## TTC plans street car line extension of subway through Scarborough

## Will use Queen Street trams

## By Thomas Claridge (The Globe and Mail, Thursday, Sept. 18, 1969)

When the last street cars go out of service in downtown Toronto in about 10 years, they will probably head for a new career in suburbia.

A long-term Toronto Transit Commission plan calls for construction of an eight-mile line into Scarborough that would use street cars of the type running on Queen Street.

The line would form an eastward extension of the Bloor-Danforth subway. It would angle its way through the middle of the borough, passing close to its proposed Town Centre on Ellesmere Road and ending near Malvern where Ontario Housing Corp. is to build housing for 40,000 people.

John Sansom, the TTC's director of planning, says the line could easily go a mile farther east to the new Metro Zoo in the Rouge River Valley. Zoo planners anticipate crowds of 50,000 a day soon after the zoo's scheduled opening in July 1973.

Success of the initial line would lead to completion of a 35-mile loop that would cross North York north of Finch Avenue and swing south to Islington Station on the Bloor-Danforth subway. A spur would serve Toronto International Airport.

Why street cars? At a time when public transit bodies elsewhere have long since consigned their trams to museums or scrap heaps, TTC planners see them as the ideal vehicles for the proposed line.

Mr. Sansom says street cars are the only transit vehicles yet devised which can bridge a service gap between buses, which can handle passenger loads of up to 4,500 an hour, and subways, which don't become economical until patronage reaches 20,000 an hour,

"Street cars can cope with 10,000 passengers an hour on a busy street," Mr. Sansom said in an interview, "and 15,000 to 20,000 an hour if they are coupled into trains and have their own right-of-way."

The long-term plan, released last spring, gives the Scarborough line priority after the Spadina and Queen subways, and Mr. Sansom said the TTC would prefer to built it and the Queen line simultaneously.

The TTC proposes to follow a little-used CNR spur and an Ontario Hydro right-of-way to cut land costs and minimize the number of intersections where grade separations would be needed. Apart from about 20 such separations, construction costs would not be significantly higher than for ordinary street car lines.

Traffic projections indicate that along the proposed route rapid transit – defined as a service averaging at least 20 miles an hour – will initially attract peak loads of 10,000 to 15,000 passengers an hour.

The idea would be to provide a frequent, express street car service that would match subway speeds without requiring millions of dollars for stations, equipment and signalling systems.

The trams best suited for the proposed service are 175 built or purchased about 1950 for multiple-unit operation on the old Bloor-Danforth street car line.

William Crabtree, supervisor of the TTC's street car and subway equipment division, says that while they are coupled only into two-car trains for operation on Queen Street, the trams can operate in trains of six or seven cars.

Mr. Sansom said use of 80 cars on the Scarborough route would allow two-minute service by four-car trains during rush hours.

The alternatives to use of street cars would be bus service along a private roadway or some type of monorail. But in each case huge outlays would be needed for new vehicles and it would be almost impossible to convert to full subway service without enormous construction costs and headaches. Since Toronto's street car and subway tracks are the same gauge, the tram service could be converted into a subway operation by building stations, adding a third rail /or power and installing automatic signals.

"The actual changeover could take place overnight with no interruption in service," Mr. Sansom said.

The planning director feels that while the line will be necessary as Scarborough's population grows, its fate is linked with that of the Queen Street subway, which would act to siphon off traffic that would otherwise use the Bloor-Danforth line.

The Bloor-Danforth service is expected to approach peak capacity of 40,000 passengers an hour in a few years, and Mr. Sansom fears the Scarborough line would create serious overcrowding unless the Queen subway is built.

The Queen line as projected would run from Sunnyside along Queen Street as far as Jones Avenue, where it would swing north to intersect with the Bloor-Danforth route at Donlands station and proceed to about Eglinton Avenue. It would replace the Bloor-Danforth and Yonge lines as favored routes downtown from the Don Mills area.

Mr. Sansom said success of the first line might lead to completion of the loop envisioned in the long-range plan. The loop would run from Malvern along a Hydro right-of-way near Finch Avenue as far west as Highway 400, where it would swing south to Islington Station.

One thing that concerns some TTC officials is what would be done if the street cars wore out before a full-fledged subway was practical – there hasn't been a tram built in North America in 15 years. Even without the problem of winter road salt the cars aren't likely to last much more than another 20 years.

The commission has asked its experts to arrive at "a possible design of a suitable lightweight vehicle for this type of high-speed service."

Mr. Sansom said the search hasn't been successful as yet, although one answer might be found in new street cars in use in Europe. Otherwise the best hope is that other North American cities that still have trams will need replacements and production will begin on a new generation of street cars.

Mr. Sansom said transit experts are starting to wonder whether the conversion to buses by most North American public transit bodies was a good idea after all.

In many instances the conversion took place mainly because tracks and equipment had been allowed to wear out and it seemed the cheapest thing to do.

"But there also was a lot of pressure from General Motors and the motoring public," Mr. Sansom said. GM wanted to sell its buses and the motorist didn't like the way street cars impeded his movement.

Mr. Sansom said the TTC's experience has been that the only people who like street cars are the transit riders.

"For instance, it looks as if taking the street cars off Bay Street was a big mistake." he said. "The buses aren't carrying a fraction of the number of people."