A major new transit system in Vancouver, British Columbia, depends heavily on communications links for its operation. The advanced light rapid transit system, known as Skytrain, operates over a 28-km track without any onboard operators. All vehicular movement is controlled by a centrally located computer complex. On-board station announcements are generated through synthesis techniques and transmitted to the trains via vehicular radios. Passenger safety radios, which communicate with a central dispatch location, are available in each car. Station video surveillance is transmitted to a centralized monitor station, and all station elevators are remotely controlled in the evening.

To reliably handle all this information, a sophisticated communications system carries voice, data and video. The transmission system, which is installed along the right of way, makes extensive use of fibre optics.

Education

To serve its rural population and those who are not fortunate enough to obtain their education on a full-time basis, Canada has pioneered the use of distance teaching techniques. Several different systems are currently in use, but each depends heavily on the use of communications systems.



In the province of British Columbia, the Knowledge Network broadcasts educational and public interest programs via Canadian domestic satellites. Programs are received on TVROs that are privately owned or on those used as the headend for CATV systems. In some cases, dial-up audio circuits allow program recipients to participate in the lectures.

In another province, Ontario, TVO (Television Ontario) uses a similar method of satellite communications but also uses video subcarriers for delivering software-based courses in a computer-assisted learning environment. ACI's line of state-of-the-art multiplexers and data sets leads the way in the world of data communications products.

Q