

Province of Ontario High-Speed Rail consultation.

February 10 2016

Comments and observations from February 9th London session.**General**

The success of many high-speed rail projects (250kph+) in Europe and Asia is without doubt. They have provided significant economic, social and environmental benefit. Many of these systems are highly developed and most, but not all, used reserved land corridors. In most instances the cost/benefit is well considered before detailed planning takes place.

The MTO consultation session in London was informative and outlined the processes the Province will take before deciding to proceed with a true, all-electric high-speed project or a more modest 200kph version to allow a diesel propulsion option. The primary concern is that the Province will continue to apply human and financial resources to the project when a more assertive approach could provide an expedited conclusion to project viability.

With a positive outcome the study could move to detailed local issues. A negative outcome should lead immediately to the consideration of other available options for the enhancement of passenger rail services in South Western Ontario.

Project cost

The pre-feasibility report provided by FCP, a British-based consultancy, suggests a capital cost for the project of approximately C\$2.5bn for the Toronto to London section. This may be low by a factor of between 10 and 15. In other words, the actual project cost may be in the region of C\$25bn to C\$38bn or possibly as high as C\$50bn allowing for inflation.

Britain's HS2 project web-site states a GBP19.4bn (C\$38.8bn at current exchange rates) cost for the 194km Phase 1 leg between London (Euston) and Lichfield (near Birmingham) based on a 2013 estimate. This is a similar distance to Toronto/Kitchener/London.

The HS2 Phase 1 route in Britain has many similarities to the proposed HSR route in Ontario including dense urban areas at both ends and valuable agricultural and rural lands in between. Assuming property expropriation, existing rail infrastructure modification and land acquisition costs are approximately 30% lower in south western Ontario, it would seem that C\$25bn is a more realistic, low-end estimate for the Province's HSR project. It also assumes the cost of physical equipment and engineering services are similar in Canada and the UK.

Given the disparity between the pre-feasibility and UK empirical figures, priority must be given to establishing an accurate order of magnitude cost for the Province's HSR project. It would very quickly indicate whether the cost/benefit ratio is acceptable, the project is actually

affordable, and whether planning and policy work on the project should continue or be redirected to study other options.

In order to achieve this as quickly as possible the Province should engage the services of the following subject matter experts (SMEs):

- Deutsche Bahn (German HSR operator).
- SNCF (French HSR operator).
- RENFE (Italian HSR operator).
- HS1 (UK HSR operator with significant Canadian ownership).
- VIA Rail (Canada). Key stakeholder.

Their brief should be to conduct a physical, high-level review of the proposed route with regard to probable acquisition and construction costs plus that of rolling stock, track, signalling, stations and all other costs with which they have practical and historical experience. China has been omitted from the list as their costs are unlikely to be representative for a Canadian project.

Input from SMEs should be managed and analysed by an independent third-party, reviewed by the Province and then placed in the public domain.

Constructability

The route options should also be examined very carefully for constructability. Factors could include:

- Conflicts with existing rail, highways and existing surface and sub-surface utility infrastructure.
- Conflicts with commercial and residential infrastructure.
- Legal and cost issues related to land acquisition including willingness of landowners to sell required properties.
- Consideration of 320kph and 200kph options (higher-speed requires more physical space).

Constructability in this instance is not the same as an Environmental Assessment. Rather, it qualifies the route for further study in the event basic constructability, in terms of major physical barriers, is economically and respectfully possible. Constructability difficulties usually result in higher costs. They should be captured in the initial project budgeting process and not contribute to surprise cost over-runs.

Options

In parallel with the high-level qualification processes discussed above it is essential that the Province considers possible improvements to existing, intercity passenger rail corridors in South-western Ontario. It should be focused on restoring VIA (or VIA/Metrolinx partner services) to those levels existing in 1982 before subsequent pruning by the federal government of the day. This could include new rolling stock offering operating cost and environmental advantages and improved passenger appeal. Express services approaching transit times similar to those available from true high-speed infrastructure should be a high priority.

A financial and technical partnership with CN on significant conventional rail infrastructure improvements is needed to reduce or eliminate train conflicts, raise passenger train operating speeds to 175kph with enhanced acceleration and braking while improving existing station facilities. CN could benefit through higher average speeds and increased freight capacity with the removal of bottlenecks. Shareholder value would be protected or enhanced.

This option has the potential to deliver superior passenger experiences on an incremental basis more quickly and at considerably less cost than the proposed new HSR route. It is also compatible with Amtrak high-performance rail plans for New York and Michigan (there are currently no U.S. HSR plans for states bordering Canada).

Summary

South-western Ontario, along with neighbouring Niagara, has transportation infrastructure that fails to meet evolving economic, social and environmental realities. There are already signs of structural distress related to poor infrastructure in every economic sector from technological innovation to culture and tourism.

The time lag from today to the full implementation of the proposed provincial high-speed rail project will span some 15 -20 years. Almost certainly we will witness further loss of industry, reduced competitiveness and greater social hardship in the interim. An accelerated, fact-based decision-making process and constructive dialog between our Federal and Provincial governments and the private sector could do much to mitigate this while aiding our climate-change initiatives and providing a much-needed economic stimulus.

End.

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