

As the coach enters a curve, an accelerometer senses the added lateral thrust and sends the information to a small electronic "black box." This sophisticated device then signals hydraulic cylinders on each truck, instructing them to bank the coach. The banking movement continues until the lateral force declines. Passengers have no sense of curving.

The LRC uses existing tracks, which makes it much cheaper than the special high-speed trains used in some countries. It is also relatively cheap to operate. Its travel time is less than that for autos, buses or conventional trains. Its fuel consumption is lower than all three. It takes an estimated four hours to travel 335 miles, consuming four gallons of diesel fuel per passenger during the trip.

Advanced Light Rail

The UTDC has developed a design for an intermediate capacity transit system capable of carrying between 5,000 and 25,000 passengers an hour. It replaces human operators with computers. Several cars can operate on a track since a central computer keeps them spaced, and stop and start commands are executed automatically by two linear induction motors beneath each vehicle. The cars ride on an electromagnetic field created between the motors and a broad strip of aluminum-coated iron down the middle of the track. The train is pulled along or braked by magnetic attraction or repulsion. Prototypes for vehicles and

major components have been built and tested.

At a cost of \$181 million, the system will be put in place in Toronto in late 1984, with twenty cars running between the end of the Bloor-Danforth subway line and the suburb of Scarborough Town Centre.

Vancouver has ordered the system to be in operation by late 1985, and the State of Michigan has also selected it for its three-mile "people mover" in downtown Detroit.

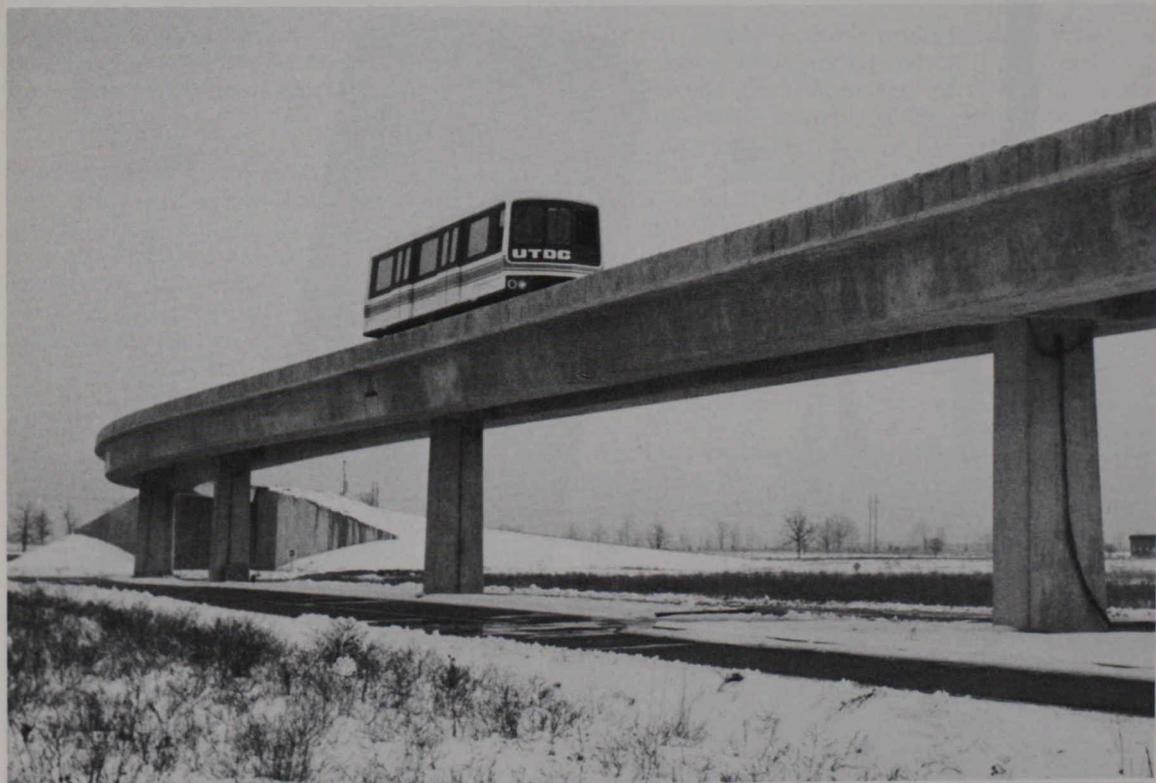
GO Double Deckers

GO-Transit has eighty new bi-level commuter cars built by Hawker Siddeley. They are double-decked and tapering with two levels of passengers in the middle and single levels at the ends. Each car seats 162, 70 per cent more than conventional cars. They are air-conditioned and have a public address system, high-backed seats, carpeted floors, a washroom and a drinking fountain.

Waiting in Style

Ottawa is the second coldest capital in the world, right after Ulan Bator, Mongolia.

It is a painful place to wait for a bus in winter, but since last November some 28,000 Ottawa-Carleton transit riders can wait at home.



An Advanced Light Rail car on the UTDC's test track in Kingston.