

Internet for Nova Scotia Initiative Strategic Plan



INTERNET FOR NOVA SCOTIA INITIATIVE

"Enhancing a connected Nova Scotia, especially in the unserved and underserved communities, will help bring sustainable services to all parts of the Province and help grow the local and provincial economies."¹

HISTORICAL PERSPECTIVE

Since the early 1990s the Internet has been transformed from a research network to a global engine of social and economic growth and connection. This constant "need for speed", driven by new services that require more speed and capacity, is expected to continue, which means higher capacity foundation networks and customer access services will be required and demanded.

"High-speed" Internet meant something very different in the early 1990s and dialup access provided kilobit speeds. And this definition of "high-speed" will continue to be a moving target as we reach and exceed the 50 Megabit plus urban residential Internet speeds of today.

By the early 2000s high-speed access was available to most urban Nova Scotian communities. However, rural Nova Scotia communities were underserved and their social and economic development suffered. In 2007, the Province of Nova Scotia launched the Broadband for Rural Nova Scotia (BRNS) Project which reached 99% of the targeted rural households with a 1.5 MBS download service.

Technology continued to evolve and rural Nova Scotians once again expressed frustration with respect to the quality and speed of Internet services. In response, the Province engaged Ernst & Young to look at the barriers to, and availability of, high-speed Internet services in rural Nova Scotia, and to identify potential roles that the Province could play in improving access. Based on these findings, a need to build longterm strategies to address the middle mile (backbone) and last mile (customer access) Internet infrastructure in rural Nova Scotia was recommended.

The Province commissioned two studies by Brightstar Canada in 2017 and 2018. These studies confirmed that there is a market failure (costs exceed potential revenues) which prevents the private sector from meeting the high-speed Internet service needs of unserved and underserved rural Nova Scotian citizens, businesses, and public institutions. The studies identified a need for an investment in the range of \$300-\$500M to address this market failure. In response, the Province established, charged, and funded (currently \$193M) an independent, armslength trust called The Nova Scotia Internet Funding Trust—to support implementation of high-speed Internet throughout rural Nova Scotia.

Develop Nova Scotia is the crown corporation responsible for leading sustainable development of high-potential property and infrastructure across Nova Scotia. Develop Nova Scotia has been engaged by the Nova Scotia Internet Funding Trust to plan, design, and manage the implementation of the Internet for Nova Scotia Initiative. This Initiative defines a reliable, robust, high-speed Internet network that will reach more than 95% of rural Nova Scotians.

¹Brightstar Canada "NS DoB Middle Mile Strategy"

The Nova Scotia Internet Funding Trust represents a significant investment by the Province of Nova Scotia in rural high-speed Internet infrastructure that will result in significant change across many Nova Scotia communities. The purpose of this Strategic Plan is to establish the foundational Mission, Vision, Guiding Values, and Goals that will drive Develop Nova Scotia's implementation effort and promote inclusive economic growth and social connectivity throughout Nova Scotia. This is reflected in the Province's priorities as presented in its 2018-19 Business Plan.

GOVERNMENT PRIORITIES

"The 2018-19 Government Business Plan builds on our work and investments made in recent years to strengthen services and support under four priority areas:



Healthier people and communities

Safe and connected communities



Investing in early years and education

Inclusive economic growth

Access to high-speed Internet across the province is essential for communities to innovate and grow."²

MISSION AND VISION

To guide Develop Nova Scotia's thinking on strategic issues, and assist in defining performance standards while cultivating a competitive environment that generates productive focus and advancement of common goals, our mission and vision are simply to:

Mission

To develop and promote access to sustainable high-speed Internet services that contribute to great places in Nova Scotia that attract and inspire people.

Vision

Rural Nova Scotian citizens, businesses and public institutions have access to reliable, high-speed Internet services at competitive prices encouraging participation in the digital economy, contributing to the creation of great places and realizing social and economic benefits.

STATEMENT OF GUIDING VALUES

Develop Nova Scotia has established guiding values for this most important initiative. They will provide direction across all phases of the initiative including planning, procurement, implementation, and operations. These guiding values provide a common understanding of what outcomes are most valuable to Nova Scotians (connected communities, open access, choice of fair service offerings, service level standards, etc.).

²"Budget 2018-19: Government Business Plan, Finance and Treasury Board, March 2018", Province of Nova Scotia.

Engagement: Implement timely and ongoing stakeholder (rural and Mi'kmaq communities, governments, and businesses) engagement programs to ensure the consideration and inclusion of diverse perspectives and innovative solutions to connect Nova Scotians.

Transparency and Integrity: Demonstrate financial and operational responsibility, actively seeking ways to maximize transparency and reduce project risk.

Partnership: Build successful collaborative partnerships with all levels of government and the private sector to leverage capabilities and assets and better serve and connect rural Nova Scotia.

Sustainability: Source innovative solutions that will meet the high-speed Internet needs of Nova Scotians now and in the future.

Outcome Focused: Maintain a constant focus on delivering access to reliable, robust, high-speed Internet services to rural Nova Scotians.

GOALS

Develop Nova Scotia's Internet for Nova Scotia Initiative is focused on addressing Internet service gaps across Nova Scotia and achieving the overarching goal of connecting communities.

While adhering to the guiding values outlined in this strategy, we will achieve this goal by focusing on key supporting objectives that will ultimately facilitate the development of middle- and lastmile technologies into homes and businesses across rural communities in Nova Scotia.

These detailed objectives are broadly encapsulated across four groupings:

OVERARCHING GOAL

1. **Connected Communities:** Provide competitively-priced, quality, high-speed Internet access service to more than 95% of rural Nova Scotians, enabling and promoting the social, educational, health, community, and commercial advantages it supports.

SUPPORTING IMPLEMENTATION OBJECTIVES

- 2. Implementation Management: Utilize project management best practices to achieve solution quality, risk management, milestone attainment, cost control, service level compliance, and transparent reporting.
- **3. Technology and Infrastructure:** Using a selection of technologies and infrastructures, implement a cost-effective, high-speed Internet solution that addresses current and future customer requirements (services, speed, coverage, latency).
- 4. Financial and Procurement: Develop a competitive procurement framework to attract qualified proponents, leading to agreements that leverage existing investment, mitigate risk, minimize overbuild, accelerate implementation, and support open access and reporting transparency. Working with all levels of public and private sector partners, secure sufficient funding for full implementation.

STRATEGY MAP

The strategy map is a summarized visual representation of Develop Nova Scotia's Internet for Nova Scotia Initiative objectives. This map outlines the Initiative's strategic ambitions and priorities, while ensuring every stakeholder is channeled in the same direction. Most importantly, the strategy map summarizes what Develop Nova Scotia intends to accomplish, along with the high-level initiatives involved in each. The cause-and-effect relationships between strategic goals are defined.

STRATEGY MAP & STRATEGIC OBJECTIVES

Connected Communities	Initiatives
 Access for >95% of Rural Nova Scotia Rural Customer Satisfaction Competitively Priced Service Offerings Inclusive Economic & Social Development - Smart Communities 	 Subsidy payout based on key milestone achievements Inspections/Performance & Service Verification Project Management Plan Project and Financial Sureties Open Access opportunities Service Level Agreements
Implementation Management • Milestone- Focused Build • On Specification, On Time	 Initiatives Contractual key performance indicators reporting Communications plan Compliance to contract requirements
Provide Open Access & On-Budget Technology & Infrastructure	 Social and economic impact analysis Initiatives Provincial Zone design (mixing together
 Technology Portfolio to Address Business Model Failures Minimize Overbuild Improve Network Capacity and Customer Experience Establish Foundation for Expanded & Next Generation Services 	 densities and topography Bid evaluation process Next Generation Service Identification Contractual key performance indicator reporting Service Level Testing Framework Competitive Bid Framework
Financial & Procurement	Initiatives
 Drive Competitive, Qualified Responses Drive Sustainable, Competitive Solutions Shared Risk Leverage Additional Sources of Capital 	 Vendor Briefing Program (pre-RFP) Vendor pre-qualification Fair and transparent procurement process RFP specifications Bid evaluation process Contract negotiations Financial/Milestone/Project reporting Leverage government infrastructure Leverage federal, provincial, and municipal funding sources Leverage private sector investment



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