

Northern Lights Fiber Partners With Calix To Tackle the Digital Divide, Connecting Agricultural Communities in Western Canada With a New High-Speed Fiber Network and Value-Add Services

OVERVIEW & CHALLENGE

Addressing Isolation Frustration in Small Communities Across Rural, Western Canada

Founded in 2020, Northern Lights Fiber is a subsidiary of fiber network builder, owner, operator, and service provider Canadian Fiber Optics (CFOC). A newly created brand, Northern Lights Fiber was launched specifically to meet the needs of rural and remote residential customers and small and medium-sized businesses, all of whom have been underserved. Their mission is to build, operate, and service high-speed fiber networks across these low-density areas, typically comprised of farming and industrial properties. Larger service providers had long ignored these communities, deeming them too expensive to connect. Northern Lights Fiber disagreed.

They believe everyone deserves access to fast, reliable internet, which enables communities to survive, thrive, and compete economically. Rural, western Canada is home to tight-knit communities, excellent schools, and key industries that boost economic growth. However, residents became increasingly frustrated by little to no broadband access. Unable to carry out basic day-to-day activities—such as submitting homework online without driving to the nearest town to take advantage of the hardware store's Wi-Fi connection—things needed to change. Sturgeon County, a fast-growing community in Northern Fiber's service area, recognises this pent-up demand with Jesse Sopko, general manager of corporate services, Sturgeon County sharing, "In 2022, that's just not acceptable."

Northern Lights Fiber began deploying their new fiber infrastructure in 2020, despite the challenging Rocky Mountain terrain that previously deterred other broadband service providers (BSPs). Taking on this rugged environment called for a creative combination of buried and aerial infrastructure. Grand Cache, for example, is a town built on pit rock in the foothills of the Rockies, requiring aerial cabling using composite poles to protect against forest fires. Despite the geographical challenges, Northern Lights Fiber successfully connected four communities—Wembley, Valleyview, Grande Cache, and Sturgeon County. Within five years, their goal is to serve 30,000 rural western Canadians.



COMPANY

Northern Lights Fiber

COMPANY TYPE

Broadband Service Provider

WEBSITE

lightupgrandecache.ca

LOCATION

Calgary, Alberta, Canada

SERVICES

Residential and business broadband services

SUBSCRIBERS

1,100 with a target of 13,000 in 2023.

SOLUTION

Northern Lights Fiber Builds a Powerful Calix-Enabled Infrastructure Leveraging the Latest Technology To Transform Lives Today and Tomorrow

From the outset, Northern Lights Fiber needed a reliable and experienced technology partner that could confidently scale and grow with their business. Leveraging the Calix end-to-end solution based on Intelligent Access EDGE™ and Revenue EDGE™, Northern Lights was able to go to market quickly with industry-leading services that revived desperately underserved communities. After years of limited broadband service, residents now experience asymmetrical speeds of up to 2.5 Gbps, fast-tracking Northern Lights Fiber to becoming Canada's fastest residential internet service.

Johann Reimer, director of marketing and sales at Northern Lights Fiber, summarized the importance of partnership when breaking new ground, "The thing I'm abundantly clear on is that you cannot do this alone. You need to build relationships and partnerships with the right vendors to help you along the way. That's why I'm so happy that we use Calix in our network, in our customers' homes, and in our businesses."

Their XGS-PON fiber-to-the-home (FTTH) network uses the Calix Intelligent Access EDGE platform to streamline operations and deliver an Always On subscriber experience. The technical teams at Northern Lights Fiber appreciate the simplicity of making changes, enhancements, and adjustments to their network as they scale. Calix Support Cloud (Support Cloud) and Calix Operations Cloud (Operations Cloud) provide insights from deep into the network all the way through to the customer device, giving the team complete visibility for effective troubleshooting and proactive customer support. Additionally, rapid back-office integration means their new network is ready for rapid service provisioning so that exciting new subscriber services can be launched quickly and easily. With these capabilities, Northern Lights Fiber is successfully building a network that is not only fast but also secure, reliable, and easy to manage.

Northern Lights Fiber currently structures their offerings according to three tiers of managed Wi-Fi service all built around GigaSpire® BLAST u6 Wi-Fi 6 system. This enables rapid installation and deployment, which in turn reduces capital and operating expenses. Additional services are offered for a nominal monthly fee with packages targeting different personas. "The Entry Promotion" includes both ProtectIQ® and ExperienceIQ™ to support multiple connected devices within the home. The "Gamer's Promo" offers an enhanced experience for gaming and e-sports enthusiasts, bundling ProtectIQ for online security with a static IP if needed. Their premium "Grand Cache Experience" package includes ProtectIQ and along with whole-home Wi-Fi using GigaSpire BLAST u4 system as a Wi-Fi mesh extender—ideal for expansive rural properties where outdoor coverage is required.

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Johann Reimer,
Director of Marketing and
Sales, Northern Lights Fiber



As Jodi Bloomer, president and co-founder, Northern Lights Fiber, explained, “Partnering with Calix, we’re able to offer a service that is far bigger than we are. To think a company as small as ours can offer an app with advanced parental controls and deliver Wi-Fi 6 capabilities is remarkable.”

Similarly, Calix Marketing Cloud (Marketing Cloud) and the Calix Market Activation program have been game changers for this small service provider. As Bloomer commented, “The kind of advertising materials we’re able to access is unbelievable—it’s as though we’ve had professional advertisers develop this content just for us.” Using data insights from Marketing Cloud, Northern Lights Fiber can analyze subscriber behaviors to create more impactful communications across their social media platforms as a way of building trust with their stakeholders.

RESULTS

Northern Lights Achieves a 65 Percent Take Rate for New Broadband Services With 55 Percent of Subscribers Choosing Higher-Tier, Value-Add Services, Increasing ARPU by 25 Percent

In just two years, Northern Lights Fiber has revolutionized the service provider landscape in rural western Canada. By deploying a best-in-class fiber network with innovative services, they’re exceeding subscriber expectations—and surpassing their own. Bringing life-changing connectivity to homes and businesses, in particular providing access to remote farms, smallholdings, and hamlets for the first time, is something Northern Lights Fiber is especially proud of.

As a privately owned company, offering value-added services to increase ARPU grows shareholder value. Its Revenue EDGE managed services are boosting average revenue per user (ARPU) by 25 percent in line with forecast, underscoring their original assumptions around pent-up demand in rural agricultural communities. In fact, buying behavior insights indicate that 55 percent of subscribers are choosing value-added services over basic packaged offerings.

Central to Northern Lights Fiber’s operations is ensuring a positive customer experience. Together, Support Cloud and Operations Cloud are helping Northern Lights remotely diagnose and fix problems, often before the customer is even aware. Explained Reimer, “We have the ability to solve problems in minutes, not days or hours, which is incredibly rare in rural areas where customers are used to it taking days or weeks to resolve an issue.” This enhanced visibility is helping to decrease unnecessary truck rolls by as much as 60 percent.

Beyond these key performance indicators (KPIs), Northern Lights Fiber is transforming the communities they serve. By working closely with local community groups, rural municipalities, and administrative departments, Northern Lights brings projects to life that reflect their unique demographics and specific needs.

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Jodi Bloomer,
President & Co-Founder,
Northern Lights Fiber

Their collaboration with Sturgeon County, an area North of Edmonton with a population of 20,000 residents spread over 21,000 square kilometers, is an excellent example of a public/private partnership. Sturgeon County Council invested \$7.55 million in the first phase of their fiber rollout, with additional funding from Northern Lights Fiber. As Jesse Sopko explains, “We want fiber because we’re interested in innovation, bringing things like precision agriculture and other technology that can move our community forward.” A 2020 report by the Edmonton Metropolitan Region Board found that investment in broadband can increase GDP in this region by up to \$1 billion annually, underscoring the positive impact for generations to come.

Over in Valleyview, a bustling business and travel community, residents now have access to a 10-Gigabit enabled network with speeds of up to 5,000 times faster than anything previously thought possible. Thanks to this new infrastructure, Valleyview’s increasingly diverse economy is significantly more competitive, attracting new business and further diversifying the town’s traditional skillsets.

In Grand Cache, where previously 6 Mbps was the fastest available internet connection, businesses couldn’t run efficiently, students couldn’t access distance learning, and residents couldn’t even stream a movie. Today, Grande Cache has access to multi-gigabit speeds, allowing its vibrant community to enjoy all the benefits of a more connected lifestyle.

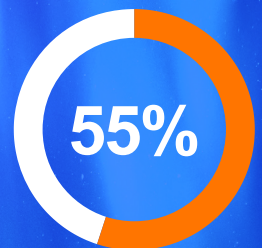
The town of Wembley has long lived in a state of underdevelopment and underinvestment, leading to a stagnant economy and little diversification within their small community. By bringing connectivity, Northern Lights Fiber believes Wembley can change its fortunes with fresh opportunities to engage new businesses, retail opportunities, and e-commerce, transforming itself into a contributing satellite of Grande Prairie’s bustling economy.

With a proven track record of delivering these services to rural communities, Northern Lights Fiber is growing their reputation as a trusted provider across western Canada and looking to expand further. With Calix by their side, there is no doubt Northern Lights Fiber will continue to successfully build, connect, and innovate, becoming one of the most progressive service providers in Canada.

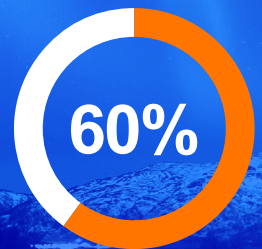
Community by community Northern Lights Fiber endeavors to help bridge Canada’s digital divide. Check out this [video](#) to learn more about their incredible journey, or browse our [Municipalities Solutions page](#) for more stories like theirs.



Higher ARPU



**Subscribers
choose value-add
services over base
packages**



**Reduction
in truck rolls**