Smart Native American Reservations Bridging Tradition and Technology for Sovereign Futures

A Vision for Empowered Communities Merging smart city infrastructure with cultural preservation and tribal sovereignty.

Salish Tribal Alliance Group Leading the initiative alongside Traxl, NANOFIBER, Point 2 Point, and HTI.

Sustainable & Culturally-Aligned Innovation Designing smart systems that enhance, not replace, Native identity and traditions.



Introduction

- The Importance of Smart Technologies for Indigenous Communities
- Closing the Digital Divide
- Native reservations frequently experience some of the lowest connectivity rates in the United States, which
 restricts access to essential services.
- Infrastructure Deficiencies Impede Development
- The absence of digital infrastructure obstructs education, healthcare, economic growth, and public safety.
- Smart Technology as a Route to Sovereignty
- Digital independence fosters self-governance, cultural preservation, and the overall well-being of the community.

Vision & Values Technology Driven by Culture and Sovereignty

- **Technology Supporting Culture:** Digital resources should enhance, rather than supplant, tribal identities, languages, and values.
- Sovereign Systems: Intelligent infrastructure must be owned, managed, and protected by the tribe to maintain independence.
- **Community-Focused Innovation:** Solutions are collaboratively developed with elders, youth, and local leaders to address specific community requirements.

HUNTER TELECOM INC. (HTI)



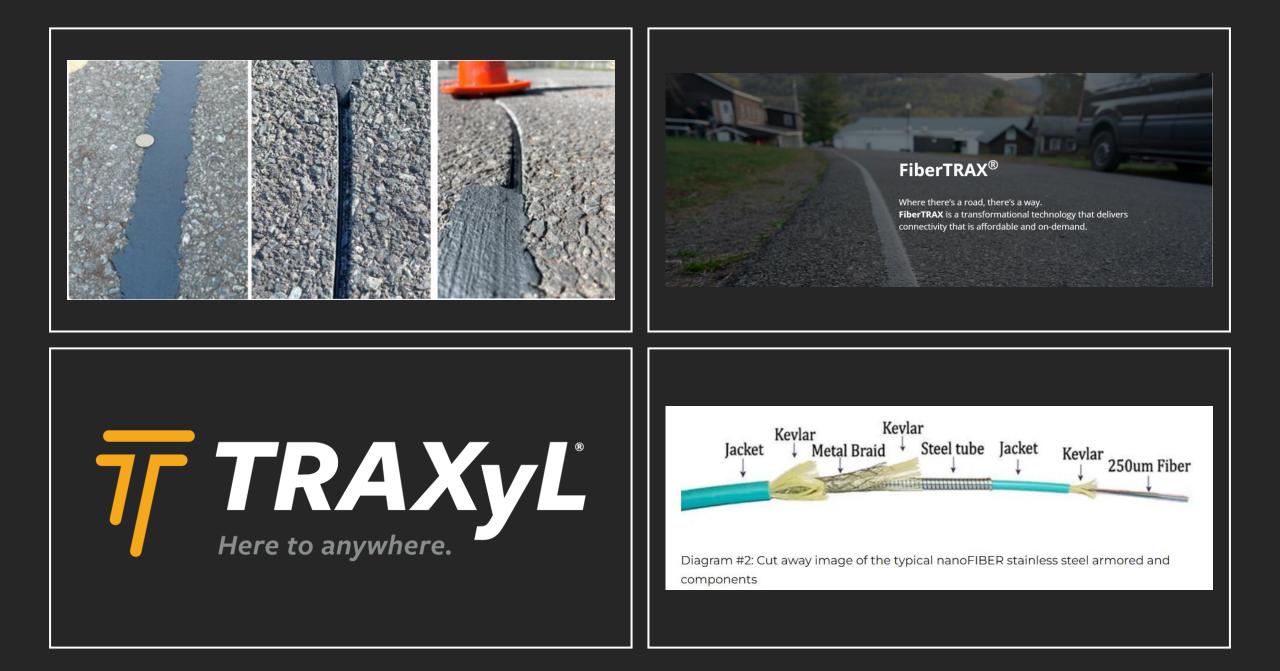


ANDERER

Development Partner Ecosystem

Empowering Smart Tribal Connectivity through Expertise

- Salish Tribal Alliance Group: Leads with tribal governance, sovereignty-first design, and alliance coordination.
- Hunter Telecom Inc. (HTI): Integrates all vendors and projects with expertise in tribal and rural deployments.
- **nanoFIBER™:** Provides stainless-steel armored fiber that's durable, cost-effective, and bend-resistant.
- **TRAXyL (FiberTRAX):** Offers trench-free fiber deployment with ultra-fast, minimally invasive installation.
- **Point 2 Point (P2P):** Supplies custom telecom hardware and champions tribal ownership in connectivity.



FiberTrax offers an efficient approach

to the installation of fiber optic lines, suitable for both small and

large-scale projects.





Versatility and Precision

TRAXtors are self-propelled machines designed to install FiberTRAX on demand. They come in various sizes and capabilities, making them adaptable in different environments. Typically, one or two machines can install FiberTRAX on pavement at a remarkable speed of up to 1,000 feet (305 meters) per hour. The installation process involves etching a small channel into the pavement surface, just a few millimeters deep, to house the fibers and resin. This method ensures that the pavement surface layer remains intact, preserving its integrity.

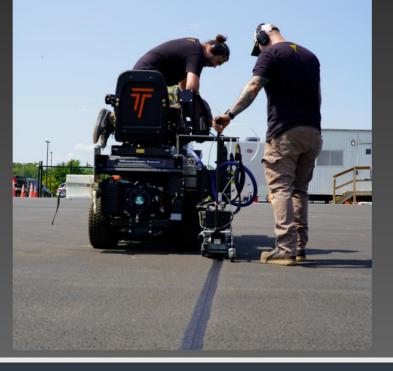


TRAXtors®

Revolutionizing Infrastructure Installation

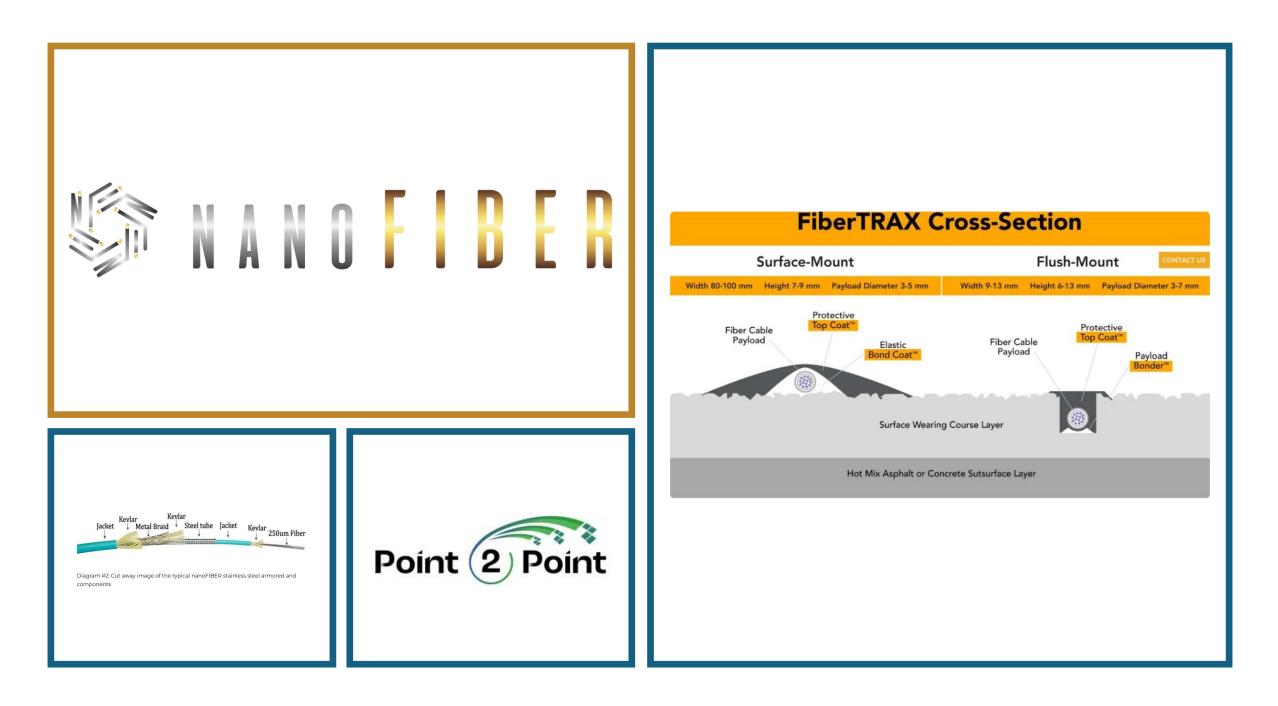
In the ever-expanding world of infrastructure needs, efficiency and innovation are key. The TRAXtors, our state-of-the-art installation machines, are transforming the way fiber and other utilities get deployed.

Capable of installing at an impressive rate of 1,000 feet (305 meters) per hour, these automated infrastructure deployment machines are setting new standards in the industry. Once the microducts are in place, a specialized protective coating is applied. The coating shields the microducts from physical damage, preventing cracks or leaks and withstands extreme temperatures, UV radiation, and moisture. It cures within minutes, allowing for rapid deployment.



Other organizations are turning to TRAXyL for solutions. Here's why you should too.







Improved Resource Management

Intelligent Infrastructure for Water, Energy, and Land

- Intelligent Irrigation Systems: IoT-driven technology enhances water efficiency in both conventional and sustainable farming practices.
- **Sustainable Microgrids:** Grids powered by solar and wind energy decrease reliance on outside utilities and promote energy independence for tribal communities.
- Land Utilization Oversight: Drones and GIS technologies assist in safeguarding habitats, preserving cultural sites, and planning for development.

Enhanced Access to Healthcare

Intelligent Systems Delivering Care to Isolated Communities

Telehealth Integration

Online consultations minimize the need for travel and provide immediate access to specialists for patients.

Mobile Health Units

Solar-powered mobile clinics equipped with diagnostic tools offer services directly at patients' homes.

Advanced Health Monitoring

Wearable and remote health devices monitor chronic illnesses and integrate with tribal electronic health records (EHRs).

Economic Empowerment

Smart Infrastructure Fuels Local Business and Opportunity

• **Broadband-Driven Entrepreneurship:** Reliable internet enables remote business startups, e-commerce, and digital services.

• **Online Education & Training:** Virtual learning tools support youth and adult skill-building in their own communities.

• **Remote Work Enablement:** Connectivity opens access to national and global job markets while preserving residency.



Cultural Preservation

Digital Tools Protecting Language, Identity, and Heritage

Language Revitalization Platforms

Mobile and web apps document and teach Native languages to younger generations.

Oral History Archives

Audio-visual recordings preserve elder wisdom, stories, and ceremonies.

Tribal-Controlled Data Systems

Digital sovereignty ensures sensitive content is stored, accessed, and governed by the ommunity.

Environmental Stewardship

Smart Tech for Nature-Aligned Living

• Sensor-Based Monitoring: Track air, water, and soil health in realtime, protecting ecosystems and sacred sites.

• **Renewable Energy Systems:** Solar, wind, and bioenergy align with Native values of sustainability and self-reliance.

• **Drone and Satellite Tools:** Used for wildfire detection, habitat mapping, and land conservation planning.

Community Smart Grid

Sovereign Renewable Energy for Tribal Autonomy

- **Solar-Powered Microgrids:** Locally managed systems provide clean, reliable power and reduce grid dependency.
- Energy Storage Integration: Battery banks ensure energy continuity during outages and peak demand.
- Local Workforce Training: Community members are trained to install and maintain systems, creating green jobs.



Broadband Connectivity

Linking Communities through High-Speed Access

5G and Satellite Implementation

Fast wireless solutions help eliminate infrastructure disparities in rural and isolated regions.

Community Wi-Fi Centers

Consolidated access points provide shared connectivity for residences, educational institutions, and healthcare facilities.

Public-Private Collaborations

Federal funding alongside Native-owned technology companies fosters the development of sustainable and autonomous networks.

Mobile Health Units Bringing Care to the Heart of the Community

Solar-Powered Clinics

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Self-sustaining mobile units with diagnostics and real-time data syncing.

Culturally Competent Staff

Healthcare teams trained to respect tribal values, language, and wellness beliefs.

Integrated Tribal Health Records

Smart data systems connect with local EHRs, ensuring continuity of care.





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