After much controversy, Toronto’s major transit investments until 2020 are being finalized. All that is needed now is approval from the provincial government, due in a month or two, of the plans for spending a total of $8.4-billion (in 2010 dollars) by 2020.

Canada’s costliest infrastructure project – a hydroelectric dam in B.C. is second – is the centrepiece of Toronto’s transit expansion plans. It is a 19-kilometre light-rail line along Eglinton Avenue, of which 11 kilometres is to be tunnelled and the remainder is to be on a separated right-of-way run along the centre of the roadway.

According to Metrolinx, the provincial agency charged with implementing the transit improvements, the Eglinton line is to cost $4.9-billion (an amount under review). It is forecast to carry 5,400 passengers per hour in the peak direction in 2031, eleven years after it is scheduled to begin operation.

This peak rate is usually associated with an annual total of some 17 million rides. The annualized capital cost of the line is about $300-million per year ($4.9-billion amortized over 35 years at 5 per cent).

Thus the capital cost per ride will be an extraordinary $17.50 ($300-million divided by 17 million). This will be the effective subsidy per ride if the fares to be paid roughly cover the operating costs.

Subsidizing the Eglinton light-rail at the rate of $17.50 per ride makes no sense at all. But this is what is planned and almost approved.
Four things can be done to reduce the subsidy. The first, charging higher fares, makes as little sense as planning for such a high subsidy because it would actually cause the subsidy per rider to increase. The second, paying the cost down over a longer period has surprisingly little effect. Doubling the debt repayment period from 35 to 70 years only reduces the subsidy from $17.50 to $14.70 a ride.

The third way to reduce the subsidy would be to reduce the cost of construction. There may be a lot of scope for this. Average all-in costs of light-rail lines in North America are in the order of $35-million per kilometre (in 2010 dollars), with the highest cost so far being for the Seattle system – about $110-million per kilometre – which involved extensive tunnelling.

Vancouver’s Canada line, which also has a major underground component, also cost about $110-million per kilometre. However, this is a step up from a light-rail system. It is a “mini-metro” – more like a conventional subway in terms of carrying capacity and speed. Moreover, the Canada Line is fully automated and its operating cost is thus much lower than the Seattle system (or the Eglinton line is likely to be).

Unbelievably, the Eglinton line is set to cost more than $250-million per kilometre. There has never been a good explanation as to why it is to cost so much compared with, say, the Canada line.

The fourth way to reduce the subsidy per ride for the Eglinton line would be to increase ridership. If 2031 ridership were to be four times higher than is being planned for – still well within the capacity of the line – the capital subsidy per ride would come down by 75 per cent. It would still amount to about $4.40 per ride. Some people may still think this amount of subsidy is excessive, but it would be easier to justify in terms of benefits to other users of the corridor and factors such as reduced pollution.

Ridership could be increased by encouraging massive development at and near the light-rail stations, but there is no plan to do this. Indeed, the predominant message associated with a just-launched two-year planning exercise for Eglinton Avenue seems to be that of “protecting neighbourhood character.” This is planning-speak for “preventing substantial development.”

The likely result is that for several decades Ontario taxpayers will be stuck with paying out $17.50 for each ride on the Eglinton line.

The real shame is that investing the additional $300-million a year in current service could transform Toronto’s transit from its near-Third-World operation to something Torontonians could again be proud of.

Richard Gilbert is a Toronto-based consultant who focuses on energy and transportation. His latest book is Transport Revolutions: Moving People and Freight without Oil, written with Anthony Perl.