Infrastructure Opportunities Through Co-Production in the Railways

Asia-Pacific Gateway & Corridor Initiative Roundtable

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Outline

Canadian Pacific

- The Causes of Rail Infrastructure Capacity Constraints
- CPR Direct Capital Expenditures and Investment for Capacity Expansion
- Improvements in Service Design and Execution
- Co-production
  - – General
  - – Generic Examples
  - – Specific Examples
- Implications for Railway Competition
- Overall Conclusions

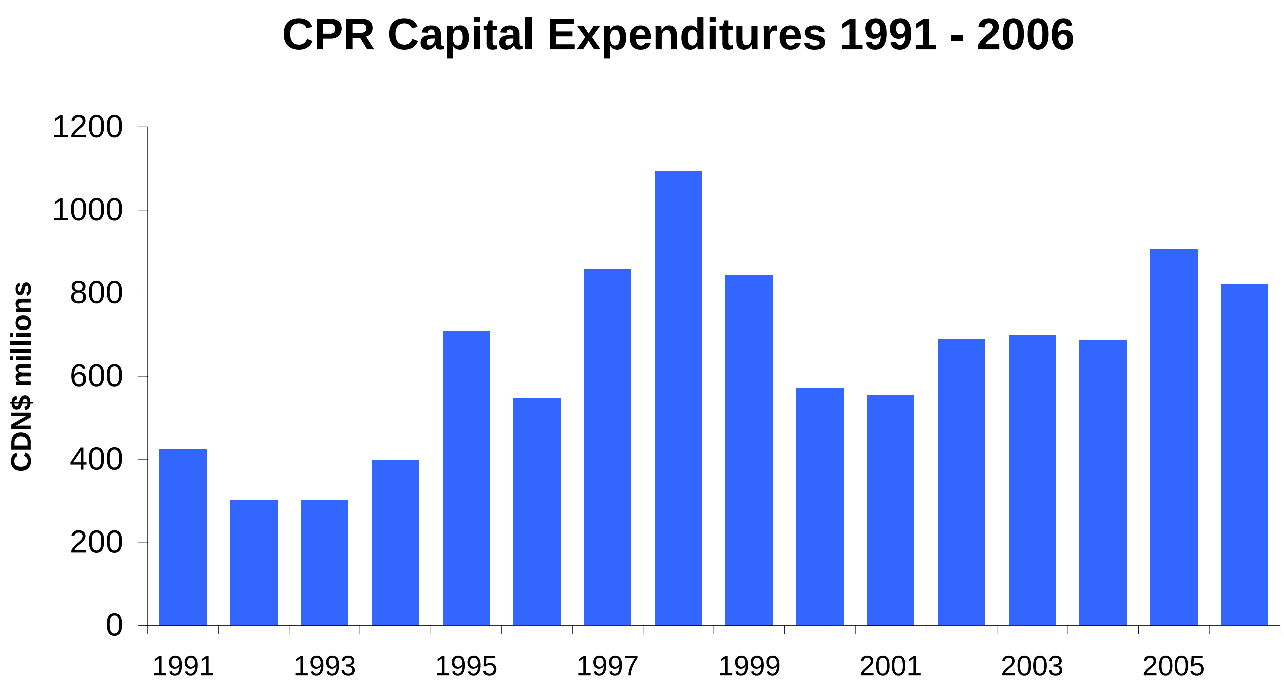
Causes of Rail Infrastructure Capacity Constraints

Canadian Pacific

- A very significant increase in demand for rail transport has arisen over the past several years from the economic revival of China – both a demand for the outbound movement of resource products, especially from western Canada, as well as a demand for the inbound movement of manufactured goods in containers through the west coast of North America
- This increase in demand has also been driven in part by recent strong economic growth in North America
- This increase in demand follows a long period in which the railways of North America have rationalized their excess railway infrastructure following the deregulation of the industry in the 1980s and 90s
- The combination of the above developments implies that the railways of North America find themselves with the need to increase rail infrastructure capacity significantly in key corridors, to meet the future anticipated demands
- The CPR response to overcoming infrastructure capacity constraints involves:
  - Increased direct capital investment
  - Improvements in service design and execution
  - Co-production agreements with CN and other railways

Direct Capital Expenditures

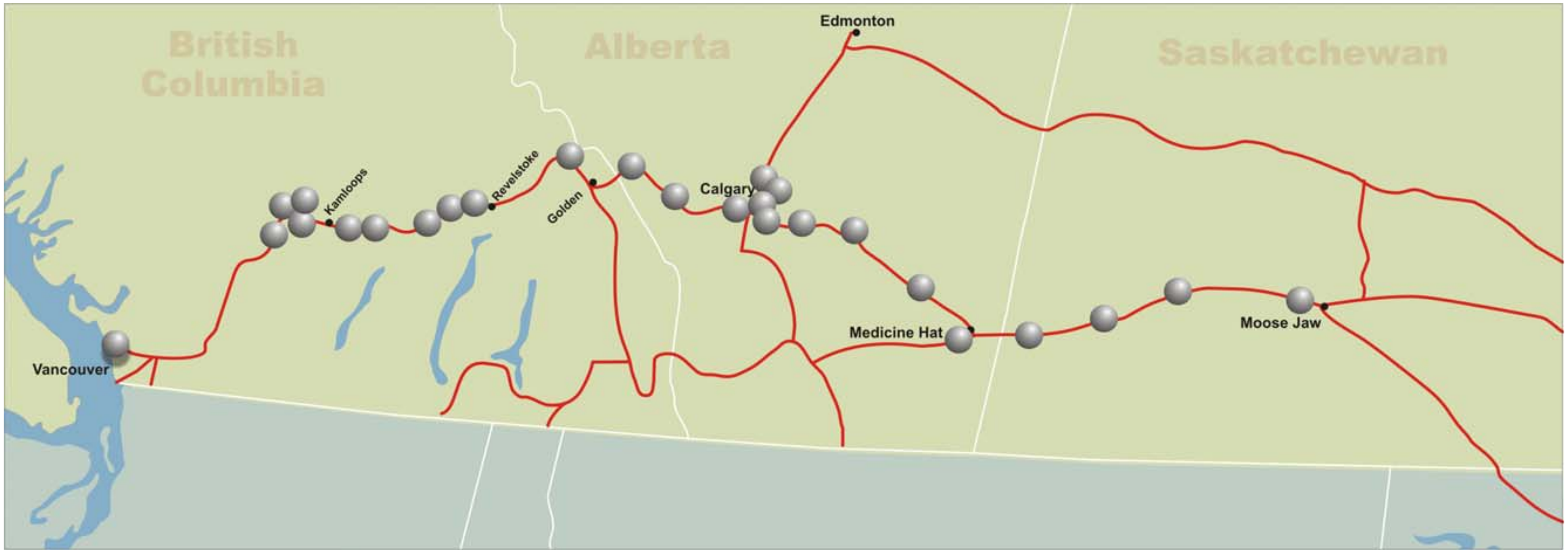
Canadian Pacific



- Total CPR capital expenditures over the past 15 years average $640 million per year
- Railways are the most capital-intensive industry in North America, typically spending an average 18% of revenues on capital expenditures annually

Investment for Infrastructure Capacity Expansion

Canadian Pacific



- An expectation of regulatory stability led to $160 million of extra CPR expansion projects in 2005
- The expansion was completed in the fall of 2005 and involved 25 projects:
  - 12 projects between the Port of Vancouver and Calgary, and 10 projects between Calgary and Moose Jaw, to extend sidings and lay sections of double track
  - 3 projects between Edmonton and Calgary to extend sidings and build a new siding
- A further potential multi-million capital expansion program will be considered for Western Canada for the period 2007 and beyond, depending upon demand

Improvements in Service Design & Execution

- CPR has created capacity to more efficiently handle increased volumes through key service design and execution principles:
  - A strive for balance and smoothing of flows by design
  - Run a scheduled 7x24 operation
  - Design with velocity in mind – minimize car handling
  - Attack waste, bottlenecks and variability within rail control
  - Create a culture of discipline, accountability and execution excellence
  - Make “lean” and “velocity” part of the culture to help drive continuous improvement

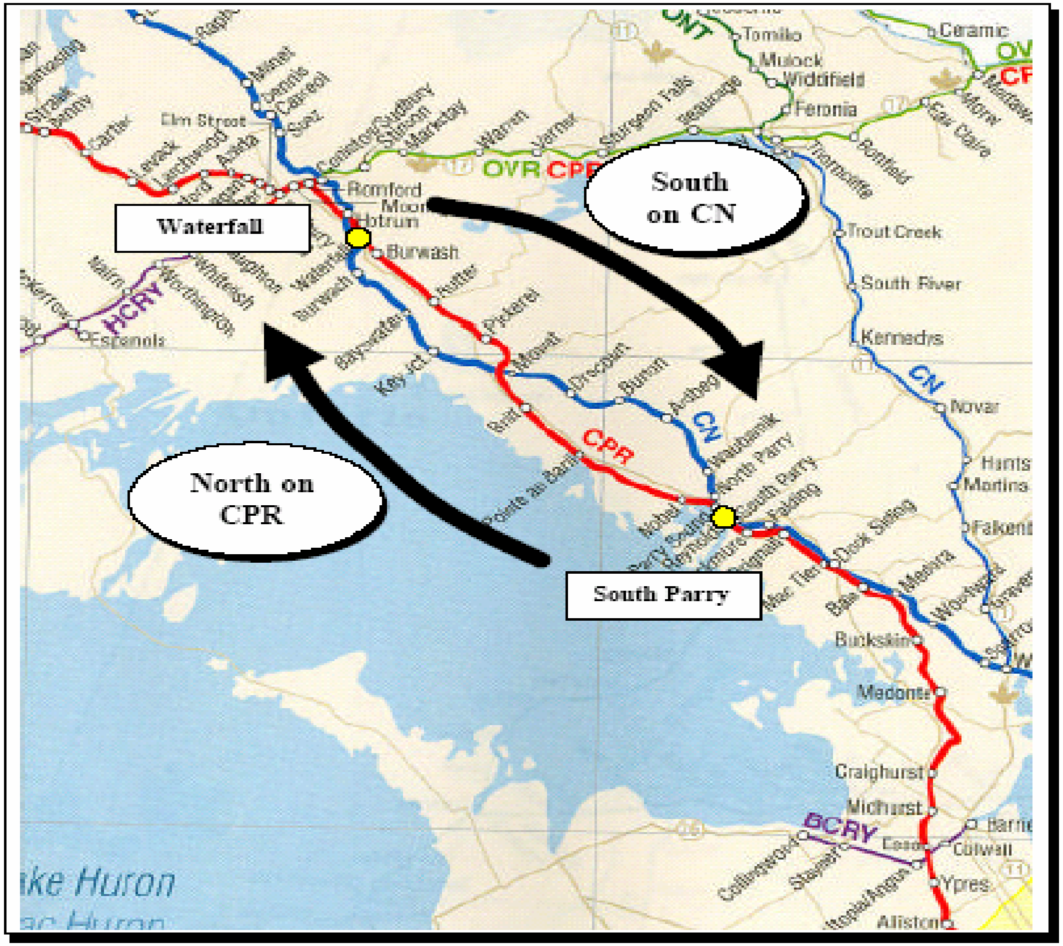
CPR is also undertaking to improve supply chain coordination with its partner Ports and Shipping Lines

- Co-production is a form of commercial access in the North American rail industry that has existed for many years
- It covers various types of commercially-negotiated agreements between railways to improve system efficiency without impacting rail labour
- Ultimately, the overall impact of co-production agreements is improved service to shippers
- While the details vary from one agreement to another, each is meant to achieve a combination of purposes related to better service to shipper, including:
  - Increased line capacity
  - Improved equipment utilization
  - Increased efficiency of operations
  - Elimination of redundant infrastructure or facilities
  - Provision for alternative operations at times of accidents or weather incidents
- Co-production agreements do not reduce the choice of shippers to alternative rail carriers, nor do they have any impact on the level of competition between the parties to the agreements

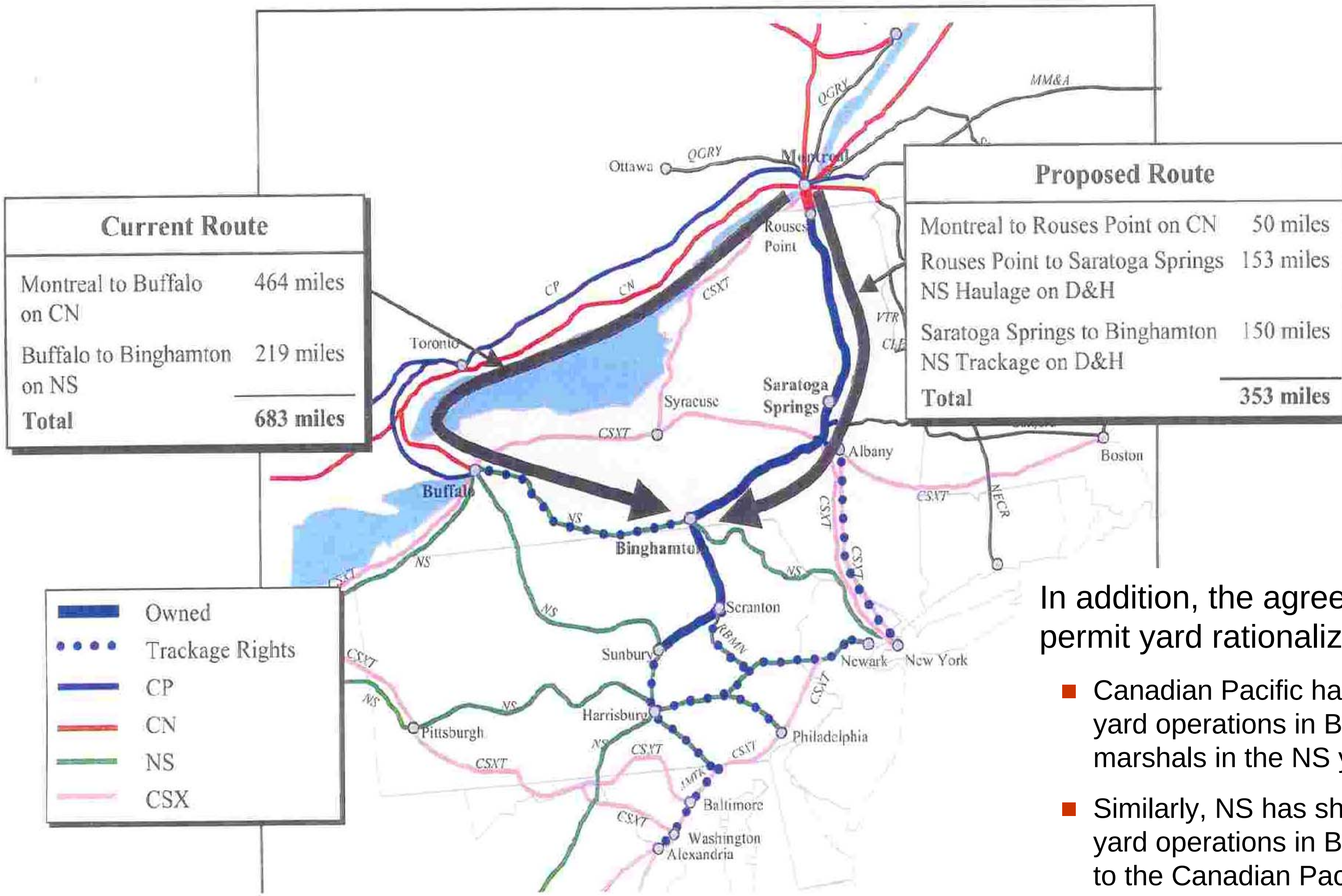
- Co-Production Agreements include components such as:
  - **Directional running**
    - When two railways have parallel routes each being used in both directions, an agreement can be negotiated to run the trains of both railways in one direction on one route and in the other direction on the other route
  - **Haulage rights, overhead operating rights, or running rights in Canada; trackage rights in the US**
    - The use of a rail line of one railway by another railway for a fee
  - **Rationalization** of duplicate, underutilized yard facilities and rationalization of duplicate, underutilized rail lines
  - **Reciprocal access to two different bottleneck locations**
    - Such arrangements are also imposed by interswitching regulations in Canada, up to a distance of 20 miles
  - **Yard-to-Yard interchange**
    - This involves interchanging traffic within yards rather than at intermediate and more inconvenient locations
  - **Reciprocal access over line-haul segments on a corridor**
    - This refers to joint use of segments of line over a given corridor when there is more than one route

Directional Running Zone

- This agreement followed the highly successful Fraser Canyon directional running zone
- The Georgian Bay zone stretches over about 100 miles



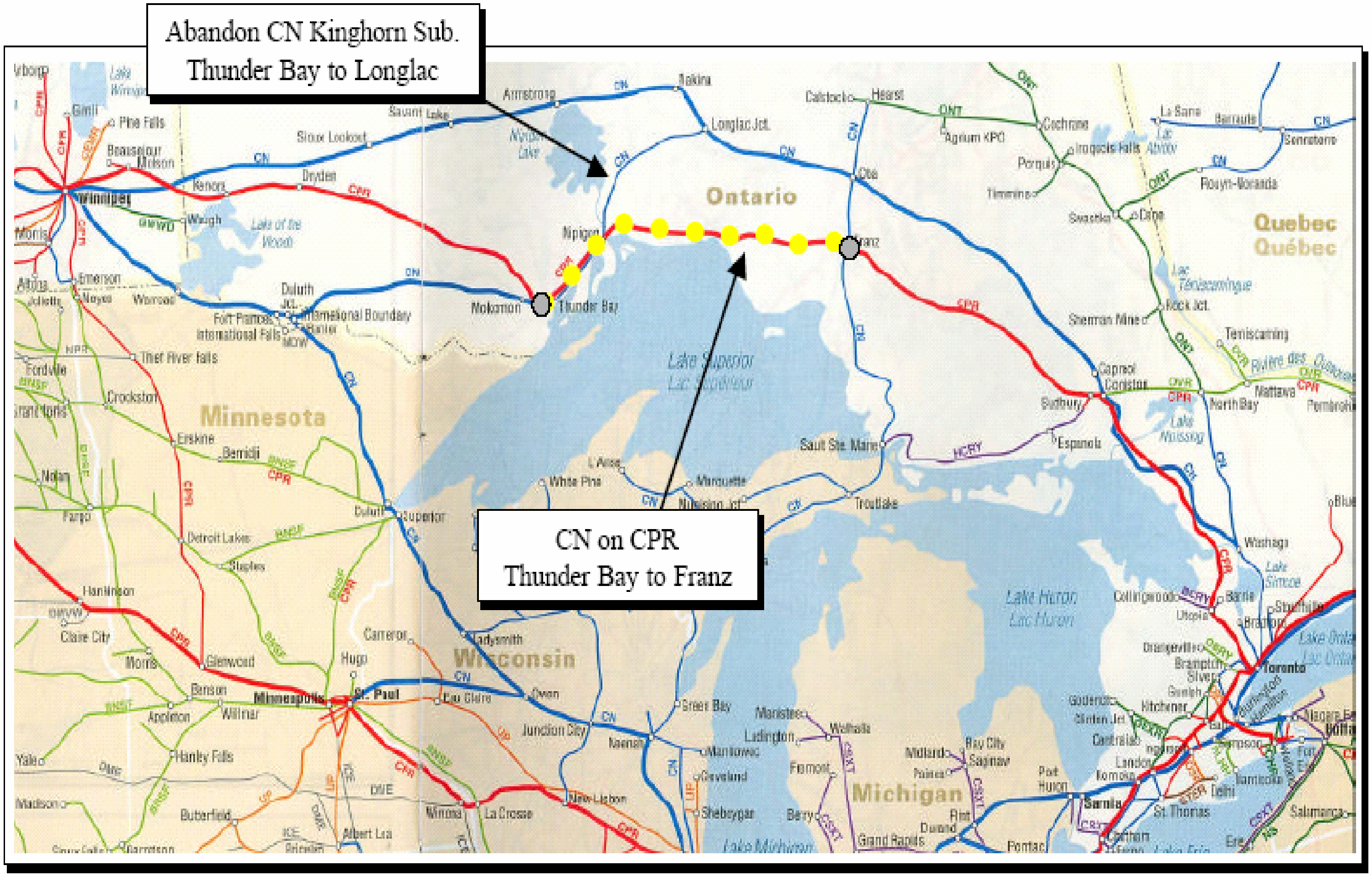
Haulage Rights, Trackage Rights & Yard Rationalization



In addition, the agreements permit yard rationalization:

- Canadian Pacific has ceased yard operations in Buffalo and marshals in the NS yard there
- Similarly, NS has shifted its yard operations in Binghamton to the Canadian Pacific East Binghamton yard

Haulage Rights & Associated Line Rationalization



- Canadian Pacific granted CN haulage rights over the 300 miles between Thunder Bay and Franz
- With the abandonment, CN maintains transportation service to affected shippers

Between Detroit & Chicago, IL

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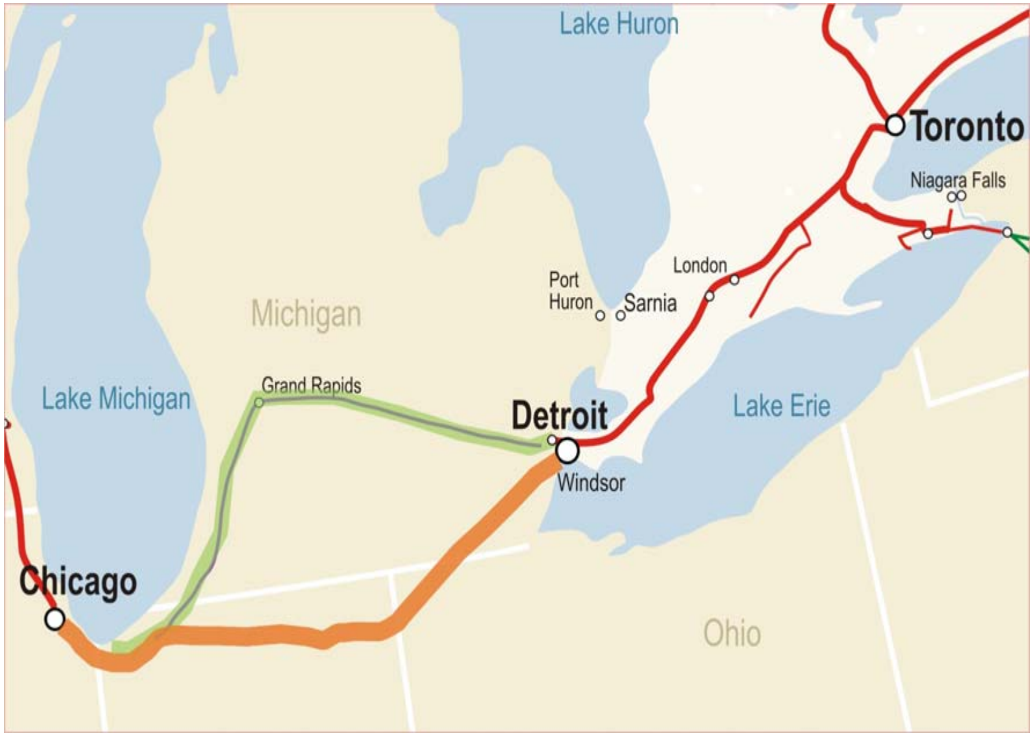
Trackage Rights



NS Route   CSX Route

- Implemented August 10th, 2005
  - Phased implementation with all trains on new route by December 15th
  - Allows Canadian Pacific to consolidate volumes on one route
  - 33% increase in maximum allowable train lengths
  - 15 - 25% reduction in transit times
  - Reduced marshalling and greater flexibility in train design

Vancouver Gateway

Co-Production

- Implemented March 8, 2006
  - CPR serves South Shore; CN serves North Shore
- Increased fluidity by:
  - Eliminating all CPR CN Interchange traffic in the Vancouver Area (except Fraser Wharves).
  - Fewer mainline trains into Coquitlam; better yard access.

Implications for Railway Competition

- Direct capital expenditures and improvements in service design enable CPR to serve its existing shippers better and to handle "organic" growth in traffic volumes – there are no competition issues
- Co-production agreements do not reduce shipper choice, nor do they impact the level of rail competition between the parties. Nevertheless, they do represent collaboration – or what are sometimes referred to as alliances – and as such they need to conform to the Canadian Competition Act and/or the appropriate antitrust legislation in the US
- See the 2006 Proceedings of the CTRF for a paper demonstrating that co-production agreements between railways do not raise valid competition concerns for shippers, or the applicable competition authorities in Canada or the US

Conclusions

- Overall, current developments at CPR to overcome capacity constraints – either through direct capital investment, improvements in service design, or through co-production agreements with other railways – have positive implications for service to shippers
- Furthermore, none of these developments raise valid competition concerns for shippers or the applicable competition authorities in Canada or the US
- CPR continues to explore further opportunities for co-production with other railways that will expand infrastructure capacity – note, in passing, that the CN strike has adversely affected CPR through the co-production agreements
- However, there will still be a need for further capital expenditures if demand continues to increase as anticipated
- Such further capital expenditure also requires:
  - Regulatory stability;
  - Improvements in tax equity between modes
  - Partnerships with governments: Example, Pacific Gateway Initiative
- Overall, there is a need to recognize the vital role that railways make to national economies

Discussion

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