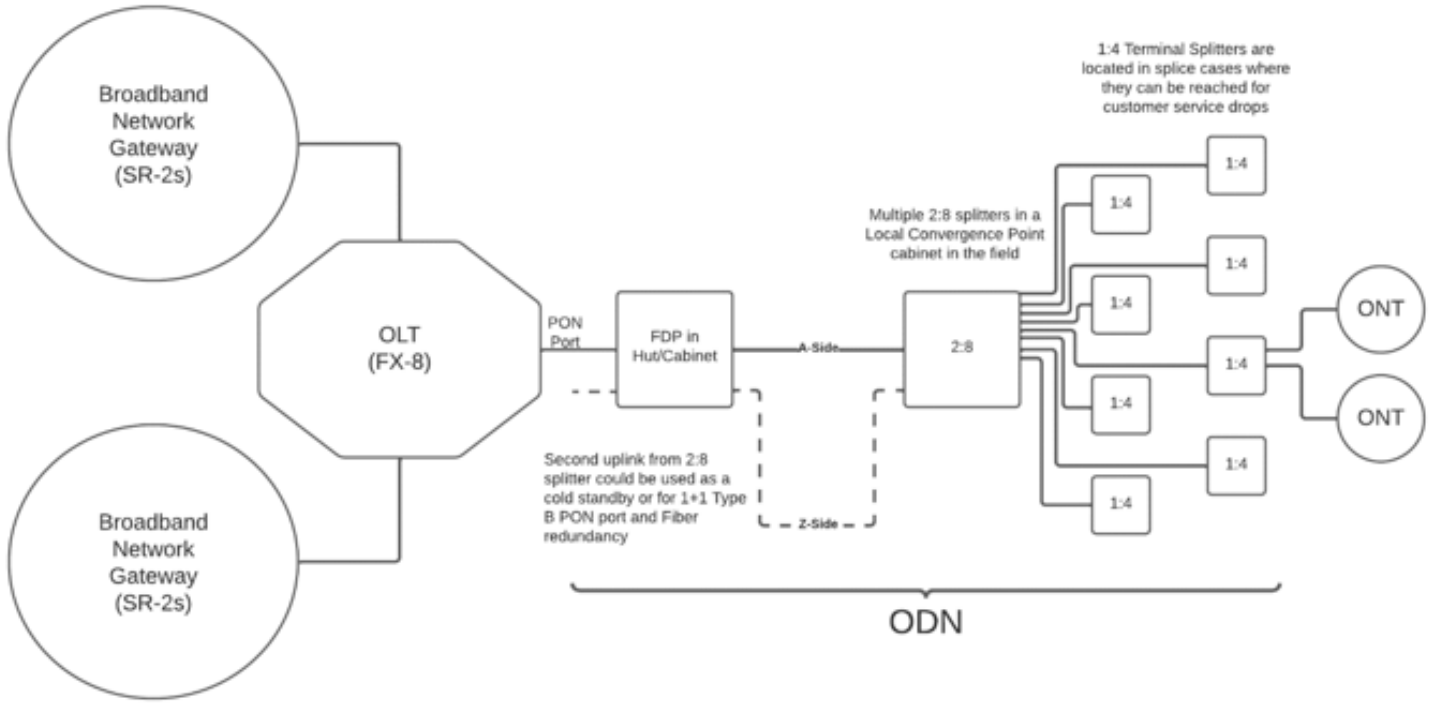
1. **Review NOFO Document:** Study the grant guidelines carefully to ensure you meet all qualifications and submit all the necessary documentation.
2. **Define Project Clearly:** Outline your broadband expansion plan and stick to your plan. Ensure your plan aligns with your state's priorities.
3. **Demonstrate Community Impact:** Emphasize how un/underserved areas will benefit from your project.
4. **Seek Partnerships:** Collaborate with local entities for support and document that support.
5. **Budget and Sustainability:** Create a detailed budget and sustainability plan. The lower your budget and greater your match %, the more points you will receive.
6. **Affordable Pricing:** Offer the lowest price possible for your subscribers.
7. **Propose a Fixed Bid:** You will not need to undergo the procurement process.
8. **Gather Documentation Early:** Support everything you submit with documentation.

BABA Certified & Compliant Solutions

Fiber Eco-Center & Hybrid Solutions

How Fiber Optic Networks Work

- Fiber Optic Networks are how the Internet arrives at your doorstep
- All Fiber Optic Networks will consist of three main features:
  - Fiber Cabling
  - Optical Line Terminal (OLT)
  - Optical Network Terminal (ONT)
- A fourth component can be added into the Fiber Optic Network and that is a Passive Optical Splitter (See Diagram). This would be inserted on the Fiber Optic Cabling between the OLT and ONT
- Most of the work that CHR completes for our clients would involve inserting a Passive Optical Splitter into the network



Network-in-a-box

Build America, Buy Nokia

Find out more here

Nokia's BEAD Compliant Solutions Porfolio

Broadband edge

7750 SR-1

VSR-a

Waived

Aggregation

7250 IXR-X

7250 IXR-e

Waived

Fiber access

Multi-rate optics

Lightspan FX

Lightspan SF-8M

Lightspan MF

Optical Network Terminals

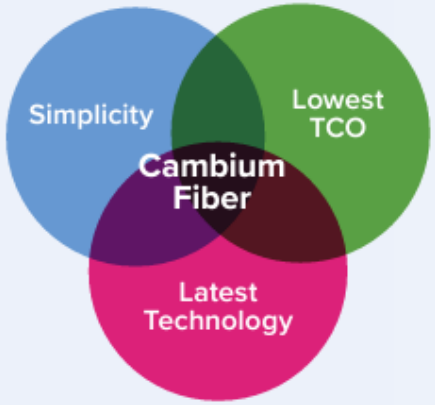
Waived

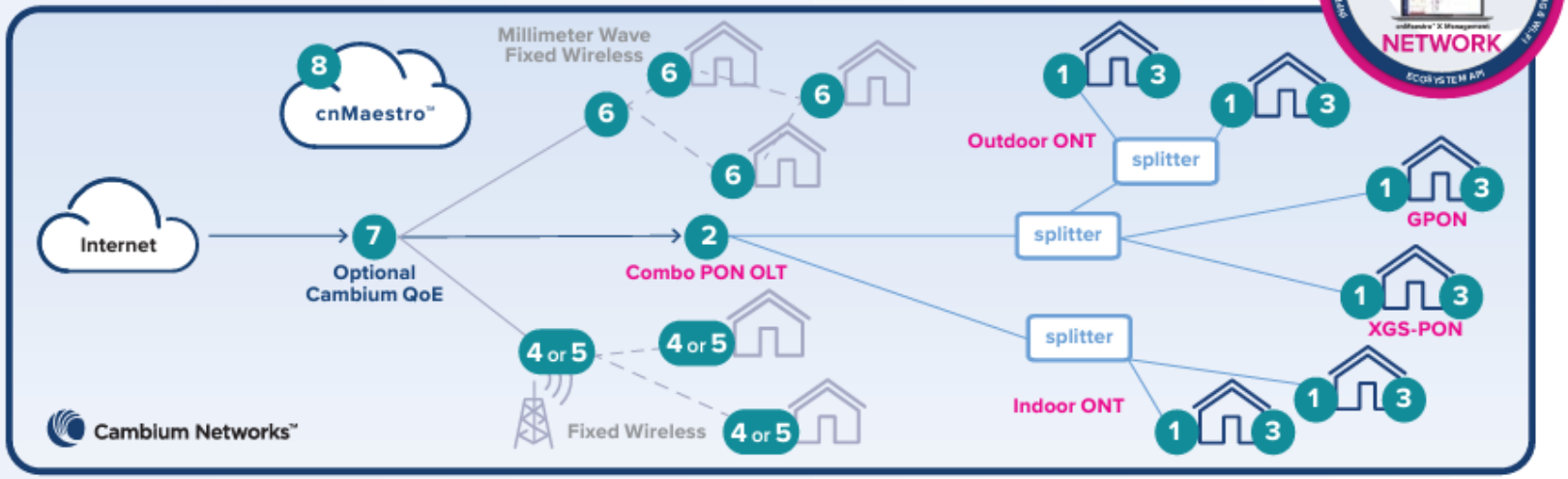
Gateway ONTs

ONT XS-220X-A

Data and voice ONTs

Deploying a Hybrid Network is Easy with the Cambium ONE Network Portfolio





1 Indoor or Outdoor ONT:

2 8- or 16-Port Combo PON OLT:

3 RV22 Wi-Fi 6 Home Mesh Router:

4 ePMP™ Fixed Wireless APs + SMs:

5 PMP Fixed Wireless APs + SMs:

6 cnWave™ 60 GHz Fixed Wireless:

7 Quality of Experience:

8 cnMaestro™ X Network Management:

BULK FIBER OPTIC CABLE

Data Center
- CPR
- Inside Plant
- Outside Plant

High Density
- Wrapping Tube
- OSP MicroCore
- Premise MicroCore

Harsh Environments
- Industrial
- Subsea

Aerial
- OPGW
- ADSS
- Skywrap

Structure Cabling
- Indoor / Outdoor
- Inside Plant
- Outside Plant
- Cordage

FUSION SPLICING & CLEANING

Specialty Fusion Splicing Equipment
- Cleavers
- Fiber Testing
- Recoaters and Splice Protection

Fiber Optical Cleaning Tools
- Cleaning Sticks
- Cleaning Fluids
- Push-Type Cleaners
- Reel Type Cleaners
- Cleaning Kits
- Wipes and Cleaning Cards

Field Fusion Splicing Equipment
- Splicers Ribbon Fiber
- Splicers Single Fiber
- Cleavers
- Ribbon Fiber Tools
- Splice Protection
- Thermal Strippers

CABLE ASSEMBLIES

Loose Tube & Riser Rated
MPO Cable Assemblies
Node Cable Assemblies
Pre-Terminated Drop Cables
MDU Drop Cables
Multi Fiber Cables
Simplex / Duplex Cables

FIBER OPTIC CONNECTIVITY

Connectivity Accessories
- Buildout Attenuators
- Fanout Kits
- SpliceConnect
- Optical Adapters
- Optical Terminators

Distribution Accessories
- Parallel Groove
- Clamps
- Hotline Connectors
- Wedge Pad Tap
- Connectors

Field Installable Connectors
- Factory pre-polished
- Universal Took Kit
- MPO Splice-On Connectors
- Splice On Connectors

Fiber Optic Splice Closures
- Splice Closures
- Aerial Splice Closures
- Sealed Spice Closures
- Splice Trays

Compression Accessories
- Comealongs
- Compounds
- HiTempt
- Compression
- Quick Compression

Couplers, Splitters, and Multiplexers
- LGX Optical Couplers
- Modules
- Couplers (Wideband)
- Optical Splitter Shelf
- Rack-Mount Panel

Rack Mount Patch Panels
- Conversion-Cassettes
- Fanout Cassettes
- Fiber Housings
- Fiber Containment
- Vaults

Fiber Demarcation Boxes
- Inddor Enclosures
- Outdoor Enclosures
- Panel Accessories

TEST & INSPECTION

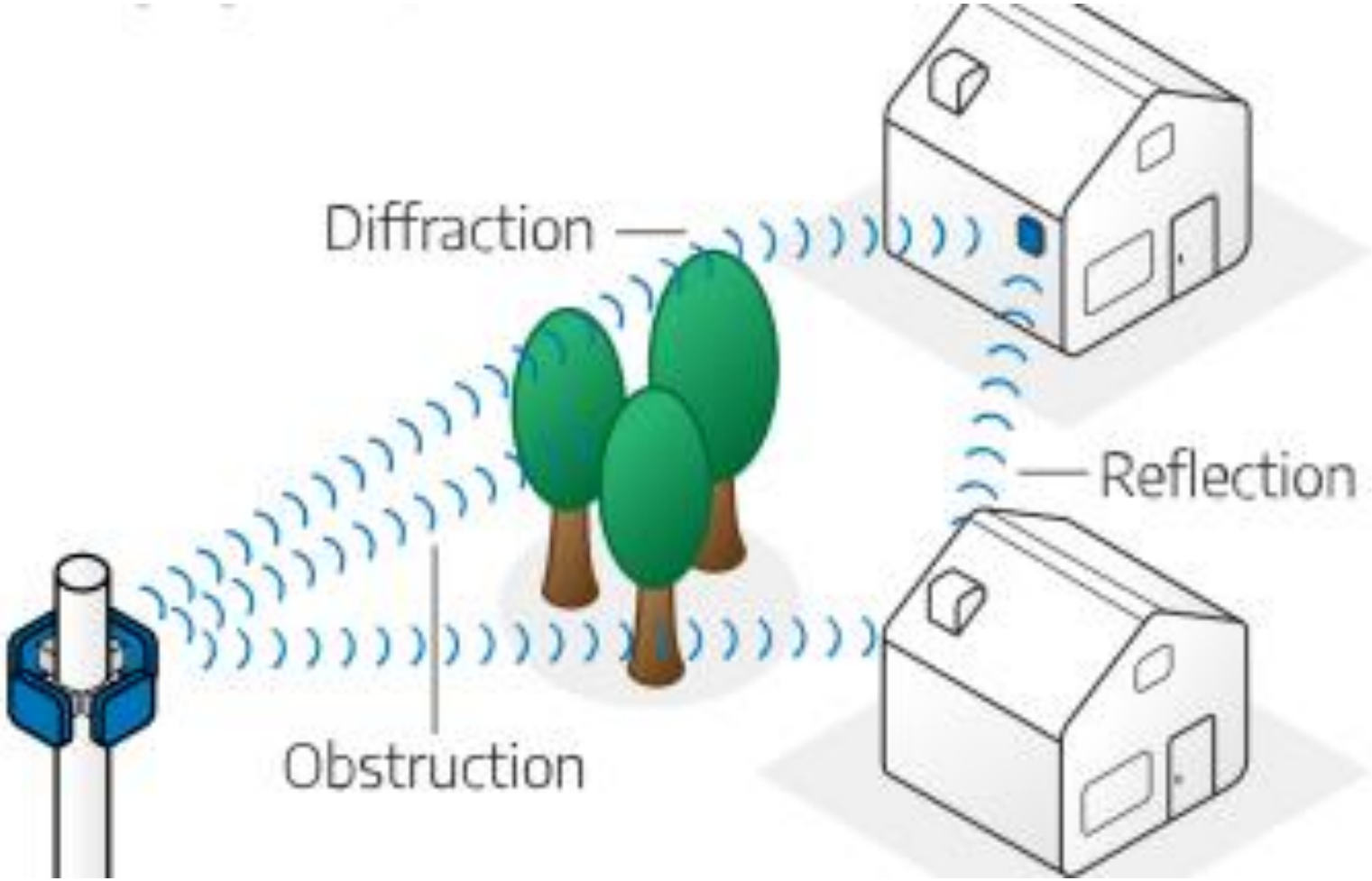
Optical Loss Testing
- Optical Loss Test Sets
- Optical Light Sources
- Optical Power Meters

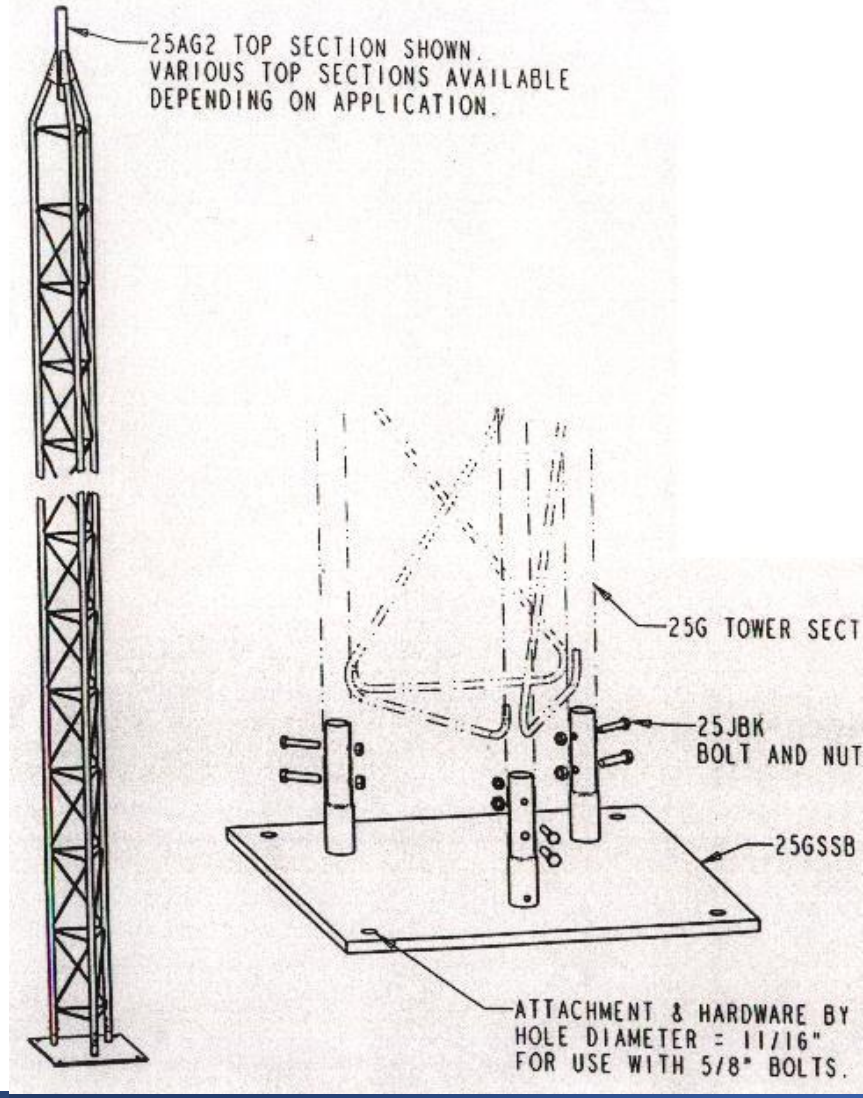
Fiber Identification
- Optical Fiber Identifier
- Visual Fault Identifier
- OFI-BIPM / OFIBIPMe Optic Fiber ID Tool

FTTX PON Deployment Made Easy
- Fiber Installation Verification
- PON Verification and Activation

Fiber Optic Inspection & Cleaning
- Fiber Optic inspection Systems
- Fiber Optic One-Click Cleaners

OTDRs and Troubleshooters
- Quad OTDR
- SM OTDR
- FTTH PON
- Troubleshooter
- Optical Port Saver
- OTDR FiberRings





High-Cost Area Strategy

Fiber Deployment Methods

Key considerations and comparative analysis of Aerial VS Burial Fiber

Aerial Cable Available Configurations

Cable Type

- ADSS Fiber Optic Cable
- Figure 8 Fiber Optic Cable
- OPGW Cable
- Other

No. of Fiber Core

- 1-12
- 13-24
- 25-48
- 49-96
- 97-144
- > 144

Optical Fiber

- G652D
- G657A1
- G657A2
- Other

Span

- 0-80m
- 81=100m
- 101-120m
- > 120m

Short Term Tension

- ≤1000N
- 1001-2000N
- 2001-3000N
- 3001-4000N
- 4001-5000N

Jacket Material

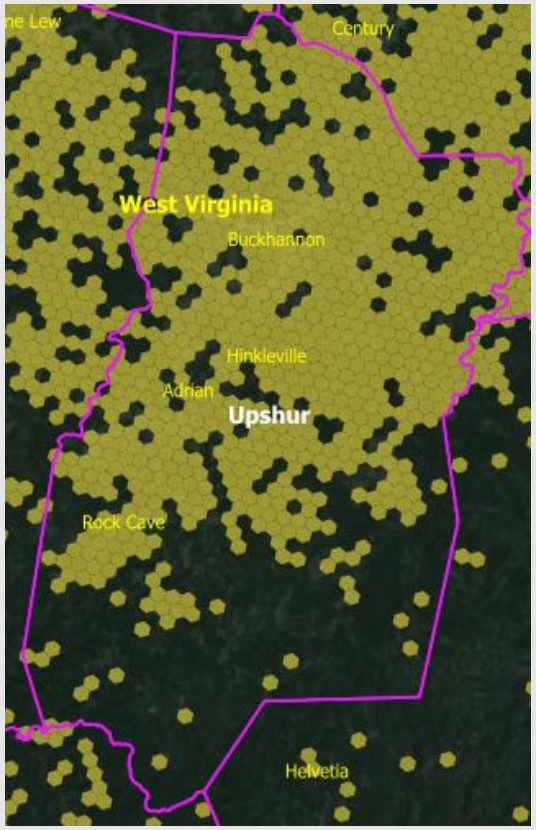
- LSZH (anti-UV, flame retardant)
- PVC
- PE
- Other

Winncom Enhanced Services

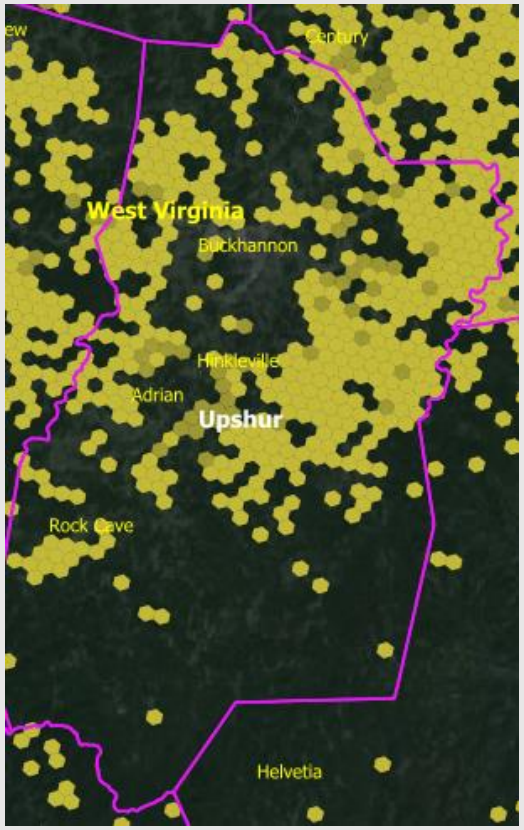
BEAD Pre-Engineering
High Level Fiber Design
Grant Writing Services
Professional Engineering Services
Financial Services

Winncom HEX Mapping Capabilities

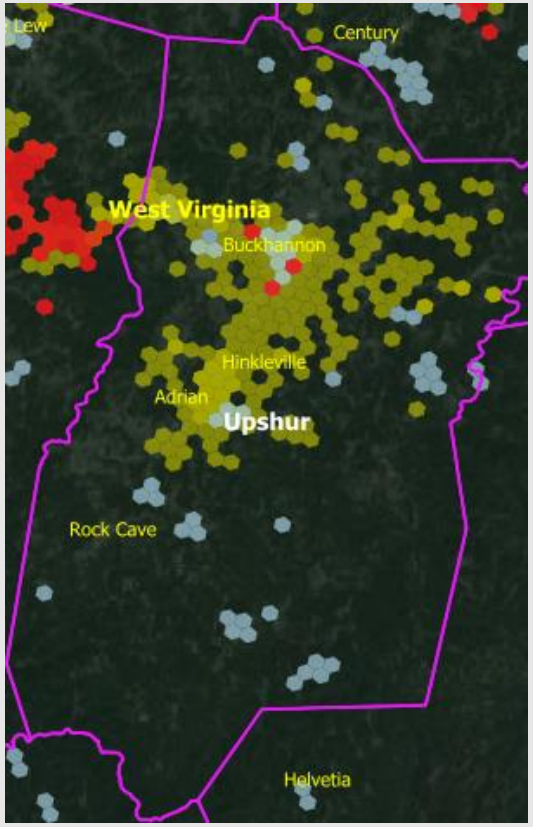
Unserved / Underserved Mapping



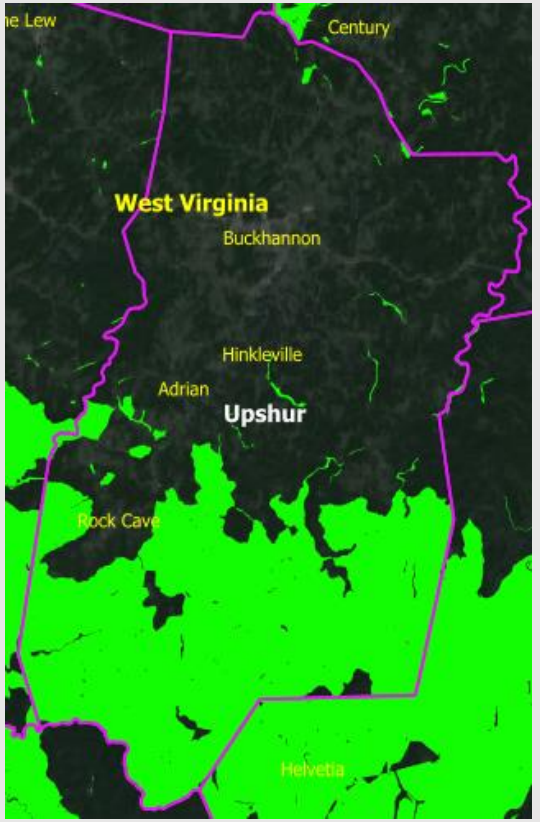
Project Areas (80% Rule)



Existing Technology: Fiber, CBRS, DSL, Cable



Previous RDOF Funding



WHERE, WHAT and **HOW MUCH** To Bid?

You provide us a few parameters…and we will provide the **WHERE** to bid, the recommended network structure (**WHAT**) with the costs and ROI (**HOW MUCH**)

THE WHERE

- Comparative ROI Ranking
- Identified Unserved/Underserved (Housetop)
- Competitive Breakdown
- Historical Federal Grant Winning Locations
- Demographics of Project Bid Area

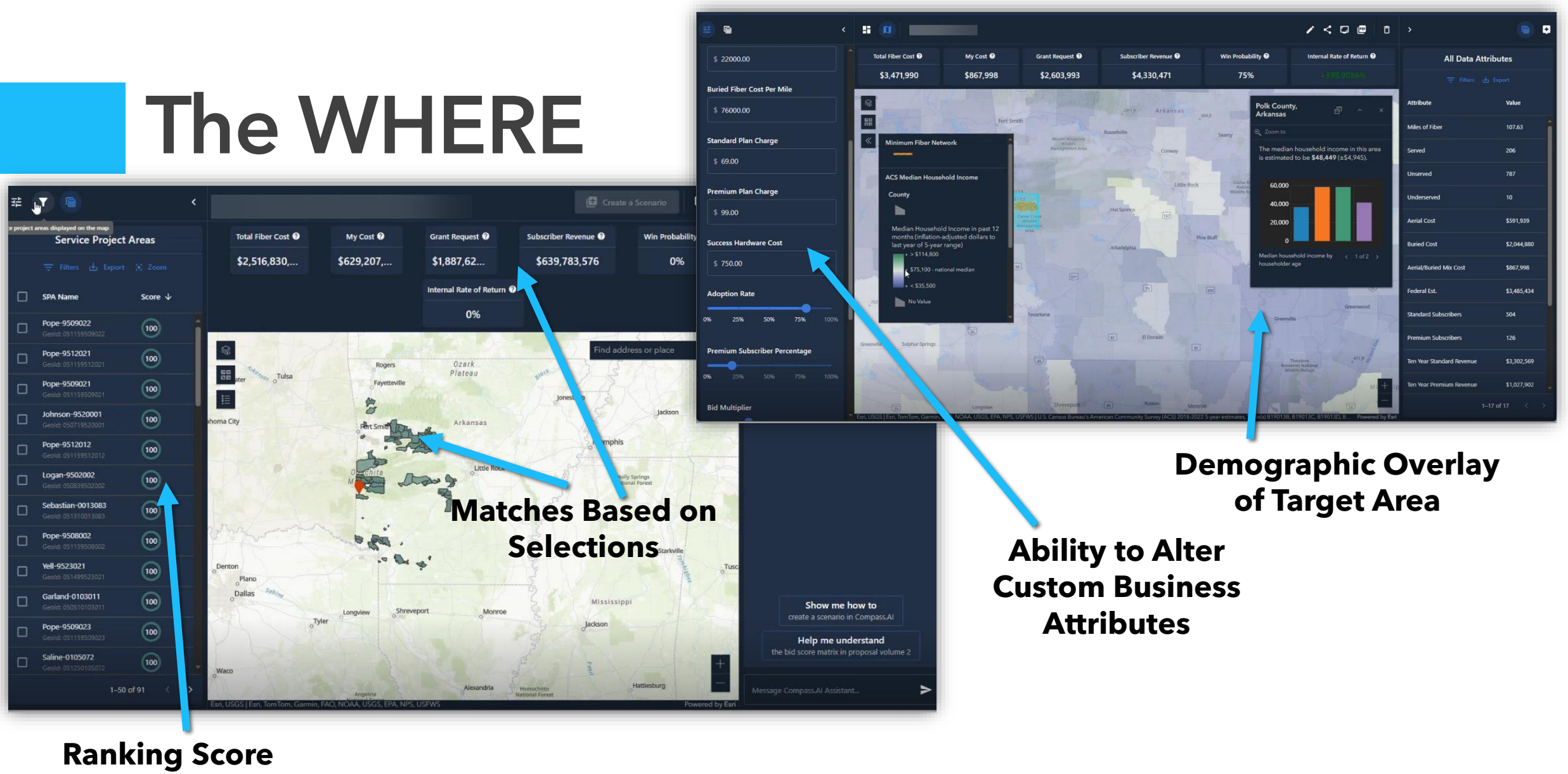
THE NETWORK

- AI Generated Fiber Spine
- Customized Buried/Aerial costs
- Soil/Terrain Complexity
- Number and Cost for High-Cost Locations

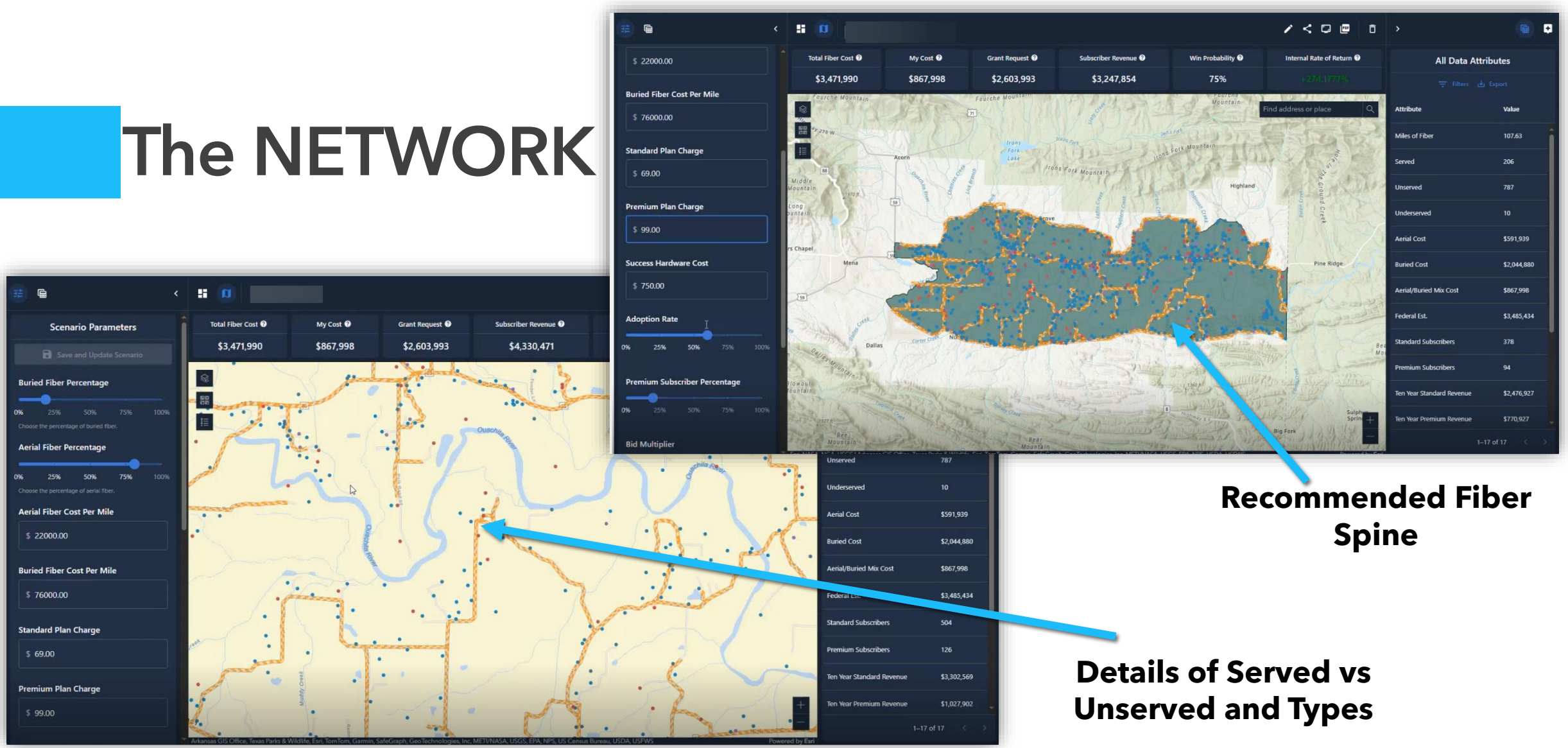
THE MONEY

- Winning Bid Recommendation
- 10 Year Pro-Forma:
  - ***Build Phases***
  - ***OPEX/CAPEX***
  - ***Adoption Rate & Build by Phase Revenue***
  - ***Stage Grant Funds***

The WHERE


Service Project Areas
Create a Scenario
Total Fiber Cost
$2,516,830,...
My Cost
$629,207,...
Grant Request
$1,887,62...
Subscriber Revenue
$639,783,576
Win Probability
0%
Internal Rate of Return
0%
SPA Name
Score
Pope-9509022
Pope-9512021
Pope-9509021
Johnson-9520001
Pope-9512012
Logan-9502002
Sebastian-0013083
Pope-9508002
Yell-9523021
Garland-0103011
Pope-9509023
Saline-0105072
1–50 of 91
Buried Fiber Cost Per Mile
$ 76000.00
Standard Plan Charge
$ 69.00
Premium Plan Charge
$ 99.00
Success Hardware Cost
$ 750.00
Adoption Rate
Premium Subscriber Percentage
Bid Multiplier
Total Fiber Cost
$3,471,990
My Cost
$867,998
Grant Request
$2,603,993
Subscriber Revenue
$4,330,471
Win Probability
75%
Internal Rate of Return
Minimum Fiber Network
ACS Median Household Income
County
Median Household Income in past 12 months (inflation-adjusted dollars to last year of 5-year range)
$75,100 - national median
No Value
Polk County, Arkansas
The median household income in this area is estimated to be $48,449 (±$4,945).
Median household income by householder age
All Data Attributes
Attribute
Value
Miles of Fiber
107.63
Served
206
Unserved
787
Underserved
10
Aerial Cost
$591,939
Buried Cost
$2,044,880
Aerial/Buried Mix Cost
$867,998
Federal Est.
$3,485,434
Standard Subscribers
504
Premium Subscribers
126
Ten Year Standard Revenue
$3,302,569
Ten Year Premium Revenue
$1,027,902
1–17 of 17
Show me how to
create a scenario in Compass.AI
Help me understand
the bid score matrix in proposal volume 2
Message Compass.AI Assistant...
Matches Based on Selections
Demographic Overlay of Target Area
Ability to Alter Custom Business Attributes
Ranking Score

The NETWORK


Scenario Parameters
Save and Update Scenario
Buried Fiber Percentage
Aerial Fiber Percentage
Aerial Fiber Cost Per Mile
$ 22000.00
Buried Fiber Cost Per Mile
$ 76000.00
Standard Plan Charge
$ 69.00
Premium Plan Charge
$ 99.00
Total Fiber Cost
$3,471,990
My Cost
$867,998
Grant Request
$2,603,993
Subscriber Revenue
$4,330,471
Success Hardware Cost
$ 750.00
Adoption Rate
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Federal Est.
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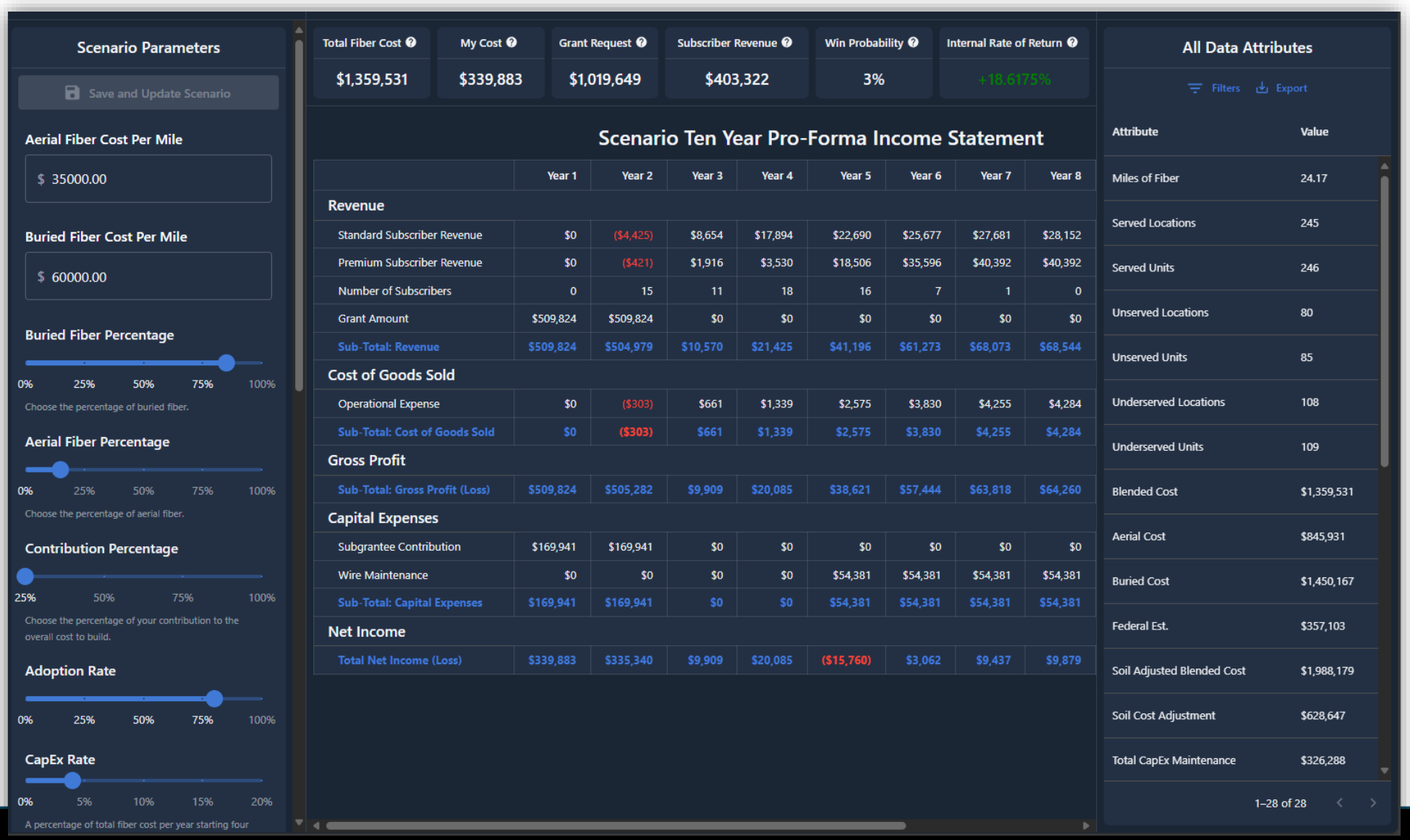
Standard Subscribers
504
Premium Subscribers
126
Ten Year Standard Revenue
$3,302,569
Ten Year Premium Revenue
$1,027,902
Recommended Fiber Spine
Details of Served vs Unserved and Types

The MONEY (Pro Forma)



Scenario Parameters

Save and Update Scenario

Aerial Fiber Cost Per Mile

$ 35000.00

Buried Fiber Cost Per Mile

$ 60000.00

Buried Fiber Percentage

0% 25% 50% 75% 100%

Choose the percentage of buried fiber.

Aerial Fiber Percentage

0% 25% 50% 75% 100%

Choose the percentage of aerial fiber.

Contribution Percentage

25% 50% 75% 100%

Choose the percentage of your contribution to the overall cost to build.

Adoption Rate

0% 25% 50% 75% 100%

CapEx Rate

0% 5% 10% 15% 20%

A percentage of total fiber cost per year starting four

Total Fiber Cost	My Cost	Grant Request	Subscriber Revenue	Win Probability	Internal Rate of Return
$1,359,531	$339,883	$1,019,649	$403,322	3%	+18.6175%

Scenario Ten Year Pro-Forma Income Statement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Revenue								
Standard Subscriber Revenue	$0	($4,425)	$8,654	$17,894	$22,690	$25,677	$27,681	$28,152
Premium Subscriber Revenue	$0	($421)	$1,916	$3,530	$18,506	$35,596	$40,392	$40,392
Number of Subscribers	0	15	11	18	16	7	1	0
Grant Amount	$509,824	$509,824	$0	$0	$0	$0	$0	$0
Sub-Total: Revenue	**$509,824**	**$504,979**	**$10,570**	**$21,425**	**$41,196**	**$61,273**	**$68,073**	**$68,544**
Cost of Goods Sold								
Operational Expense	$0	($303)	$661	$1,339	$2,575	$3,830	$4,255	$4,284
Sub-Total: Cost of Goods Sold	**$0**	**($303)**	**$661**	**$1,339**	**$2,575**	**$3,830**	**$4,255**	**$4,284**
Gross Profit								
Sub-Total: Gross Profit (Loss)	**$509,824**	**$505,282**	**$9,909**	**$20,085**	**$38,621**	**$57,444**	**$63,818**	**$64,260**
Capital Expenses								
Subgrantee Contribution	$169,941	$169,941	$0	$0	$0	$0	$0	$0
Wire Maintenance	$0	$0	$0	$0	$54,381	$54,381	$54,381	$54,381
Sub-Total: Capital Expenses	**$169,941**	**$169,941**	**$0**	**$0**	**$54,381**	**$54,381**	**$54,381**	**$54,381**
Net Income								
Total Net Income (Loss)	**$339,883**	**$335,340**	**$9,909**	**$20,085**	**($15,760)**	**$3,062**	**$9,437**	**$9,879**

All Data Attributes

Filters Export

Attribute	Value
Miles of Fiber	24.17
Served Locations	245
Served Units	246
Unserved Locations	80
Unserved Units	85
Underserved Locations	108
Underserved Units	109
Blended Cost	$1,359,531
Aerial Cost	$845,931
Buried Cost	$1,450,167
Federal Est.	$357,103
Soil Adjusted Blended Cost	$1,988,179
Soil Cost Adjustment	$628,647
Total CapEx Maintenance	$326,288

1–28 of 28

Supporting Analytics

HOW Can We Do This?

- **Dozens of curated data sources for in-depth cost evaluations and revenue projections including:**
  - CostQuest Associates Broadband Serviceable Location Fabric dataset
  - ESRI's GIS data
  - Population Density, Terrain, and network capacity.
  - Costing for buried and aerial fiber installations
- **Advanced AI analytic engine to optimize data sources for actionable insights.**
- **Intuitive interface for easy navigation.**
- **Powerful visualizations to enable quick decisions.**
- **Create multiple scenarios for comparison and ability to adapt as the landscape changes.**

Grant Writing Service

Winncom Grant Writing Services

- **Document verification**
- **Application writing**
- **Ensuring document compliance**
- **Use-case analysis and technology alignment**
- **Pre-award educational support**
- **Post-award compliance support**
- **Invoice Reimbursement**
- **Compliance Documentation Reporting**

Application Overview

- **Executive Summary**

A top-down summary of the project.

- **Project Narrative**

A more detailed, step by step project plan.

- **Budget Narrative**

A breakdown of project costs, where & when.

- **Detailed Budget Spreadsheet**

The budget presented in an orderly sheet.

- **Government Forms**

Proprietary forms depending on the grant.

- **Maps**

Detailing the proposed broadband location.

- **Data Compiling**

Information on the applicant, location, etc.

- **Digital Application Submission**

Most programs only accept online applications.

WINNCOM SERVICES

Timeline Estimates

Overall Project Deadlines:

- Standard minimal time: 6-8 weeks.
- Expedited minimal time: 30-days

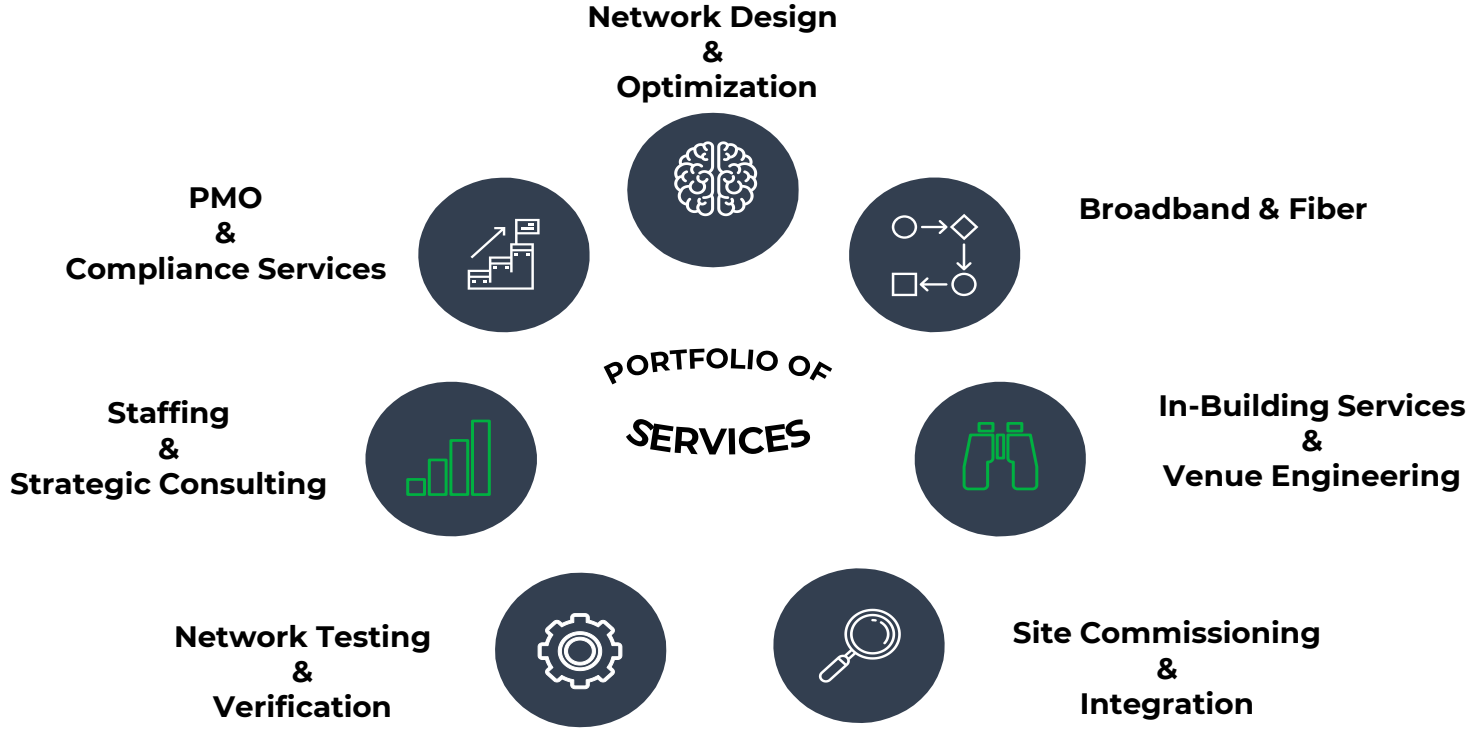
Estimated Project Timelines:

- Onboarding: 3-5 business days
- Processing application materials: 2-6 weeks
- Quality control: 1-2 weeks
- Application submission: 1-3 days
- RFI support: 2-4 weeks (Optional Service)
- Post-award compliance services: From 2-3 weeks up to several years (Optional Service)

Professional Engineering Services

Onsite Support / PE Stamped Drawings

WINNCOM PROFESSIONAL ENGINEERING SERVICE



115+ Design Engineers

50+ Pole Tech's

200+ OSP & Node Design Drafters

75+ Project Managers

Strong understanding of Outside Plant design, Including GIS programs

PLA/MRE Technicians with O'Calc & Spida experience

Experienced Autocad Drafters in OSP ROW, SBU & MTU projects

Demonstrated success managing large-scale engineering projects

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FOLLOW US...

HOME // SEARCH

FILTER BY MANUFACTURER

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WINNCOM SEARCH 1

pe stamp | Search

Showing 1-3 of 3 (0.046 sec) | Sort by Best Match | Products per page 20

	PART #	PRODUCT DESCRIPTION	CATEGORY NAME	QTY ON SHELF/ QTY ON ORDER	LIST PRICE/ YOUR PRICE
	PE-STAMP-PACKAGE	Winncom Professional BEAD Services Package, PE Review and Stamp (up to first 5 pages). The layout drawing provides comprehensive product and connection details, along with notes on installation, inspection, certification, and re-certification	Winncom Professional Services	Login	Login Sale Price: Login
	PE-STAMP-PAGE-11+	Winncom Professional BEAD Service Charge for PE Review and Stamp. One Required per page (11+). PE-STAMP-PACKAGE and PE-STAMP-PAGE-6-10 must be purchased with this SKU	Winncom Professional Services	Login	Login Sale Price: Login
	PE-STAMP-PAGE-6-10	Winncom Professional BEAD Service Charge for PE Review and Stamp, One Required per page (6-10). PE-STAMP-PACKAGE must be purchased with this SKU	Winncom Professional Services	Login	Login Sale Price: Login

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Winncom Technologies
Premier Global Distribution

- **Financing Solutions:** Tailored financing options for both **services** and **equipment**, enabling project execution without upfront capital constraints.
- **Comprehensive Support:** From project inception to completion, our financial services are designed to empower applicants, ensuring compliance and enhancing project viability.

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RESOURCES

Winncom / Nokia First Movers Webinar Series: West Virginia & Kansas:

Winncom & Nokia First Movers Webinar Series. Highlights West Virginia & Kanasas BEAD Applications next steps

RESOURCES

WISP Friendly Fiber: Aerial over Burial

Panel Discussion Recap: . The decision between aerial and buried fiber deployments hinges on understanding fiber optic networks and protecting broadband investments. Aerial fiber, hung above ground, is cheaper and quicker to install but prone to environmental damage. Buried fiber, placed underground, offers protection and durability but at a higher cost. The choice depends on specific needs such as cost, environmental factors, and maintenance.. Click to learn more.

tech, and architectures. We'll highlight our active fiber products and extensive solutions. I'll delve into our fiber ecosystem, covering bulk fiber, cable assemblies, connectivity, and more. Lastly, I'll discuss

Winncom BEAD Portal

www.winncomus.com/bead/

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Action Items:

1. Schedule a consultation to strategize on positioning your company for a successful BEAD application in your state
2. Schedule a call to learn more about **Winncom BEAD Programs**

Contact Information

Winncom Bead Consultation: BEAD@Winncom.com

Winncom BEAD Portal

Registration Link**: www.winncomus.com/bead/**


QUESTIONS