

Communications

The telecommunications infrastructure in Welland is provided by Bell Canada, the largest Canadian telecommunications operating company.

Digital Toll & Digital Local Switching

Access lines in Welland are switched for both local and toll calls through one of the most sophisticated and widely used digital switching systems in the world – Northern Telecom’s DMS™ series switches, designed and manufactured in Canada.

CCS-7 and ISDN

Digital switching in conjunction with CCS-7 and ISDN permits a whole range of “intelligent” services to be built into the network. All local lines in Welland are equipped with CCS-7. CCS-7 creates a platform for ISDN service enhancements including completely seamless voice, video and data links across Canada, to major US carriers and to international locations served through Teleglobe. Bell Canada, through its affiliation with NorTel and Bell Northern Research is presently offering some ISDN services in Welland to meet the business needs of medium and large size companies. ISDN capability.

Fibre Optics

Fibre optics technology satisfies an ever increasing demand for capacity. It can simultaneously support basic phone service, high speed data and facsimile transmission, video conferencing, video data bases, high definition television and basic entertainment video. The Bell toll link forms part of the Stentor Trans-Canada fibre optic network. Stentor operates two high capacity digital routes, one all fibre, providing enhanced system survivability and making any temporary disruptions virtually transparent to system users. The transport network linking all switching centres utilizes multiple paths and restorable fibre cable facilities. Currently, Welland has 40 km of fibre cables in place serving all business areas in the exchange along with numerous local fibre optic rings in place to provide business in Welland with increased levels of network survivability options.

NEXXIA LAN

100 Megabit service into Welland, expandable to Gigabit service. Fully redundant and secure network.

Dynamic Routing

Dynamic Routing is a built-in and completely transparent safeguard which increases network availability and ensures call completion. This network capability selects the most appropriate path for a call by, first, the most direct route, and if busy, the alternate route which will complete the call in the fastest time possible. Dynamic routing, along with the diversity of facilities, is designed to provide full protection on various routes in the toll and local networks.

Automatic Facility Restoration

Although the basic long distance transmission network has been engineered to operate with a high degree of reliability, it has been further strengthened by Automatic Facility Restoration. This network capability significantly reduces system restoration time so that most users will not notice a temporary interruption of network service.

The ongoing introduction of new technologies enhances the ability to network remote host computers and transmit video and data, all at high speed. More importantly, business users are increasingly able to program and use the telecommunications system to meet their individual needs.

High Speed Internet Availability

These capabilities are supported by the advanced telecommunications infrastructure available in **Welland, Ontario** - an infrastructure that matches, and in most cases exceeds, the best available in North America.

Source: Bell Gateway, 2003