Shaw Communications

Presentation to the Gas, Power and Telecommunications Committee

April 11, 2019



Shaw)

Shaw by the numbers



1.2M

Over 1.2 million subscribers



10,000+

Employees
(after Total
Business
Transformation)



5.75M Subscribe

rs

cable internet phone
and satellite services



\$61.8M

Shaw's total community investment in Canada (Fiscal 2011-Fiscal 2016)



2.5M Devices
100K Hotspots



Shaw has great network coverage throughout the City, and partners with world-leading organizations to provide cutting edge services – Comcast, Fujitsu, Nokia, and Cisco

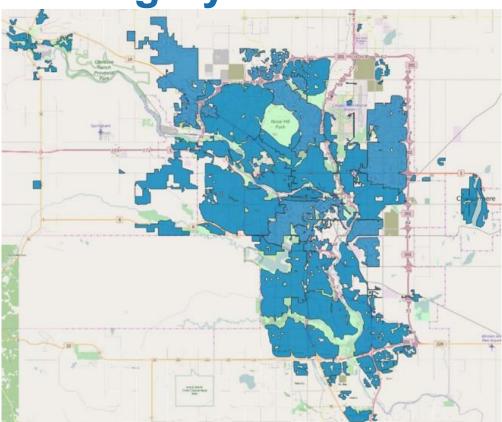
Freedom mobile continues to expand, and offers Calgarians a fourth wireless option, creating competition and decreasing prices.

Invested over \$400M in capital expenditure, and almost \$20M in community investment over the last 5 years in Calgary alone.



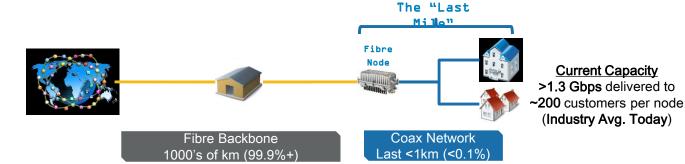


Shaw 600 in Calgary





Overview I Our Hybrid Fibre Network



99% Availability

Top-tier speeds are supported throughout the vast majority of the network and they're

High Capacity

We are only scratching the surface of the capacity available over our Hybrid Fibre Coax Network, using only about 10% of the

Huge Potential

With the FDX
specification released
last year, HFC networks
will be able to support
10Gbps/10Gbps of

customer's distance to congestion-free regardless of the capacity by 2020! node.



Overview | Powering Connectivity for Canada



Fibre Backbone

One of Canada's Largest Fibre Networks Spanning Coast to coast, over 1 million km's



19.2 Tbps

Metro Network Capacity in Serviceable Major Cities, **Delivering Future**Ready Speeds for Canada.



400 Gbps

Shaw has Completed Live Field Trials of 400Gbps Systems over 400 km Distances, Providing **One of** Canada's Most Robust Networks.





Managed WiFi

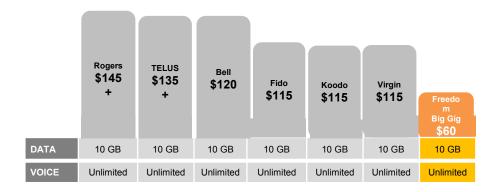
Shaw is Canada's Largest
Managed WiFi Provider,
managing over 100,000
WiFi Access Points



The Big Gig - Market Disrupter

Making High Speed Mobile Data More Affordable for Canadians

- The Big Gig: 10 GB / Unlimited Voice to Canada and US for \$60
- Our rates are roughly <u>50% lower</u> than competitors.









Overview | Product Portfolio



Internet

DOCSIS and Fibre solutions up to 100 Gbps for any use case



Voice

Business lines, Unified Comms, Voice trunking services



Data

Private data connections up to 100 Gbps





Video

Cable and Satellite TV for all business types in all segments



Data Centre & Cloud

Data center solutions based out of the Calgary flagship location



Overview | Product Roadmap

Shaw is committed to product development

- We are focused on launching products that are cloud based, managed and easy to use
- Shaw Business listens to customers to inform our product roadmap, ensuring we launch products that address customer needs.



SmartWiFi

A fully managed, enterprise-grade WiFi system with multiple SSID's, cloud management and insightful analytics.



SmartVoice

A fully-managed unified communications system with enterprise voice features and all software and hardware included.



SmartSecurity

A fully-managed network security solution which protects against the latest threats, using powerful cloud-based technologies.



SmartSurveillance

An enterprise-grade video surveillance solution with simple management through an online portal.



Overview | Technology for Smart Communities

Advanced technology that can improve government services



Managed WiFi

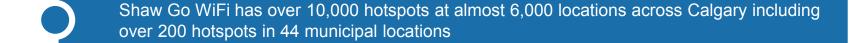


SmartSurveillance

- Provides an incredible amount of real time data that can be used for implementing Smart City transportation systems that reduce travel times, bottle necks and accidents
- Improves public safety by enabling law enforcement to pull video data in minutes through a login portal
- Provides exceptionally fast WiFi service for people waiting for and using transportation systems §







Shaw Go WiFi and City of Calgary was signed in 2014, and set to expire in November

Shaw wants to keep and upgrade current infrastructure to allow for more capabilities and features for municipal use

Potential to provide rich transit analytics, unlimited, free WiFi at Calgary Housing facilities and other locations, potentially couple with Small Cell technology



