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It's time for a businesslike approach to transit projects

By Richard Gilbert
Globe and Mail Blog

Toronto Mayor Rob Ford’s plan for two private-sector-funded subway extensions in the city's north end along Sheppard Avenue is likely a non-starter, for the reason given below. Nevertheless, we should be grateful for his proposal because it illustrates two things more powerfully than has been done before in Toronto:

- It shows how the viability of higher-order transit (subway and light-rail) is profoundly dependent on nearby development.
- It stimulates thinking as to how transit planning could become a much more businesslike process.

Contrast Mayor Ford's idea with the proposal announced on March 31 by Ontario Premier Dalton McGuinty to install a tunnelled light-rail transit line for 19 kilometres along Toronto’s Eglinton Avenue, from Black Creek Drive to Kennedy Avenue, and then elevated for 6 kilometres to Scarborough City Centre -- at a cost of $8.2-billion.

Metrolinx, the provincial agency responsible for delivering the Eglinton-Scarborough (E-S) line, has justified the line by saying it will “bring fast, efficient and convenient transit within 500 metres of more than 200,000 people and jobs across the city.”

It doesn’t take rocket science to figure out that even if 200,000 people were to use the E-S line four times a day for 35 years their fares would not cover the cost of construction, not to mention operating costs. Expected ridership for the E-S line has not been published, but from available information it’s reasonable to suppose that, without new development, the daily total will be about 100,000 rather than 800,000 rides.

This means that the amortized capital cost of the E-S line per ride will be about $14, which would rule out the line if it were a business venture because no one would pay that high a fare. The line will work only because every penny of the capital cost will be subsidized.

The capital cost of the Sheppard line extensions will have to be covered mostly from the fare box. The extensions will be viable only if there is development in the vicinity of stations that yields sufficient transit riders to provide needed fare revenue.

Applying business principles to transit development -- as must be done for the Sheppard line extensions -- requires the application of **six rules**:

1. Develop a comprehensive 35-year business plan in today's dollars. This is to ensure that all costs and revenues are properly balanced. The budget period should match the lifetime of much of the infrastructure.

2. Include amortized capital costs and operating costs. Considering both kinds of costs in relation to revenues serves as a reality check. If the costs of debt retirement wildly exceed possible revenues -- as for the E-S line -- the project should probably not go ahead as proposed, even if the debt is charged to taxpayers. Both operating and capital costs can be reduced by planning for a fully automated (driverless) system, as is now the norm in Europe.

3. Note that except for subsidy almost all revenue will be from the fare box. Over 35 years, other sources will be relatively trivial, including developers' contributions and higher property tax yields.

4. Estimate the development required to generate fares that will cover capital and operating costs. For subways, some 40,000 persons or jobs are required within a square kilometre of each station. Usually, the high ridership required to justify higher-order urban transit will come from walk-in traffic rather than transfers from other routes. Nearby development generates new riders; improved connectivity mostly benefits existing riders.

5. Estimate the subsidy needed if the required density cannot or will not be provided. Subsidy is not to be disparaged even if strict business rules are applied. Remember that *subsidy is a substitute for density*. If only 80 per cent of the required density can be built -- because of market factors or local concerns -- a 20-per cent subsidy of total costs will be needed.

6. Establish a time-limited development agency to assemble land and deliver the project. A government agency can assemble land for intensified development more effectively than the private sector. The agency could use the blunt tool of expropriation. A better strategy is to pay premium prices. Landowners who won't sell for market value will usually sell for twice market value. The premium will be a small element of a comprehensive 35-year budget.

Mayor Ford's plan for Sheppard line extensions will likely not work because he won't have the fortitude to apply these rules. We should still thank him for imagining that transit planning can be conducted in a businesslike manner.

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.*