



A VIA Rail train leaving Montreal, bound for Ottawa or Toronto. These three cities are located within the Quebec City-to-Windsor corridor, which accounts for over 90 per cent of VIA Rail's ridership in Canada. VIA Rail photo

Modernizing Passenger Rail: A Generational Imperative

Yves Desjardins-Siciliano

Canada's economic prosperity is dependent on our ability to move our country's resources, both goods and people, efficiently. As Canadian freight railways have kept Canada's resource and manufacturing economy growing by moving close to \$250 billion of goods annually, our country's knowledge and information economy demands that we move our people with the same world-class efficiency. VIA Rail's President and CEO believes that means modernizing our intercity train service.

Since the completion of the trans-continental railway more than a century ago, our transportation network on water, road, rail and in the air has benefited from many advancements. Canadian ingenuity has produced some world-leading companies in all aspects of transportation: from train and plane manufacturing to civil engineering of waterways, railways, bridges and roads; from profitably running former deficit-making, government-owned North-American freight railways and global airlines to financing airports and passenger railways around the world—not to mention our ability to harness renewable energy through waterways. That same ingenuity should fuel our confidence that we can do the same for intercity passenger train service. But

there is an additional concern that should transform this ambitious vision into a generational duty: making sure our economy is sustainable for future generations by reducing our economy's carbon footprint.

In 2014, Canada's transportation sector was responsible for 24 per cent of national greenhouse gas emissions. Fully 52 per cent of those emissions were produced by private vehicles using our extensive road network. In Canada's most densely-populated area, the Quebec City-to-Windsor corridor, close to 15 million people live, work or study. Within the heart of the corridor, between the major urban centers of Toronto—Ottawa—Montreal, over 80 per cent of intercity trips are by car. Reducing this number by 10 per cent, by moving those travellers from their car to the train, would be equivalent to eliminating 2.4 million cars from Canada's total car pool (which had 21.7 million cars in 2014).

Passenger trains are among the greenest ways to travel in terms of energy consumption per person. In 2007, a trip between Toronto and Montreal by train consumed 50 per cent less energy than by car. In 2015, following the overhaul of 53 of our locomotives, VIA Rail lowered its fuel consumption by an additional 27 per cent and the resulting emissions by 25 per cent. But we can do even better by moving to electric energy where possible: the Quebec City-to-Windsor corridor.

Passenger trains in Canada have always run on tracks designed and built to move heavy freight. Even after its creation in 1977, VIA Rail continued to run its trains on freight railway infrastructure. Over the years, as Canada's economy grew, so did freight traffic on railways running heavier, longer and slower trains. This growth has made the historic cohabitation of freight and passenger trains on the same infrastructure impractical for travellers, inefficient for both freight and passenger railways and, possibly, an impediment to the prosperity of our knowledge

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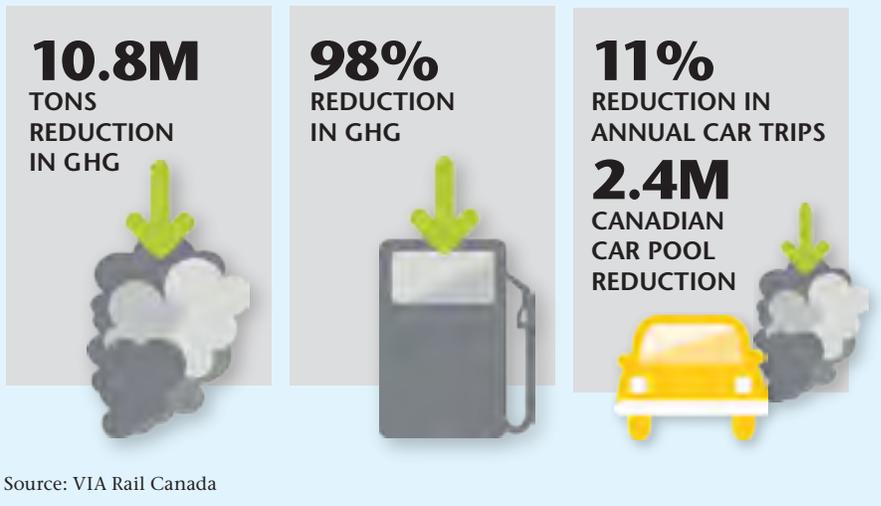
and services economy. Some studies have evaluated the cost of lost productivity due to people driving on congested roads as high as \$8 billion annually. Studies also show that the biggest determining factors in what mode of transport passengers choose are frequency (number of options per day) and reliability (on-time performance), both of which have been negatively affected by sharing the rails with freight traffic. It is quite reasonable to assume that a modernized intercity train service would help reduce the productivity deficit by enticing more people to take the train through better schedules and improved reliability. Conversely, if nothing were to be done to uncouple passenger and freight operating environments, by the time Canada celebrates its sesquicentennial next year, its intercity passenger service will offer

fewer frequencies, take more time to arrive at destination and arrive on time less often than it did in 1967. And things would only get worse in the years to follow, including a growing annual operating deficit to be covered by the taxpayer.

Commuter rail agencies in Canada have built a strong case for owning the infrastructure on which passenger services operate. Metrolinx in Toronto owns nearly 80 per cent of its GO Train routes while the Agence métropolitaine de transport in Montréal owns 27 per cent of its tracks. Since 2010, both agencies have seen their ridership grow by 24 per cent and 15 per cent respectively, while VIA Rail ridership fell 8.5 per cent over the same period. By operating on their own infrastructure, they are able to offer more frequent, faster, and more reliable service.

High frequency rail's impact on passenger GHG emissions

OVER THE NEXT 30 YEARS, WITH ELECTRIFIED RAIL:



Over the past few years, VIA Rail has purchased rail corridors when possible, in the Ottawa region and around Windsor. Ownership has allowed VIA Rail to improve its infrastructure to allow faster and more comfortable trips for its passengers. As well, on VIA Rail-owned infrastructure, passenger trains run on-time over 95 per cent of the time compared to 64 per cent of the time on mixed freight and passenger infrastructure. Today, VIA Rail only owns 2 per cent of the track on which it operates across Canada. However, it owns close to 17 per cent of the infrastructure it uses in the Quebec City-to-Windsor corridor.

Over the past 30 years, numerous studies have evaluated the feasibility of building high speed rail in the corridor. All studies concluded that the endeavour would be too expensive for Canadians as both taxpayers and travellers. Most importantly, a high-speed service would mainly link metropolitan areas and essentially replace air service without stopping in towns and villages in between.

Finally, it would not address the important issues raised above: road congestion, loss of productivity and carbon emissions, all of which demand that the modernization of an intercity train service be designed to remove people from their cars and make mobility sustainable.

In its first budget, the new federal government recognized many of the social, economic and environmental challenges facing Canada. Rather than limiting its focus on the risks such challenges present, it is proposing to seize the opportunities they create.

Modernizing intercity passenger rail service presents such an opportunity. It can provide a greener transportation infrastructure that facilitates home ownership by creating greater commutable distances to metropolitan areas and improve our economy by increasing labour productivity—all while lowering carbon gas emissions. In his budget, Finance Minister Bill Morneau acknowledged the need for improved passenger rail in Canada. He allocated more than 30 million dollars

to renovate stations and maintenance facilities. He provided funding for VIA Rail to determine the requirements of its next-generation fleet in the corridor. Most importantly, the budget acknowledges VIA Rail's proposal to build and operate rail infrastructure dedicated to passenger service in the corridor and provided funding to Transport Canada to support VIA Rail's high-frequency rail proposal.

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Over the coming months, we will finalize the detailed cost estimates for both the new fleet and the rail infrastructure. By using rights of way that would be dedicated to passenger rail, VIA Rail could immediately tackle many of its operational constraints as well as target the two factors that are most important to passengers when choosing a travel option: frequency and reliability. With its own infrastructure, VIA Rail would control the number of frequencies offered and schedule trains at times where its customers need them. With up to 18 daily departures, passengers could rest assured that there would always be a train about to leave for their destination. That greater flexibility would reduce their reliance on their car. Using a new train fleet capable of running at full conventional speed of 110mph/177kph, trip times would decrease by an average of 28 per cent. Based on current performance on its own rail infrastructure, we should expect on-time arrivals to improve

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VIA Rail owns numerous assets in the corridor: several stations and two major maintenance facilities; an important fleet (although aging); proven technology; an established brand, loyal ridership and goodwill. These, combined with a new fleet and the financial returns made possible by a more commercial exploitation of the corridor, can be leveraged to attract Canadian public pension funds to invest in the build-out of this new infrastructure. Over the past 15 years, Canadian public pension funds have invested in passenger railway operations all over the world. They have developed expertise and they can appreciate the potential presented by this opportunity.

Reasonable projections show that VIA Rail's ridership could grow threefold, which would transform its subsidized business model into a profitable enterprise. By developing a project that can be profitable and, ultimately, self-funding, VIA Rail can aim to minimize the use of taxpayer funds and attract experienced public pension funds to invest in the infrastructure. In fact, the profitability model is such that, over time, VIA Rail's share of profits in the corridor could offset the costs and resulting operating deficits of its regional services, further reducing its burden on Canadian taxpayers.

Modernizing VIA Rail by allowing it to build a green rail transportation infrastructure would stimulate economic growth while lowering carbon emissions and reducing VIA Rail's financial impact on taxpayers. It is a transformational imperative for a new generation of Canadians—the right project, at the right time. **P**

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