

passenger comfort, economics, noise and environmental pollution reduction. In addition, the products are innovative and noted for their quality, safety and reliability.

Expo '86

A showplace for this advanced technology, not only for Canada but internationally, will be Expo '86, a world exposition covering every aspect of modern transportation with special emphasis on urban transportation equipment and services.

Canada is host to this highly respected exposition, the theme of which is "Man in Motion", to be held in Vancouver, British Columbia from May to September in 1986.

The ten million people who are expected to attend Expo '86 will have an opportunity to examine at first-hand Canada's approach to urban transit. They will also learn what Canadians, inhabiting the second largest country in the world, have learned about moving people and products over great expanses of difficult terrain.

They will see a Canadian urban transit industry that provides its own engineering expertise, virtually all its major equipment and systems, and a large portion of the sub-systems and components.

They will see subway cars and trains (steel-wheeled or rubber-tired), streetcars

or light rail vehicles (LRVs), commuter rail cars and trains such as the light, rapid, comfortable (LRC) train already in use by AMTRAK in the United States. There will be diesel buses and trolley buses, large and small, rigid or articulated, and large inter-city bus coaches. They will even see marine passenger vehicles.

Whole systems

But Canadian technology does not stop at products. Whole transit systems have been developed for smooth and efficient movement of people and goods.

Canada's urban transportation showpiece is the multi-modal system operated by the Toronto Transit System (TTC).



Urban transport in Canada has come a long way since the double-decker loading in Toronto, 1923 (above) and Bombardier's rubber-tired metro cars operated by the Montreal Metropolitan Transit Bureau, which also have been bought by other countries.

This is a sophisticated and integrated network of subways, streetcars, trolley buses and diesel buses running with precise efficiency throughout the 632 square kilometres of Metropolitan Toronto. TTC has also developed techniques for effective co-ordination of its activities with inter-city bus and suburban rail transit system companies.

The Métro subway system of Montreal is another Canadian showpiece noted for its efficiency, quietness, cleanliness and architectural beauty. Its innovative rubber-tired trains virtually eliminate noise and vibration and, in Métro's completely closed environment, the rubber-tired suspension allows safe, reliable acceleration and braking on grades up to 6.5 per cent.

Rolling stock, equipment and systems are not the whole of the Canadian transit scene, however. Components and sub-systems — electronic, electrical or mechanical — are important factors, and all are designed, developed and manufactured domestically but with applications anywhere in the world.

Space does not permit the listing of all Canada's component and sub-system manufacturers in addition to the electronic and electrical producers. However, there are those, many of them internationally known, who create everything from specialized windows, traction motors, steel wheels and bus seats to air conditioning equipment, brake systems, guideways and such care systems as bus and train washers, dryers and vacuum cleaners.

Research and development

All of this — from major equipment and systems to the smallest components and simplest systems — is the result of constant and ongoing research and development programs both by governments and by private industry to create the most advanced products possible.

One of Canada's most important facilities for the development of new urban transit technology is the Transit Development Centre (TDC) located about 257 kilometres east of Toronto. Established and operated by the Urban Transit Development Corporation Limited (UTDC), a research and development agency of the Ontario provincial government, the centre is a comprehensive facility where the transit community, both of Canada and abroad, can develop new technology.

Another important Canadian source of research and development is Transport
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