

REVITALIZING UNION STATION

A Toronto showpiece for emerging railway age

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World oil production will likely begin a long, inexorable decline during the next decade. Fuel prices could rise to startling levels as a result. Aviation would be the hardest hit because there is no evident alternative to the kerosene that fuels jet aircraft. Rail, by contrast, could experience a massive resurgence because it can be powered by electricity, which can be generated without oil or other fossil fuels.

Toronto's response in the face of this prospect has been to propose investing about \$1 billion in revitalizing its severely dilapidated main rail terminus, Union Station. This sum may be contrasted with the \$4.4 billion being spent on Toronto's airport, which handles fewer passengers each day than Union Station and, in a decade or two, could handle many fewer.

The present plans of the City of Toronto and the regional train operator, GO Transit, are ill-conceived in almost every respect. The result – if the current plans are implemented – will be to replace one dreary train-travelling experience with another.

Three features make the current plan deeply flawed:

The present track arrangement is maintained. This means keeping the existing narrow platforms and requiring that passengers be kept off them until trains are ready for boarding. Imagine how Toronto's or Montreal's subway, or Vancouver's SkyTrain, might work if passengers were kept off platforms until their trains arrived. A better arrangement is described below.

Most of the low concrete roof over the platforms is being maintained. For hardly more than the cost of restoring this ugly relic of the steam age we could have a soaring glass canopy such as those that grace Europe's grandest stations. A high airy roof would allow erection of wide bridges allowing better access to platforms as well as viewing of trains – a feature that turns a station into a destination.

The hugely inefficient platform arrangement is being maintained. For a few tens of millions of dollars, a central concourse could be created at platform level, readily accessible from Union Station's magnificent ticketing hall. Some tracks could be removed, made unnecessary by improved passenger flows from the new concourse that could dramatically reduce trains' turnaround times. Most remaining tracks would dead-end into the central concourse. They would be served by wide platforms made possible by the track removal.

The most egregious feature of the city's plan is the proposed excavation of a sub-basement to be used for retail purposes. The estimated cost of developing this cramped

retail space is more than \$600 per square foot, which would put it among the most expensive retail spaces in the world. The possibility of charging rents high enough to cover this extraordinary cost is remote. Whoever sponsors this feature will likely lose most of their investment.

For less than a third of the cost of excavation, the existing basement area could be transformed into an airy retail plaza. With wide platforms and a platform-level concourse, the basement would no longer be needed to detain passengers before arrival of their trains. There could be direct stair, escalator and elevator access from the retail plaza to the platforms. Many passengers would enter and leave the station through the basement plaza, helping ensure the commercial viability of the retail space.

The total cost of these much superior arrangements would be similar to that of the current proposals, with the advantages that they would result in enjoyable experiences when visiting the station to travel by train or to watch trains, and they would provide a return on investment.

A larger return could be secured by allowing substantial development over the tracks immediately outside the station area. Removal of some tracks, as proposed above, would allow for ready installation of supporting pillars and ensure little interference with train operations during construction. Indeed, with good planning all that is proposed above could be achieved with almost no interruption to train services.

Replacement of the low concrete roof over the platforms would require electrification of train operations within the station area because a glass roof could prevent adequate dispersal of diesel fumes. As diesel fuel becomes expensive, the whole rail system will be electrified. Before that, diesel locomotives could switch to electric operation just before entering Union Station much as diesel locomotives do before entering New York's Grand Central Station. Electric operation would make for a much more pleasant station environment and for more efficient use of platforms because electrically powered trains could move away from them more quickly.

Toronto City Council's commitment to its inferior plan is one barrier to achieving a truly splendid revitalization of Union Station. Another is GO Transit's desire to keep passengers far away from platforms until trains arrive. Yet another is the federal government's designation of the present roof over the platforms as a heritage item. These barriers may well prevent the changes required to create a truly splendid rail station.

There could be a silver lining among these clouds. If the present plan is implemented the result could be so dreary and dysfunctional that when the inevitable rail resurgence occurs there will be moves to provide Toronto with a new and magnificent intercity rail station. This could be located a few blocks east or west of Union Station, not quite as close to the downtown but nevertheless readily accessible.

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