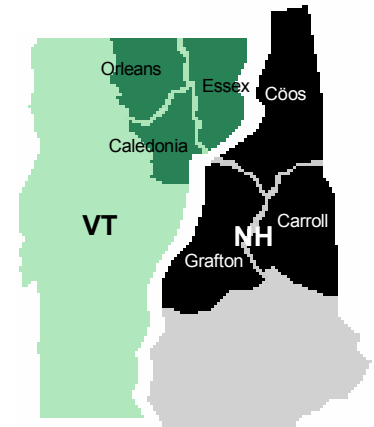


THE “WIRELESS LINC” INITIATIVE

A Public/Private Partnership
Managed by NCIC, LIDC & VBC

*Establishing an expansive, state-of-the-art
Broadband Infrastructure throughout
Caledonia, Essex & Orleans Counties of Vermont
And Carroll, Coos & Grafton Counties of New Hampshire*



BACKGROUND:

With challenging terrain and a low population density, our region’s telecommunications infrastructure lacks a sufficient return-on-investment for the private industries’ interests. As a result, we have old infrastructure with varying levels of survivability and redundancy.

Our broadband options to date are too expensive. We have little-to-no cellular systems. And the only fiber optic lines are for dedicated purposes. The majority of our region lacks the communication technologies needed for establishing a vibrant economy and providing public safety.

Wireless LINC looks forward to the implementation and tie-in to North-Link and the opportunities it will afford – and to assist in increasing the availability and access across the region!

MISSION:

Expanding the region’s economy and services by providing high speed, high technology connectivity for technology-based business, public, education, health and safety professionals.

OVERVIEW:

We intend to initiate the project with three to four pilot projects around the region. Coordination is being done with numerous organizations to ensure both the pilots and the regional investment delivers to its full potential. Coordinated efforts are being made with:

- ♣ Wireless Internet Service Providers (WISP) to develop optimal performance for the businesses and homes while developing the most effective operating relationship
- ♣ Educational Institutions including k-12 along with higher education to ready the organizations to deliver programs as the system comes on-line
- ♣ Tele-health Organizations to participate in the preparation and investment of technologies which can impact the region’s services
- ♣ Public Safety Departments to define the shortfalls of current systems, to integrate plans and technologies.

Wireless LINC is proposing a four part solution, including: an infrastructure deployment; a regional area network; an integrated revolving loan fund for supporting the buildup of related broadband business; and a supporting education/call center for end users.

INFRASTRUCTURE

Because of the terrain and low population, along with current technological advances, a fixed wireless infrastructure fits the region’s needs very well. Wireless provides highly secure and easily up-gradable technologies that can offer state-of-the-art performance both now and as the demands increase.

This infrastructure initiates through fiber connections in key areas that provide both primary and back-up sources, providing competition in pricing along with automated and immediate backup. Such a design creates the first level in redundancy and survivability.

Within the system, data transmissions are made point to point between Outreach Beacons to distribute service throughout the 6,000 square mile region. Each Outreach Beacon has multiple point to point transmissions to ensure automated and immediate backup within the system to create the second level in redundancy and survivability. Finally, point to multipoint transmission is made to distribute service to end users.

REGIONAL AREA NETWORK (RAN)

Wireless LINC is considering a variety of solutions in establishing optimal relationships to WISP’s, Educational Institutions, Tele-Health Organizations and Public Safety Departments. The RAN software interface concept is an interesting potential component of the system as it enhances local commerce and maintains a sense of community while providing the end user true open access choice which are key objectives of the project.

REVOLVING LOAN FUND (RLF)

An RLF is to be established to provide direct term loans ranging in size from several thousand dollars to more than \$200,000 for businesses focused on the advancement of broadband usage and technology-based businesses utilizing broadband. These loans are typically made in conjunction with bank loans, and often provided in a subordinate position.

EDUCATION/CALL CENTER

Wireless LINC will establish a virtual call center providing near-24/7 service for supporting end users of the system. This would reduce the challenges small WISP owners have of providing quality support to high volume, simple questions along with workshops to promote latest applications utilizing wireless and related technologies. Additionally, training programs would be offered to certify service technicians hired by the WISP to teach skill and service standards.

GRANT INVESTMENT SUMMARY

Northern NH Partnership Project

	Infrastructure	RLF	Startup	Total
Year 1	\$2,053,575	\$750,000	\$751,445	\$3,555,020
Year 2	\$1,825,400	\$0	\$571,592	\$2,396,992
Year 3	\$684,525	\$0	\$63,463	\$747,988
Total	\$4,563,500	\$750,000	\$1,386,500	\$6,700,000

Northeast Kingdom Project

	Infrastructure	RLF	Startup	Total
Year 1	\$1,798,065	\$750,000	\$322,195	\$2,870,260
Year 2	\$1,598,280	\$0	\$330,283	\$1,928,563
Year 3	\$599,355	\$0	\$101,822	\$701,177
Total	\$3,995,700	\$750,000	\$754,300	\$5,500,000

The projected six county project cost is \$12,200,000.