



Rural Project #4

**Providing Fixed
Wireless Access in the
Township of Lake of Bays**

CENGN Residential Broadband Program



Goal

Support and validate innovative technology solutions and new business models to expand broadband access to rural and remote communities

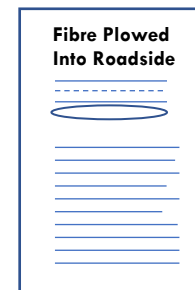
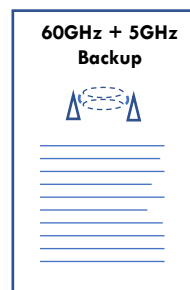
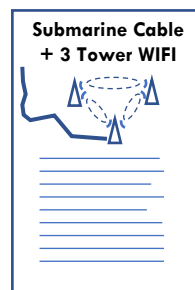
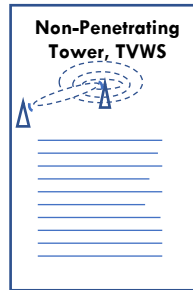
Program Elements

- ✓ 12 projects across Northern and Rural Ontario over the last 2 years
- ✓ 3-6 months to full service to prove residential broadband technology solution
- ✓ High speed reliable 50/10 internet services to underserved residents
- ✓ 50% of expenses funded by CENGN to solution provider, up to \$500K per project
- ✓ No cost to host community participating in residential broadband project
- ✓ Select solution providers with the drive, ability, experience, and technology to deploy a commercial service that meets the broadband needs of the community
- ✓ Technology solution could be extended to nearby communities easily



CENGN enables innovative tech solutions through its **Rural & Northern Ontario Residential Broadband Program**

Compile Collection of Blueprints for Broadband Innovation



**Collection of
Broadband Solutions Blueprints for
Small Northern and Rural
Communities**



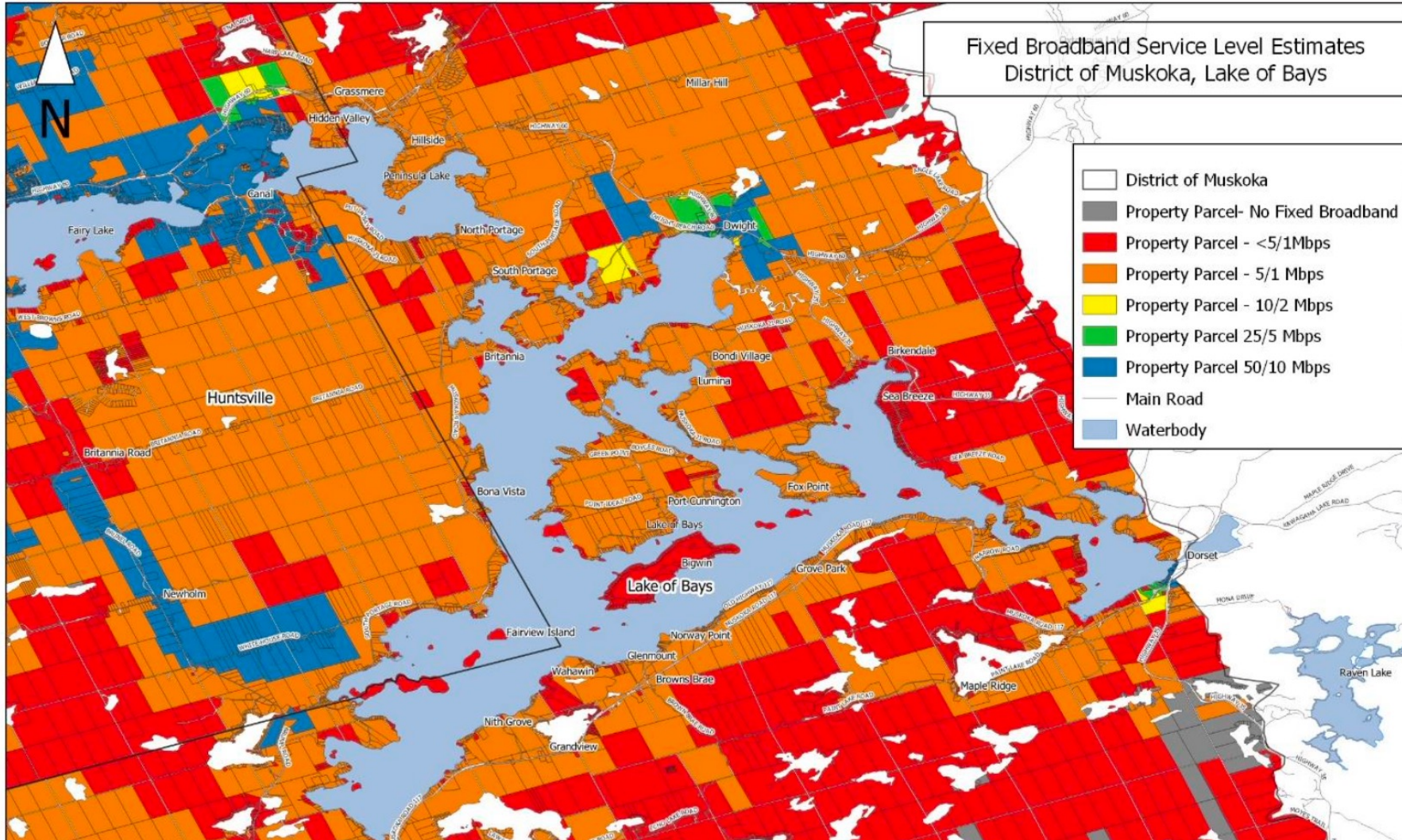
High on Innovation

Low on Cost

Problem Statement for Rural Project #4

Utilizing one or more available access corridors, in whole or in part, to extend broadband access to underserved residences. Example of Access Corridors include, but not limited to abandoned rail beds, unused road allowances, recreation trails, municipal right of ways, municipal properties etc.

Township of Lake of Bays – Service Level Estimates



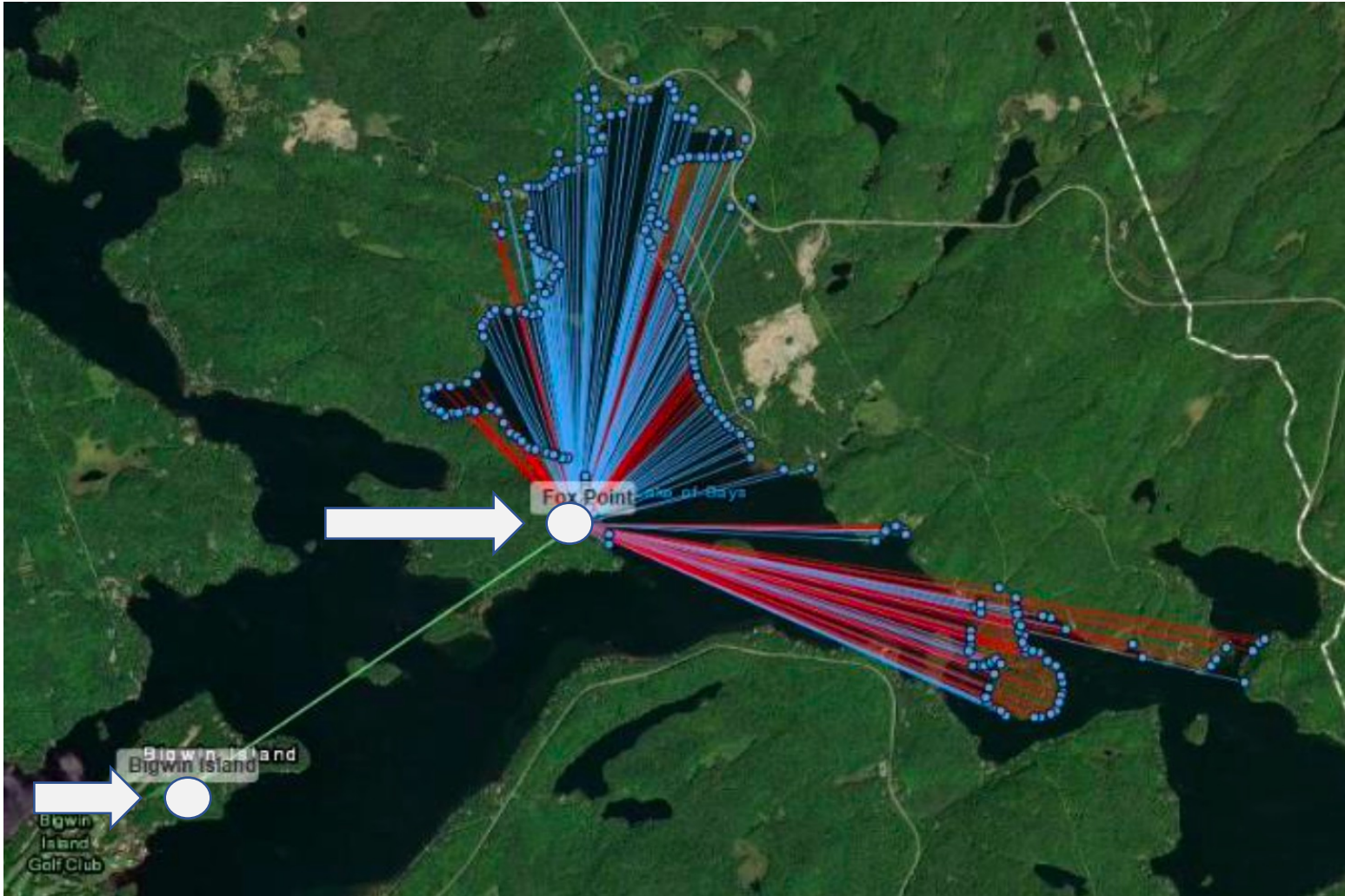
- ✓ Waterfront properties
- ✓ Permanent population – 3167
Seasonal population – 11,720
- ✓ Geography: Abundance of trees, lakes and rocks
- ✓ Widely underserved

Service Provider: Lakeland Energy



- ✓ Lakeland Energy is an established regional ISP providing optical and wireless broadband to 6,300 customers across Parry Sound – Muskoka area
- ✓ Lakeland Networks is the retail brand of Lakeland Energy
- ✓ Over 500 km of fibre optic network and 118 towers for wireless infrastructure
- ✓ Coverage area of 4,000 square kilometers
- ✓ Service offerings include Internet, Phone and Digital TV services

Proposed Network Design



- Lakeland will utilize existing Fibre backhaul to Bigwin Island
- At the Fox point location, Lakeland has an existing abandoned tower site within a municipal road allowance
- A new 100' Super Titan tower will be installed to provide wireless solution to 225 underserviced homes, around the 10 Mile Bay, and into Emerald Bay

Community Benefits of Project

- ✓ Very high backhaul capacity
- ✓ Optimal location for service coverage: Structure relocated closer to the waterfront
- ✓ Choice of new high performance 25/5 and 50/10 broadband internet access
- ✓ Quick deployment leading to faster time to service
- ✓ Easy expansion for potential future builds



THANK YOU!