

Alberta SuperNet: Vision and History

The Alberta SuperNet is a network of fibre-optic cables and wireless connections across Alberta in over 400 communities. It consists of more than 13,000 km of fibre and 2,000 km of high-speed wireless links. The SuperNet connects more than 3,300 government services and public institutions, including over 1,950 learning centres, 650 government locations, 300 healthcare facilities, 300 libraries, and 90 Alberta municipalities, with more schools being built and connected each year. Currently, 43 First Nations communities in the Treaty 6, 7 and 8 regions, and eight Métis settlements, have SuperNet connectivity within or adjacent to their communities.

In operation since 2005, SuperNet was built to provide broadband network connectivity to Alberta public organizations and business users. The network is also leveraged by dozens of private service providers to deliver internet and other services directly to customers throughout the province¹⁴.

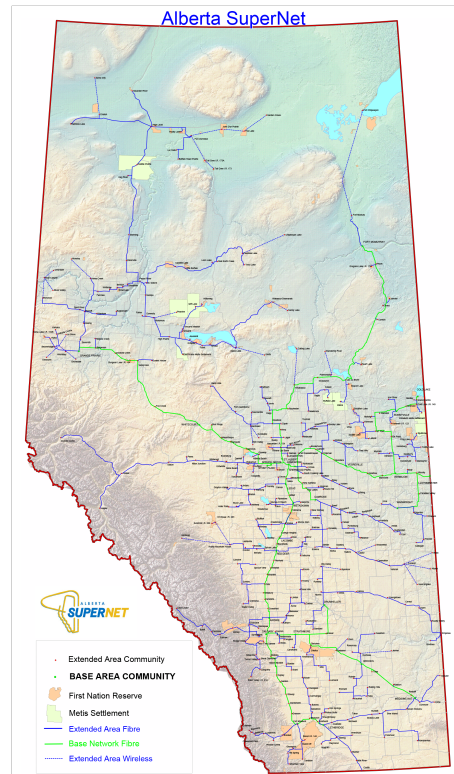


Figure 7. Map of the Alberta SuperNet backbone as it was originally deployed to 429 Alberta communities. Some network pathways have been modified since, but this map shows the scope of provincial coverage by the network¹⁵. Of note: there is no longer a Base Area Network and Extended Area Network, as Bell manages the entire network.

The SuperNet was a \$295 million strategic infrastructure investment by the Government of Alberta (\$193 million) and Bell Canada (\$102 million). When construction was completed in 2005¹⁶, the final cost, including subsequent extensions, was approximately \$330 million¹⁷. At the time of completion, the SuperNet was the first jurisdiction-wide fibre optic network in North America.

The SuperNet was originally divided into two networks: a primary backbone made up of 27 Base Area Network (BAN) locations, and an additional 402 Extended Area Network (EAN) locations. The operation and management of the SuperNet was originally contracted to Axia SuperNet Ltd (a wholly owned subsidiary of Axia NetMedia Corporation) on the Extended Area Network (EAN), and to Bell Canada on the Base Area Network (BAN). All public sector customers, whether on the BAN or the EAN, were managed by Axia. The initial contract agreement spanned 2005-2015, and was extended from its initial 10-year term for an additional three-year period until June 30, 2018¹⁸.

Governed by Service Alberta, a ministry of the Government of Alberta, the SuperNet now entered a second contract phase. In early 2016, Service Alberta issued a Pre-Qualification Request (PQR) for provincial broadband services in order to identify potential service providers, review business and technical requirements, and gather current information on industry trends¹⁹. In May 2016, telecommunications operators Axia, Bell, TELUS, and Zayo were pre-qualified to participate through the PQR process²⁰.

After the PQR process concluded, in late 2017, Service Alberta issued a Request For Proposals (RFP) to replace the initial, extended SuperNet contract from the shortlist of Bell and Axia, as by this time TELUS and Zayo had withdrawn from the competition. The RFP was awarded to Bell Canada, who became the sole contract holder for the SuperNet as of July 1, 2018. To ease the transition process, Bell purchased Axia Netmedia Corporation and began integrating SuperNet into its national network²¹.

SuperNet Operating Model

New SuperNet Services since July 1, 2018

SuperNet and Rural Last Mile

References

¹⁴Bell Canada. [Bell awarded SuperNet contract by the Government of Alberta](#). Newswire, 03 July 2019.

¹⁵Service Alberta. [Layout:4 \(servicealberta.ca\)](#).

¹⁶Government of Alberta [release.cfm \(alberta.ca\)](#). Accessed 10 February 2021.

¹⁷Middleton, C. and Given, J. (2010) [Open Access Broadband Networks in Alberta, Singapore, Australia and New Zealand](#). The 38th Research Conference on Communication, Information and Internet Policy, 1 October 2010. Accessed 10 February 2021.

¹⁸Axia NetMedia. [Continuity of Services Assured for Axia's Alberta Customers](#). Newswire, 29 August 2013. Accessed 10 February 2021.

¹⁹Service Alberta. Procurement Services. Pre-Qualification Request (PQR) For Provincial Broadband Services PQR 288-PA-PBS, Reference number: AB-2016-01170, 16 February 2016.

²⁰Alberta Purchasing Connection. Opportunity Notice: Provincial Broadband Services, Awarded Vendors, 05 May 2016.

²¹Interview with Bell SuperNet Contract Manager, 08 February 2021.