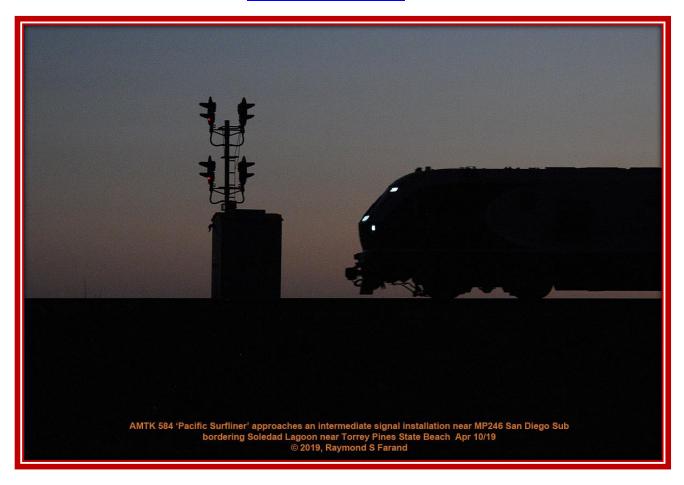
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High-Performance Rail for Canada: No Razzle Dazzle, Just Solid Service

By

Tony Turrittin

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Why doesn't Canada have a network of modern, swift, affordable, efficient and reliable passenger trains, like virtually every other nation – large and small – around the world?

The answer to that question could fill a book. And it soon will. Transportation analyst, policy adviser and author Greg Gormick is currently at work on just such a tome, titled *A National Dream Reborn?* – with a heavy emphasis on that question mark. At the core of his tale of inspiring achievement and heartbreaking derailment is a concept known as high-performance rail (HPR) passenger service, which he endorses as the logical means to save, improve and expand our skeletal network of deteriorating passenger trains.

While politicians and some dreamy-eyed advocates call for high-speed rail (HSR) similar to the Japanese Shinkansen and French Train à Grande Vitesse (TGV) systems, Gormick points out these didn't just miraculously arise from virtual rail passenger deserts, which is what Canada has become over a period of more than half a century.

Gormick calls for HPR, which is a proven middle ground between Canada's current and deficient VIA Rail Canada service, which largely operates on tracks shared with freight trains. HSR operates on all-new electrified lines that must be built from scratch at a very high cost. HPR incrementally improves all aspects of the existing conventional service and builds on what little public funds have already been invested in it. Operating at progressively higher speeds with modern cars and locomotives on tracks shared with freight trains, HPR offers:

- Increased frequency
- Reduced door-to-door travel times
- Enhanced comfort and onboard amenities
- Better on-time performance and all-weather reliability
- Improved, fully-accessible stations
- More and better connections to local transit

A major advantage of HPR is that it isn't a "big bang" approach that takes years to deliver any benefits when the entire project is completed, as with HSR. HPR delivers improvements at each step along a phased pathway to full and greatly expanded service.

HPR is often called a practical and affordable "higher speed" option for today, which can lead the way to more expensive and lengthy HSR construction in the future. To a certain extent, Canada once did have HPR trains, dating all the way back to the fleet-footed Canadian Pacific (CP) steam-powered trains on the Toronto-Detroit, Montreal-Quebec City and Calgary-Edmonton routes in the mid-1930s. The speedy, self-propelled Budd rail diesel cars bought by CP and competitor Canadian National (CN) set a brisk intercity pace in the 1950s. And then there were the even faster conventional CN Rapidos and star-crossed Turbos in the 1960s.

But Canada's participation in what was a global and gradual move to HPR was derailed on several occasions. The reasons were two: (1) government interference and (2) a total lack of political will. As much as technology and funding played roles in the development of all the other HPR networks that evolved in some cases into HSR lines in other countries, it was government commitments that made them all roll.

Thanks to decades-long commitments by the governments and the railways of the more enlightened nation's with which we compete, HPR is already at work on dozens of rail corridors around the world – with more under development. On some, HPR's success has led to the construction of all-new HSR lines and its continuation as an important feeder and a connector for the cities bypassed by the HSR trains.

In the U.S., HPR is now at work on 15 corridors in the Northeast, Midwest and California. Several extensions to these routes and all-new ones are under construction or being planned.

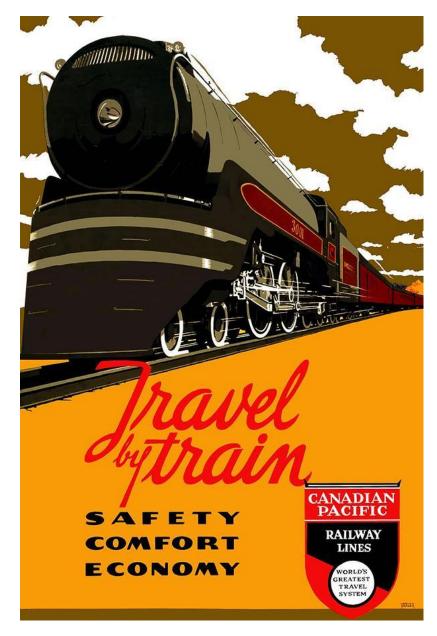
U.S. HIGH-PERFORMANCE RAIL CORRIDORS – 2020

ROUTE	KM	ROUNDTRIPS	FASTEST TRAVEL TIME
Brunswick-Portland-Boston	232	5	3:10
Boston-New York City-Washington	735	High Frequency	6:10
Springfield-New Haven	100	12	1:23
Albany-New York City	225	8	2:30
Philadelphia-Harrisburg	166	8	1:45
Washington-Richmond	174	9	2:15
Raleigh-Charlotte	277	4	3:10
Miami-West Palm Beach	106	17	1:00
Detroit-Chicago	450	3	5:00
Chicago-Milwaukee	138	7	2:30
Chicago-St. Louis	454	5	5:30
Seattle-Portland	299	5	3:30
Sacramento-Oakland-San Jose	213	15	3:04
Oakland-Bakersfield	504	5	6:20
Los Angeles-San Diego	205	13	2:55

There is little doubt HPR would succeed in Canada ... if there was a government commitment and funding. It is ideal for VIA's Quebec-Windsor Corridor, home to 18 million potential passengers and Canada's economic heartland. More than three million Central Canadians already travel by train in the Quebec-Windsor Corridor annually. Based on worldwide experience, HPR could be expected to easily double that ridership within a decade.

HPR could also be applied to other corridors, such as Calgary-Edmonton and Halifax-Moncton-Saint John. It could connect with the HPR routes in Canadian-American border regions.

Canadian HPR would start with a \$3-billion investment to provide faster and more frequent service than VIA can now deliver. This initial investment would upgrade CN, CP and VIA tracks, improve signal systems and eliminate many dangerous grade crossings. The result would be more travellers, higher revenues, lower costs and improved safety. The objective would be 200-km/hour service on most routes. A second \$3-billion wave of improvements would build on the first to cut the journey times further, boost train frequency and attract even more travellers.



CANADIAN HPR OF THE PAST: The steam-powered Canadian Pacific Jubilee trainsets of 1936

This should be compared with the \$7 billion Canadian airline unions are demanding Ottawa shell out in so-called loans to airlines to deal with the severe drop in traffic and revenue due to the current pandemic. This would be on top of the public billions that have gone to create and shore up Canadian air travel ever since Liberal Minister of Transport C.D. Howe ordered CN to create Trans-Canada Airlines (now Air Canada) as a foundation for his pro-air policies in 1935.

Considering that social distancing is easily achieved with passenger trains through rigorous cleaning, improved ventilation systems, the safe spacing of passengers and the addition of more cars to the trains, an aviation investment of this size – which pales beside the \$123 billion governments have shelled out worldwide to keep air service aloft – further public funding for such an environmentally and economically unsustainable mode of travel is questionable.



The convenience and cost-effectiveness of a phased HPR approach to resolving our pandemic travel challenges, car-driven urban gridlock and sprawl, and Canada's hideous record on transportation emissions and energy usage would be massive. Other nations are plunging heavily into HPR in the face of the pandemic, while also maintaining a reduced level of air service that generally connects directly with HPR, HSR and urban rail networks. But not Canada.

HPR would deliver vastly improved travel times and departure choices compared with the skimpy low-performance VIA service, plus downtown-to-downtown convenience.

POTENTIAL CANADIAN HPR CORRIDORS

ROUTE	KM	ROUNDTRIPS	FASTEST TRAVEL TIME
Halifax-Saint John	445	4	3:30
Quebec-Montreal	272	10	2:30
Montreal-Ottawa	186	15	1:45
Montreal-Toronto	539	15	3:45
Ottawa-Toronto	446	15	3:15
Toronto-London	185	10	1:30
Toronto-Windsor	360	6	3:00
Winnipeg-Regina	575	2	6:00
Regina-Saskatoon	262	4	2:30
Regina-Calgary	765	2	8:00
Calgary-Edmonton	310	6	2:30
Vancouver-Seattle	249	4	3:00

CURRENT AND FORMER VIA RAIL CANADA CORRIDORS

ROUTE	KM	ROUNDTRIPS	CURRENT FASTEST TIME
Halifax-Moncton-Saint John	445	0	N/A
Quebec-Drummondville-Montreal	272	5	3:11
Montreal-Alexandria-Ottawa	186	6	1:50
Montreal-Kingston-Toronto	539	6	4:59
Ottawa-Kingston-Toronto	446	10	4:14
Toronto-Niagara Falls-Buffalo	172	1	4:30
Toronto-Brantford-London	185	5	2:07
Toronto-Stratford-London	195	2	3:21
Toronto-Brantford-London-Windsor	360	4	4:15
Winnipeg-Brandon-Regina	575	0	N/A
Regina-Saskatoon	262	0	N/A
Regina-Moose Jaw-Medicine Hat-Calgary	765	0	N/A
Calgary-Red Deer-Edmonton	310	0	N/A

Ironically and fortuitously, the first wave of equipment to implement a Canadian HPR solution is already on order, but for a wildly improbable scheme cooked up by federally-manipulated VIA.

Breech birthed out of a plan Gormick designed in 2011 for now-defrocked Conservative MP Dean Del Mastro to restore service on the Toronto-Peterborough route – and then perversely expanded by the MP, his riding association cronies and the local chamber of commerce – it morphed into a dream scheme to extend the service east to Smiths Falls and Ottawa over a rollercoaster-like, unpopulated 150-km right of way abandoned by CP in 1971.

A now-departed VIA CEO twisted Gormick's politically-compromised plan into what it calls 160-km/hour high-frequency rail (HFR) for the Montreal-Ottawa-Toronto triangle. To boost its political and business community attraction, VIA arbitrarily expanded it to include Quebec City.

The stated objective of VIA's HFR proposal is to separate passenger and freight traffic to eliminate the conflicts that often arise because of competition for track time and capacity, as well as differences in operating speeds. The theory is intriguing, but implementing it would be expensive, time consuming and largely unnecessary. Freight and passenger trains happily share tracks at speeds of more than 200 km/hour on HPR routes around the world. The key is incrementally and economically adding capacity for both types of traffic. Creating a full, passenger-only route would easily cost \$100 billion for the Quebec-Windsor Corridor alone.

Nonetheless, the federal government is throwing nearly \$100 million at consulting studies of this largely unexplained proposal. You could be forgiven if you suspected this is just to delay making any decision until the whole idea falls by the wayside and nothing has been done to improve the existing VIA services.



One benefit that will come of this is through the order VIA wisely placed in __ with Germany's Siemens Mobility for 32 five-car Venture trainsets for delivery beginning in 2022. This \$1.5-billion contract is part of a wave of North American orders for these 200-km/hour diesel-electric trains, 10 of which are already operating between Miami and West Palm Beach. More than 300 Charger locomotives, which reduce emissions by more 90 percent compared with previous models, are now on order, with some in service on various Amtrak intercity and regional commuter routes. Derived from the highly successful Railjet trains now zooming along major routes in Austria, the Czech Republic and Hungary, the Venture trainsets can be easily converted to electric operation using the Siemens Cities Sprinter electric locomotives now serving as the workhorses of Amtrak's electrified Boston-New York-Washington Northeast Corridor.

In his 2018 report, *SouthwestLynx: Integrated High-Performance Transportation for Southwestern Ontario*, Gormick praised the Siemens trains for their ability to swiftly, affordably and reliably deliver HPR service on current or future rail corridors throughout Canada.

In the end, it's not so much the hardware as the software that's the roadblock to improve HPR service in Canada; it's the governance. Here, too, the proven approach is on display in daily service in the U.S., particularly California. Using a combination of federal and state funding to fuel locally-managed, cross-jurisdictional projects, the joint powers authorities (JPAs) employed on three routes in the Golden State are incrementally revolutionizing rail transportation in one of the most auto-centric regions in America.

The Capitol Corridor JPA describes this governance structure's application on the San Jose-Oakland-Sacramento route as "a partnership among the six local transit agencies in the eight-county service area, which shares the administration and management of the Capitol Corridor. Services are developed with input from our riders, private and public sector stakeholders, along with the partners who help deliver the Capitol Corridor service – Amtrak, the Union Pacific Railroad, Caltrans and the various agencies and communities that make up the Capitol Corridor."

It's time for Canadians to face facts and cease being dazzled by razzle-dazzle rail schemes dangled by politicians in front of them at election time – and then invariably dropped afterward. VIA hasn't worked out and never will in its top-down, politically-dominated form. New JPA-style governance, new equipment, a new HPR approach and political will are required to finally give Canada a network of modern, efficient and effective rail passenger services.

How likely is this to occur?

The September 23, 2020 Speech from the Throne provides a depressing clue. In it, the Trudeau government announced that "to further link our communities together, the Government will work with partners to support regional routes for airlines. It is essential that Canadians have access to reliable and affordable regional air services. This is an issue of equity, of jobs, and of economic development. The Government will work to support this."

On the subject of rail passenger service – HPR or otherwise – there was not a word.

Meanwhile, south of the border, the HPR investment and growth strategy continues. One month after Ottawa uttered not a word about rail's role in a post-pandemic Canada, the U.S. Federal Transit Administration awarded the Michigan Department of Transportation funding for further improvements to its diesel-powered, 176-km/hour Pontiac-Detroit-Chicago Wolverine Corridor. This is on top of the millions in federal and state investments that are incrementally upgrading the Pontiac-Detroit-Chicago route to handle more trains faster, more frequently and more cost-effectively.

Sic transit gloria mundi.

Tony Turrittin is a retired York University sociology professor. For more than four decades, he has been a member, director and/or funder of transportation advocacy groups such as Transport 2000, the Clean Train Coalition, the St. Clair Right-of-Way Initiative for Public Transit and the U.S. Rail Passengers Association.

