Rail Freight Service Review

Submission to the Transport Canada Rail Freight Service Review Panel

April 30, 2010
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Executive summary

Vancouver is home to Canada’s largest port and North America’s most diversified port, trading $75 billion in goods with more than 160 trading economies annually. The Port sits at the heart of the Vancouver Gateway, with almost 95 percent of the Port’s total volume serving Canadian import and export markets. As an agency of the federal government, Port Metro Vancouver has a unique perspective of the supply chain, which connects Canada to global markets.

The Vancouver Gateway’s customers and stakeholders depend on rail service as a critical link in the supply chain for export and import cargoes. Every participant in the supply chain must be accountable to each other for service standards that optimize output while respecting the need for all supply chain participants to earn a fair commercial return that motivates ongoing investment.

Port Metro Vancouver strongly supports the Rail Freight Service Review Process and has prepared this submission based on consultations and evidence gathered from more than 50 different organizations including rail customers (e.g. shippers, shipping lines) and other stakeholders including terminal operators, railways and industry associations.

While the rail freight system currently serving the Port works reasonably well at a broad level, there is a lack of consistent and reliable day-to-day, week-to-week and month-to-month rail service to the degree necessary to meet customer and stakeholder needs and to maximize Canada’s trade growth potential. This imposes additional costs and uncertainty upon supply chain participants and increases the financial risks of current and future investments in the port system. It also threatens the Vancouver Gateway’s international reputation, competitive position and ability to respond to market opportunities. To address these issues, we propose the following recommendations:

1. **Develop and implement Level of Services Agreements**

   Develop and implement Level of Services Agreements between the railways, railway customers and other stakeholders that address service-related matters.

   Provide a commercial dispute resolution mechanism to address problems between railways and rail stakeholders.

   Encourage commercial initiatives such as expanded utilization of rail assets and networks through commercially negotiated co-production agreements.

2. **Implement independent performance monitoring**

   Implement independent performance monitoring to increase the transparency of the supply chain by measuring, monitoring, evaluating and reporting on performance to identify opportunities for improvement.

3. **Amend the Canada Transportation Act**

   Amend the Canada Transportation Act to confirm port authorities and terminals have standing to bring a complaint before the Agency.

   Expand existing Level of Services provisions to enable the Agency to proactively address service-related issues to support the desired outcome of adequate, consistent, reliable and cost-effective rail services.

All three recommendations reflect our preference for a largely commercial approach to defining, measuring, monitoring and enforcing rail service matters. In those cases where a regulatory solution is cited, it is generally not Port Metro Vancouver’s first preference and is offered as an alternative solution, to be implemented later, if the commercially-inspired recommendation has failed to produce the necessary results or desired changes.

Port Metro Vancouver’s goal is to develop the most reliable and consistent supply chain in North America and our success critically depends on Canada’s rail network. Railway performance, capacity, and service are top strategic priorities and we see the Rail Freight Service Review Process as an integral part of our mission to lead the efficient and reliable movement of cargo and passengers in a manner that supports Canadian growth and prosperity.
Port Metro Vancouver recognizes the importance of export bulk commodities and breakbulk cargoes as critical to jobs and Canada’s future economic wellbein.

Introduction

Vancouver is home to Canada’s largest port, which sits at the heart of the Vancouver Gateway. The Gateway depends on rail service as a critical link in the supply chain for export and import cargoes. Port Metro Vancouver therefore strongly supports the Rail Freight Service Review Process and has prepared this position paper for the Minister of Transport, Infrastructure and Communities pursuant to the Review Panel’s call for submissions.

The positions taken herein are Port Metro Vancouver’s own. They are consistent with our Supply Chain Program that promotes accountability for defined performance standards for all service providers in the supply chain, which connects global value chains and business networks.

In preparing this submission, Port Metro Vancouver carried out an independent fact-based review to supplement the research done by the federal government and to document a Vancouver Gateway perspective on rail freight service. Some 50 organizations were consulted, including rail customers and other stakeholders (e.g. shippers, shipping lines, terminal operators), Canadian National Railway Company (CN), Canadian Pacific Railway (CP) and industry associations. The nature, extent and impacts of rail service and service issues, as well as railway perspectives regarding their ability to serve the Vancouver Gateway, were examined. Those surveyed represented in 2008 nearly 94 million tonnes of bulk, breakbulk and containerized cargo moving through the Port worth about $75 billion a year in trade to the Canadian economy.
The overall economic output of ongoing operations related to the Vancouver Gateway across Canada is:\(^1\)

- 129,500 jobs
- $10.5 billion in Gross Domestic Product (GDP)
- $22 billion in economic output
- $6.1 billion in wages

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**Port Metro Vancouver: a champion for the Gateway**

As an agency of the federal government, Port Metro Vancouver has a unique perspective of the supply chain, which connects Canada to global markets.

Port Metro Vancouver is a self-sufficient business and custodian of port land on behalf of Transport Canada, its primary “shareholder”. Port Metro Vancouver pays more than $8 million a year to federal and local governments in the form of stipends and payments in lieu of property taxes. It reinvests all profits back into gateway initiatives and infrastructure priorities.

Consequently, Port Metro Vancouver has a uniquely broad perspective and a direct interest in improving the overall performance and reputation of the Gateway.

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\(^1\) 2008 Economic Impact Study prepared for Port Metro Vancouver by Intervistas Consulting and revised January 12th, 2009.
Strategic context

Why we are here

In May 2006, the Coalition of Rail Shippers (CRS) Group, in a letter to the federal Minister of Transport, Infrastructure and Communities advised that the failure of Canada’s two major railways – CN and CP – to provide acceptable levels of service was a serious concern that needed to be addressed with some urgency.

At the time, shippers were experiencing difficulties in meeting contractual commitments due to inadequate and deteriorating rail service and, as a result, they submitted that the existing legislative remedies provided neither a quick nor effective means to hold the railways accountable.

Representatives of the CRS and senior Transport Canada officials, along with senior policy advisors to both the Ministers of Transport and Agriculture, met that same month to discuss revisions to the *Canada Transportation Act* (CTA). Shippers wanted to negotiate potential amendments to the rail freight shipper protection provisions of the CTA to address what they perceived to be an imbalance in bargaining power between railways and rail customers.

The 2008 CTA amendments introduced a limited number of changes to address the balance of power issue, but were seen by many as a compromise outcome. Government, however, committed to undertake a comprehensive review of rail service. Consequently, there is a high expectation among shippers and other supply chain participants of meaningful results from the Review to provide effective solutions to their rail service issues.

The Vancouver Gateway supply chain

The supply chain serving the Vancouver Gateway is part of a complex and highly competitive global distribution network. The Port provides market access to a diverse range of import and export cargoes for some 160 different economies. As noted in Table 1, the Port handled 102 million tonnes of cargo in 2009, making it the largest port in Canada and fourth largest in North America in terms of tonnage.

Table 1: Port Metro Vancouver cargo profile (2009)

<table>
<thead>
<tr>
<th>Port Metro Vancouver cargo profile (2009)</th>
<th>million tonnes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Breakbulk</td>
<td>14.6</td>
<td>14.3</td>
</tr>
<tr>
<td>Bulk</td>
<td>67.7</td>
<td>66.4</td>
</tr>
<tr>
<td>Containers(^2)</td>
<td>19.3</td>
<td>18.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>102.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

By 2050, Port Metro Vancouver expects the Gateway to handle 150 million tonnes of cargo. The performance of this major trade gateway critically depends on Canada’s rail network. Improving railway performance, capacity, and service are top strategic priorities for Port Metro Vancouver.

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\(^2\) Port Metro Vancouver container traffic totaled 2.15 m TEUs (inbound, 1.12 m TEUs; outbound 1.03 m TEUs) in 2009, representing 11% of Canadian and U.S. west coast container port traffic.
Customers and stakeholders of the Vancouver Gateway depend on rail service. Most bulk traffic – representing some two-thirds of the Port’s annual tonnage – is 100% dependent on rail as the only economically viable means of transport to the Port. Also, approximately 80% of the containerized import cargo leaves the region directly or indirectly by rail.

In today’s global trade environment where success depends on time (speed to market), reliability and market access, supply chain performance can be a key differentiator of competitive success. Supply chain participants, including ocean carriers, port terminals, railways and truck carriers all must respond by providing cost effective, reliable and consistent service from end-to-end in the supply chain.

Figure 1 illustrates the supply chain serving the Vancouver Gateway. The supply chain system includes 26 cargo terminals and more than 50 off-dock freight facilities that perform import/export distribution and trans-loading, cold storage, freight forwarding and other functions within Port Metro Vancouver’s jurisdiction. In such a complex and inter-related system, the actions of any one participant can impact the operation and performance of any other supply chain participant as well as the collective performance, profitability and reputation of the entire network.

Within the Vancouver Gateway there are five railways that own rail infrastructure (Figure 2): CN, CP, Burlington Northern Santa Fe (BNSF), Southern Railway and BC Rail. Four other railways operate in the region including VIA Rail, West Coast Express, Amtrak and Rocky Mountaineer. In addition, BNSF handles unit trains of coal, on behalf of Union Pacific, to the Gateway. Port Metro Vancouver’s view therefore is that any federally regulated Class 1 railway doing business in the Vancouver Gateway should operate under the same conditions.
Railway infrastructure in the Vancouver Gateway is physically constrained by geographic factors. Each railway also has its own operating and financial objectives, rail track and equipment ownership rights and labour practices. It is therefore no simple task to employ rail assets in a manner that will provide the levels of rail service required or expected by the market in a consistent and reliable manner.
Consultation results

Several common themes emerged from Port Metro Vancouver’s consultation process with rail customers and stakeholders. Consultation was carried out between November 2008 and February 2010.

Figure 3: Satisfaction rating of customers and stakeholders surveyed by Port Metro Vancouver

![Satisfaction rating graph]

**Rail customer and stakeholder perspectives**

Rail customers and stakeholders generally fall into two categories (see Figure 3); both view rail as the backbone of the supply chain:

1. The first group (16%) includes those satisfied or somewhat satisfied with rail service. A key defining characteristic of this group is that they feel they have a stronger ability to negotiate rates and services with the railways. This group includes large volume shippers that have invested in transportation assets (e.g. railcars) to increase control and overall service quality.

2. The second group (84%), representing the majority of rail customers and stakeholders interviewed by Port Metro Vancouver, is dissatisfied or very dissatisfied with rail service. They cite the need for more consistent and reliable on-time service and the need for service improvements at loading and unloading points. This group holds the view that there is only limited, and in many cases, no rail-to-rail competition. The group includes both large and smaller volume shippers, as well as shippers who have no viable economic transport alternative to rail available to them.

Many rail customers and stakeholders indicate that they feel they are at a significant disadvantage because of the railways’ market dominance. Some express the view that the current railway “conveyor belt” intermodal operating model, based on balanced capacity, is not in the best interest of Canada’s economy and is fundamentally at odds with world trade that is seldom balanced.

Others think the current rail operating model should give more consideration to the needs of shippers and other stakeholders. Economic output of bulk shippers alone is more than $81

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3 About 16% of port customers and stakeholders are satisfied with rail service and 84% are dissatisfied, based on 2009 tonnage shipped for those stakeholders interviewed by Port Metro Vancouver. The total sample size in our process represents about 82% of the total port tonnage.
billion a year\(^4\). If the retail sector were included, the economic output of rail customers and stakeholders in Canada would easily exceed $100 billion.

A specific concern expressed by bulk shippers is that their products receive a lower priority during times of capacity constraint when the overall demand for rail services is high. This has a major impact on their ability to ship to forecast requirements and can compromise future shipping contracts with commodity buyers.

Industry concerns about rail capacity and on-time delivery performance are of particular note in years like 2009, when rail demand was relatively weak. Such service problems are typically associated with periods of strong and competing demand for rail services. These problems would not have been anticipated in a lower volume year.

Rail service concerns noted in our consultation fall into two main categories:

1. Delivering the right number of cars at the right time; and,

These findings are consistent with the NRG Research Group’s *Survey of Shippers* that was prepared for the Review.

The most common issues cited by rail customers and stakeholders are:

- Excessive and uncompetitive dwell times for container cargoes due in part to a chronic undersupply of railcars relative to demand;
- Lack of ability by the railways to handle short-term fluctuations in demand caused by unforeseen market upswings and/or supply chain disruptions;
- Poor communications, often with no reasonable advance notice from the railways to terminal operators regarding operational changes\(^5\);
- Unilateral reduction of switching services and/or train schedules at port terminals;
- Lack of visibility and accountability regarding the status of railcars and shipments within the Port, including local rail yards;
- Increased capital and operating costs (in some cases, millions of dollars) and uncertainty for terminals and other supply chain participants, including “excessive” ancillary charges;
- Lost business and trade opportunities that are difficult or impossible to recover; and
- Negative perceptions among international customers over the past several years about the reliability of the Port due in large part to persistent rail service issues.

**Railway perspectives**

Class 1 railways operate about 50 one-way trains a day, on average, to and from terminals and local rail yards in the Vancouver Gateway. The Gateway represents about 15% of CN’s overall system freight volume and 30% of its intermodal units (including domestic and

\(^4\) Source: *A Comparison of Contributions to the Canadian Economy of Key Bulk Commodity Shippers and Rail Freight Carriers*, University of Toronto Rotman School of Management, October 2009. Figures refer to Canadian gross domestic product for CN, CP and four bulk shipping industries (grain, coal, wood manufacturing and pulp and paper manufacturing).

\(^5\) The *Survey of Shippers* similarly found that “improving communications was the most frequently mentioned action that shippers felt would improve overall service,” NRG Research Group, November 30, 2009, pg. 40. This includes “better communications so they [railways] know what their customers’ needs are.” (pg. 56).
international traffic). Vancouver is, proportionately, an even more important gateway for CP, accounting for about 35-40% of its overall business. CP handles relatively more bulk commodities in Vancouver than CN.

The railways emphasized the complexity of serving the Vancouver Gateway, which arises from several factors:

- The large number of terminals and customer locations (more than 60 for one carrier alone);
- Geographic and infrastructure constraints, (e.g. rail bridges, insufficient track lengths near/at terminals);
- Cargo diversity and seasonality of demand;
- Variability of ship arrival schedules and level of non-conformance of shipping lines to schedules; and
- The operation of several different railways in the region.

In addition, the railways noted that supply chains are getting longer and more complex. A key challenge is how to accommodate supply chain demand by providing adequate capacity and services at a competitive cost.

Some rail customers and stakeholders operate 24/7 within the Port, while others do not. Since the railways operate 24/7 they believe customers and stakeholders should operate in the same way in order to smooth out demand, maintain fluidity, reduce costs and promote reliability. The railways see 24/7 operations as a key aspect of the capacity and productivity needed to sustain the growth of the Vancouver Gateway.

CN and CP initiated directional running through the Fraser Canyon in 2000. Since then there have been other successful bi-lateral co-production initiatives in the Vancouver Gateway designed to reduce rail operating costs and improve productivity. Between 2004 and 2006 CN and CP launched several initiatives to improve the movement of freight through the Port. CP operates all trains of both railways and switches traffic to/from terminals on the south shore of Burrard Inlet while CN operates all trains and switches traffic for north shore terminals. CN and CP also have an operating agreement to share switching of intermodal trains at Roberts Bank.

The railways generally agree on the need to continue operational cooperation through co-production to improve the performance of the Vancouver Gateway. Other key railway concerns are the need for:

- A commercial, proactive and cooperative approach as opposed to regulatory intervention;
- Improved shipping line performance to schedule, and actions to reduce bunching of vessels;
- More accurate and timely demand forecasts, particularly for containers, in order that the railways can develop and deliver reliable operating plans;
- A clear definition of contingent (“surge”) capacity required to meet system needs and who should pay for it (i.e. the current rail system is based on a fleet sized to accommodate average weekly demand); and
- A fact-based approach using a few simple performance metrics that show the performance of each key stakeholder in the supply chain.
Rail freight service performance assessment

The federal government commissioned several studies to support its review of rail freight service\textsuperscript{6}. NRG Research Group’s qualitative survey concluded that “there is a significant dissatisfied shipper population in Canada” and that “two-thirds of respondents (62\%) said they have suffered a serious financial impact as a result of poor service from Canada’s Class 1 railways”\textsuperscript{7}.

QGI Consulting’s quantitative order fulfillment and transit time performance assessment reported that CN and CP have accurate demand forecasting processes and that car supply performance in fulfilling shipper demand for empty grain cars was 97-98\% over a 2-year period. For merchandise traffic the annual fulfillment rate was 86\% for CN and 73\% for CP. No car supply results were published for intermodal traffic since it was excluded from the analysis. QGI Consulting also found that many railway customers receive highly variable transit times\textsuperscript{8}.

At a broad level, the railways’ performance record as reported by QGI Consulting appears reasonably good. However, QGI Consulting also reported that railway performance on a week-to-week basis is “much lower” and exhibits “significant variability” relative to car supply. For example, grain shippers only received 90\% of the cars they ordered at a specific location “half the time”\textsuperscript{9}. This is an important point because the operational performance of The Gateway and therefore the Port’s reputation and ability to retain and attract business in all sectors is not based on averages. Daily and weekly service performance reliability is an essential customer requirement.

Port Metro Vancouver established a Memorandum of Understanding with CP in April of 2005. Over the last 5 years, the agreement has led to improved communication between the Port and CP and progress regarding rail service levels in the Gateway. Port Metro Vancouver recognizes recent agreements with both CN and CP to allow the use of their transit data in the last month as a further positive step, but significant service concerns remain. This data sharing agreement will serve to considerably improve performance monitoring of the intermodal traffic that moves through the Gateway.

The recent appointment of a new CEO at CN has led to changes in approach to service issues and customer concerns. Port Metro Vancouver welcomes this change, along with rail customers and stakeholders, and is hopeful that this will improve communications, relationships and performance. It has been suggested that the increased focus on performance and stakeholder issues by both railways in the last few months is a direct result of the Rail Freight Service Review. Regardless, the improvements are welcomed.

Port Metro Vancouver uses a series of supply chain scorecards to track the port logistical system using performance metrics such as vessel on-time performance, railcar supply, import container dwell times and rail transit times. The evidence from our analysis suggests

\textsuperscript{6} There have also been several recent independent reviews of rail service in North America. In its July 2009 \textit{North American Railroad Shipper Survey}, RBC noted: “some shippers were very vocal about the fact that rail service has actually declined significantly. These shippers feel that they have seen an ongoing trend of deteriorating rail service across all railroads because they appear to focus more on revenue than on their customers.”

\textsuperscript{7} “Survey of Shippers”, NRG Research Group, November 30, 2009.

\textsuperscript{8} “Analysis of Railway Fulfillment of Shipper Demand and Transit Times”, QGI Consulting, March 2010.

\textsuperscript{9} Ibid.
two main types of service problem: delivery of sufficient railcars to meet daily demand; and consistency of delivery as it impacts on-time service\textsuperscript{10}.

**Intermodal container cargo**

Inconsistent and sometimes excessive import container dwell time is one of the most contentious service issues in the Vancouver Gateway. It is affected by several different factors including weather such as high winds and snow, equipment issues, holiday shutdowns, late vessel arrivals, vessel bunching and rail service, including car supply and delays at local rail yards.

Dwell time at Vancouver Gateway terminals is measured as the elapsed time of a container movement, from vessel discharge to railcar loading. Our performance target – based on agreements with CN, CP and Port container terminals – is 90% of containers departing from marine terminals within 3 days of discharge from vessel. Intermodal customers inform us that this performance target is widely recognized across North America as a minimum standard for intermodal dwell time. Shorter dwell time standards are common.

As shown in Figure 4, the Vancouver Gateway falls short of this target with only about 60% of containers departing within 3 days, and the remaining 40% being delayed 4 days or more. More detailed data also shows that there is significant day-to-day, week-to-week, month-to-month variability in performance to target on this measure, which is also noted by shippers as an indication of unreliability in the Gateway.

Figure 4: Vancouver Gateway import container dwell (all import containers April 2009 – March 2010), Gateway target = 90% at 3 days or less.

![Figure 4](image)

Figure 5 illustrates accumulated import footage on-dock. The horizontal line represents the planned 3-day railcar supply target, while the black line represents on-dock footage. Therefore when the on-dock footage is above the horizontal line, then the dwell is greater than 3 days unless additional rail footage is provided.

Both railways express a desire to provide a "consistent" daily supply of railcars rather than vary supply to meet customer demand. As an example, if railway “A’s” goal is to provide

\textsuperscript{10} RBC Capital Markets also found that on-time arrivals and departures are the most important metric for the majority of shippers surveyed and 78% cited this as the major concern where the railways perform most poorly. *North American Railroad Shipper Survey*, December 2009.
Deltaport 8,000 feet a day, 7 days a week, (i.e. 24,000 feet of rail intermodal equipment = 3x daily 8,000 feet), many containers on vessels that discharge 40,000 feet (now happening weekly) will not leave the terminal within the dwell target unless the railway is willing and able to increase daily car supply above 8,000 feet per day.

The current intermodal rail model will consistently fail to achieve the agreed upon 3-day or less dwell benchmark. This rail intermodal operating model effectively makes the terminal the surge capacity in the supply chain when volumes fluctuate. When the backlog of containers on-terminal surpasses certain established terminal threshold volumes, it can critically affect the terminal’s ability to operate in the most efficient and productive manner. This jeopardizes the terminal’s competitive position and the Vancouver Gateway’s reputation.

Figure 5: Gateway on-dock import footage trend by railway (January 2009 - March 2010)

The railways have indicated that vessel bunching caused by the late arrival of vessels constrains their ability to synchronize railcar supply with demand. Port Metro Vancouver defines vessel bunching as more than one vessel discharging greater than 8,000 feet at the same terminal on the same or consecutive days. Analysis indicates that the impact of vessel bunching may not be that significant.

Vessel arrival to schedule generally deteriorates during the winter months (November to March), largely due to weather in the Pacific. However, data indicates that although vessels are off schedule, the occurrence of vessels actually bunching is small. From July to December 2009 there were only 8 occurrences at Deltaport out of 195 vessel calls.

Port Metro Vancouver monitors intermodal total transit time performance against other west coast gateways. Total transit time is the elapsed time from a container’s vessel discharge to railcar delivery at the destination rail ramp and includes port terminal dwell, off-dock rail
yard dwell and rail transit time. As shown in Figure 6, transit time performance for Vancouver Gateway traffic appears more variable by comparison with other gateways such as Los Angeles.

The data sample used to track transit times from US origin comes from a major shipping line using Vancouver. It is important to note that the sample size of US data is limited. Other data indicates that US port to Eastern destinations in North America has a better level of reliability than Vancouver to Canadian Eastern destinations. The data supports assertions by shippers that performance in Canada is less reliable than in the US, as indicated in Figure 6.

Figure 6: Comparative West Coast Port transit times (April 2009 – March 2010)

Although Port Metro Vancouver is able to measure the overall transit time (see Figure 7) using data available from shipping lines and port terminals, there is limited ability to identify the local rail yard dwell component due to the historic reluctance of the railways to share transit data. Recent agreements between the Port and both CN and CP allow access to this data, an indication of improved cooperation.

It is encouraging to note that recent test trains of intermodal cargo destined for the US demonstrate effective collaboration between railway and terminal operator. For example, a recent pilot project demonstrated consistent rail service between Vancouver and Chicago in just over four days in-transit time (not including dwell times at terminals).

Figure 7: Railcar transit time components
**Bulk and breakbulk**

The bulk export sector typically involves unit train operations with trainloads of single commodities, such as coal, fertilizers, petrochemicals, sulphur and some grain products, moving from one or relatively few origins to a single terminal and returned empty to origin. Grain is perhaps the biggest exception with respect to the greater number of origins involved in the handling and distribution system.

From a bulk customer and terminal operator perspective, good rail service means:

- **Shipping to forecast requirements** — shipping the right quantity at the right time critically depends on rail capacity. Good rail service is a function of delivering the required number of trains per day in a predictable manner and timely recoverability from service disruptions (e.g. winter weather).

- **Asset utilization** — given the significant investments by some shippers/receivers and terminals in equipment (e.g. stacker/reclaimers, railcars, terminal-based locomotives) and technology to improve loading and unloading productivity, asset utilization is just as important for them as it is for the railways. With today’s typical unit trains lengths being around 120 cars, and approaching 150 cars in some cases, cycle time (velocity) is critical to asset utilization, productivity and the competitiveness of resource-based supply chains. While such long trains generate efficiencies for the railways, they also make predictable delivery even more critical for port customers and stakeholders.

Unlike container intermodal data, Port Metro Vancouver has had less success in collecting relevant bulk and breakbulk performance data. However, some stakeholders speculate that mainline rail capacity constraints and deteriorating car transit times threaten to undermine on-time performance and their ability to compete in global markets. Late or unpredictable train arrivals and poor railcar delivery performance at port terminals also reduces terminal productivity and increases operational costs.

Spotting and switching data (as shown in Figure 8) captured at one Vancouver terminal over the period tracked, identifies highly variable railway performance, specifically, meeting switching times and number of railcars delivered. In order to improve service and predictability, the railway and terminal operator involved are working towards a negotiated agreement, which Port Metro Vancouver strongly supports.
Figure 8: Switching performance bulk/breakbulk terminal by month (2005-2009)
Key principles and conclusions

A cornerstone of optimal supply chain performance is the provision of adequate, consistent, reliable and cost-effective rail service. Vancouver Gateway customers and stakeholders depend heavily on rail service. Unilateral changes, reductions and rail service failures have direct and significant impacts on their performance and competitiveness. Without reliable and cost-effective rail service, the Vancouver Gateway becomes disadvantaged relative to US gateways.

Rail service levels and customer service expectations are not adequately defined between the railways and their supply chain partners. This imposes additional uncertainty on supply chain participants and increases the financial risk of current and future investments in the port system. It also threatens the Port’s international reputation, competitive position and ability to respond to market opportunities. Conversely, we also recognize that operating and investment decisions taken by terminals can directly affect the overall performance of the railways and the supply chain.

Within the Vancouver Gateway, the railways have some ability to impose their own service and operating models on those parties that rely on rail service. To a large extent this occurs because there are few, if any, negotiated service agreements between the railways, rail customers and other stakeholders, including terminal operators.

Port Metro Vancouver supports viable, profitable, efficient and productive railways and believes rail service standards should be developed in consultation with port customers and stakeholders, including terminal operators. We strongly support the concept of reciprocal or bilateral agreements that address all relevant service-related matters. We recommend a policy environment that encourages the railways to negotiate these commercial agreements in good faith.

Port Metro Vancouver has recently negotiated an agreement with CN that addresses rail performance and service issues within the Port. This agreement is a positive step, and reflects a more collaborative approach and willingness on the part of the railway to improve the interface between itself, the Port and other stakeholders. The agreement also reflects common goals and a shared objective for improving the reputation and reliability of the Vancouver Gateway.

In order to assess the efficiency and reliability of rail services, active monitoring, measuring and reporting must occur at multiple levels. Within the Vancouver Gateway a number of stakeholder-based committees have successfully established target measures, including rail metrics, to measure and compare efficiency and reliability across the supply chain.

Under the CTA there is limited recourse to resolve rail service disputes that impact the broader interests of a gateway serving national transportation and trade objectives. The existing Level of Services provisions are not well defined in the legislation11, nor do they provide explicit recognition of a port authority or terminal operator as a “bona fide” participant in the supply chain.

Port Metro Vancouver supports a policy framework that encourages the railways to provide information in order to objectively assess their performance against agreed upon targets. We also support a policy framework that encourages the railways to share information and engage rail customers and other stakeholders in more dynamic business and contingency planning.

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In recent years the delivery of rail services within the Vancouver Gateway has improved as a result of more collaborative production planning between the Port, railways and rail stakeholders. In addition, various network strategies for the shared use of rail assets, such as co-production, have produced positive results. We recommend a policy environment that continues to support improved utilization of rail assets and networks where appropriate.

Port Metro Vancouver recognizes that the rail freight system currently serving the Gateway works reasonably well. However, through this process we have reached three conclusions:

1. Railways have a significant ability to impose their service model on rail customers and stakeholders;
2. Rail service performance falls short of rail customer and stakeholder expectations; and
3. These parties have limited recourse to resolve rail service disputes.
Recommendations

Port Metro Vancouver proposes three main recommendations for consideration by the Review Panel. All three recommendations reflect our preference for a largely commercial approach to defining, measuring, monitoring and enforcing rail service matters. In those cases where a regulatory solution is cited, it is generally not Port Metro Vancouver’s first preference and is offered as an alternative solution, to be implemented later, if the commercially-inspired recommendation has failed to produce the necessary results or desired changes.

In our opinion, the key to this commercial, non-regulatory solution for rail service matters is a series of negotiated arrangements between the railways, railway customers and other stakeholders that address service-related matters and define a process for resolving service failures. These agreements should occur at two levels: between the railways and Port Metro Vancouver, and between the railways, their customers and other stakeholders, including the Port’s terminal operators. We believe such agreements are essential for the Vancouver Gateway to build on its existing strengths and gain a sustainable competitive advantage that supports trade growth and economic prosperity.

1. Develop and implement Level of Services Agreements

Negotiation of Level of Service Agreements

There is broad support among Port Metro Vancouver’s rail customers and stakeholders, including the Port’s terminal operators, for negotiated rail service agreements that are in line with their commercial requirements and operating models. There is also support for negotiated port-wide service agreements that define broad-based performance target measures across the larger supply chain. Support for these agreements is based on the need to define the service expectations of the parties in advance of service problems, and the desire for more effective and timely dispute resolution frameworks.

We recommend that the railways serving the Vancouver Gateway, on request, engage in good faith negotiations, firstly with Port Metro Vancouver, and secondly, with the Port’s rail customers and other stakeholders, including terminal operators, within the Vancouver Gateway with a view to establishing service level agreements.

Agreements between Port Metro Vancouver and the railways servicing the Port would recognize both parties’ interest in promoting the growth, reputation and reliability of the Vancouver Gateway through the efficient movement of goods. Level of Service Agreements would:

- Define, or describe a process for defining, port-wide rail service levels;
- Describe a mechanism for engaging other parties in the supply chain, and establish communication protocols for addressing changes in rail operations or service levels that affect the movement of traffic through the Port;
- Allow for the exchange of timely and relevant operating data and information in support of monitoring and measuring performance against established benchmarks, including supply chain-related factors that impact performance but are beyond the parties’ ability to control;
- Set out appropriate issues management, escalation and dispute resolution processes; and
- Assign responsibility to senior executives within each organization for addressing service failures.
Under this recommendation, Port Metro Vancouver would collaborate with shippers, railways, terminals and shipping lines to develop the appropriate port-wide service levels, monitored by reference to standards of service in competing gateways. We would work with stakeholders on joint supply chain and operational planning, including demand forecasting, seasonal and contingency planning and system recovery protocols. We would also monitor and report on Vancouver Gateway efficiency and reliability, as well as participate in the development of consultation and communication protocols to accommodate changes in rail operations or service levels affecting the Gateway.

Agreements with rail customers and other stakeholders would describe the specific, measurable and reciprocal service obligations of both parties with respect to transit times, car ordering and supply commitments, hours of operation, loading and unloading times, volume targets and switching service frequency. Agreements would also include issues management and clearly defined escalation and dispute resolution processes. Agreements could include appropriate financial incentives and penalties. In short, these agreements would define the appropriate commercial relationship between the individual rail customer or stakeholder and its railway partner or partners.

The CTA does not currently require railways to enter into the types of service agreements we have recommended. If, after the prescribed period of time (2 years) the railways either fail to enter into good faith negotiations when requested to do so, or the negotiated agreements fail to bring about positive changes in the provision of rail services, then we support the necessary amendments to the CTA to require such agreements.

Provide commercial dispute resolution mechanism

The CTA does not currently contain an effective dispute resolution mechanism to address problems between railways and rail stakeholders. There is a voluntary mediation process available through the CTA; however it requires the consent of both parties to participate.

It is recommended that in order to provide a timely, accessible, binding and low-cost means of settling disputes, a mandatory Commercial Dispute Resolution (CDR) model be advanced and implemented as a key supporting element of our recommendation. It is envisaged this CDR process would become the primary means of resolving disputes arising out of the individual service level agreements and would require minimal involvement by regulatory agencies and government departments. Alternatively, it could be used by parties that have no such agreements.

The CDR would be a two-staged process involving mandatory mediation and, if necessary, mandatory arbitration. Arbitration could take the form of either an appeal to the Agency pursuant to the shipper protection provisions of the CTA (e.g. final offer arbitration), or by binding commercial arbitration without regulatory involvement. The commercial mediation and arbitration framework could be administered and facilitated either by the Agency or by means of other recognized legislation such as the Commercial Arbitration Act of British Columbia.

Both stages, mediation and arbitration, could be initiated at the request of any party having standing; the CDR process would be expressly available to port authorities.

We understand that the CDR model recommended has been reviewed by both the railways and other parties, including the Canadian Fertilizer Institute. In addition, the need for an effective CDR process has been recognized in the independent research that was conducted for the Review Panel.
Other commercial initiatives

There is broad industry support, which includes the railways, for expanding co-production in the Vancouver Gateway. Co-production covers a variety of commercially negotiated agreements between railways to expand rail infrastructure and improve system efficiency. It offers the potential for higher performance and growth by increasing capacity and productivity at relatively low cost, as well as the potential to avoid or defer capital expenditures. Co-production also promotes sustainable supply chain practices that help minimize the community and environmental impacts of rail transportation.

In our experience there have been two successful co-production initiatives in the region: the Fraser Canyon directional running zone negotiated between CN and CP in 2000, and the 2004 co-production agreements between CN and CP aimed at increasing capacity on key sections of track in the Vancouver Gateway.

We support the expanded utilization of rail assets and networks through commercially negotiated co-production agreements. The expansion of existing rail corridors and infrastructure within the Vancouver Gateway is constrained by a number of factors. These constraints make co-production initiatives particularly important to this region. Sustained efforts should be made by the railways to explore more opportunities for co-production and the benefits of co-production, such as improved access and system efficiency, which should be measured and reported.

Should the collaborative commercial solutions advocated here fail to deliver the necessary performance improvements, then more innovative concepts such as the integration of rail assets within the Vancouver Gateway could be considered. A full review and business model for an integrated Vancouver Gateway railway system would be required under these circumstances.

Recommendation:

- Develop and implement Level of Services Agreements between the railways, railway customers and other stakeholders that address service-related matters.
- Provide a commercial dispute resolution mechanism to address problems between railways and rail stakeholders.
- Encourage commercial initiatives such as expanded utilization of rail assets and networks through commercially negotiated co-production agreements.
2. Implement independent performance monitoring

The Rail Freight Service Review is unlikely to produce a one-time solution to the complex and longstanding issues at hand. Given the importance of rail service to the reliability and competitiveness of Canada’s trade gateways, it is recommended that a system for performance monitoring be established and administered by an independent body. This would entail a regular and ongoing process that would increase the transparency of the logistics system by measuring, monitoring, evaluating and reporting on performance, with reference to competing gateways as well as locally agreed standards, in order to identify opportunities for improvement.

If after 2 years the independent performance monitoring reveals no material improvements in rail service, then consideration should be given to the creation of a neutral “supply chain ombudsman” to be vested with the appropriate power to investigate service failures and cause rulings to be made that address such failures in a timely manner.

Other opportunities exist to improve the supply chain serving the Port. Port Metro Vancouver advocates a proactive approach involving stakeholder collaboration that builds on our own Supply Chain Program, in addition to joint provincial and federal government initiatives already underway, such as the Gateway Performance Table and the Winter Operating Plan Workshops.

We recommend a framework that supports ongoing dialogue and action on the continued development of supply chain performance metrics, particularly for the bulk sector, the potential for 24/7 operations and improvement to the accuracy of demand forecasting. We also support a policy framework that encourages the railways to share information in order to objectively assess the railways’ performance against agreed upon target measures.

Recommendation:

IMPLEMENT INDEPENDENT PERFORMANCE MONITORING TO INCREASE THE TRANSPARENCY OF THE SUPPLY CHAIN BY MEASURING, MONITORING, EVALUATING AND REPORTING ON PERFORMANCE TO IDENTIFY OPPORTUNITIES FOR IMPROVEMENT.
3. Amend the Canada Transportation Act

Although Port Metro Vancouver prefers a commercial approach to defining, monitoring and enforcing rail service matters, there are several amendments to the CTA that are either advisable, or could become necessary, to support the desired outcome of adequate, consistent, reliable and cost effective rail services that meet the needs of our customers and stakeholders. Therefore, we advance the following recommendations that would require legislative changes to the CTA.

Clarify the standing of Canadian ports under the Level of Services provisions of the Canada Transportation Act

Section 116 of the CTA allows any “person” to bring a formal complaint respecting railway service levels, but there is some uncertainty as to whether this term includes terminal operators, ports and other parties that are not direct railway customers. As a result, these parties may not have standing to have railway service level disputes heard and resolved by the Agency.

Railway service performance is integral to Port Metro Vancouver’s ability to fulfill trade and economic mandates. It is also a major influence on the international reputation of Vancouver as a gateway to/from North America. It is important therefore that the Port and its tenants have a valid standing as a means to help ensure railway accountability.

To preclude arguments that port authorities and port terminals do not have standing to bring a complaint before the Agency, section 116(1) should be amended after “any person” to add the clause “including a Canada Port Authority and port terminals”. Adding this clause ensures our standing, avoiding future uncertainty and costly arguments before the Agency.

This proposal is consistent with the Terms of Reference for the Review that recognizes the entire rail-based logistics chain including ports and terminals.

Enable the Agency to investigate and rule on service problems

The Level of Services provisions of the CTA (Sections 113-116) allow the Agency to investigate and rule on service complaints only upon complaint. There is no provision under the CTA that permits the Agency to investigate and/or issue orders and decisions respecting railway service levels on its own motion. The lack of such a provision constrains the Agency’s ability to address service breakdowns (or imminent breakdowns) of an emergency nature in a timely manner.

Port Metro Vancouver expects the commercial recommendations, if implemented, would obviate the need for the Agency to take a more proactive role. However, if the necessary improvements in rail service fail to materialize within two years, we recommend the existing Level of Services provisions of the CTA be expanded to enable the Agency, on its own motion, to investigate the need to issue service-related orders where service breakdowns have occurred or appear imminent, specify levels of service to remedy service problems and investigate or order reasonable measures to address serious service failures.

Recommendation:

**AMEND THE CANADA TRANSPORTATION ACT TO CONFIRM PORT AUTHORITIES AND TERMINALS HAVE STANDING TO BRING A COMPLAINT BEFORE THE AGENCY.**

**EXPAND EXISTING LEVEL OF SERVICES PROVISIONS TO ENABLE THE AGENCY TO PROACTIVELY ADDRESS SERVICE-RELATED ISSUES TO SUPPORT THE DESIRED OUTCOME OF ADEQUATE, CONSISTENT, RELIABLE AND COST EFFECTIVE RAIL SERVICES.**

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Concluding remarks

The Rail Freight Service Review is a watershed opportunity to address several serious concerns that have been raised by shippers and other supply chain participants regarding the level of rail services at Canada’s largest port. At the same time, caution is required so that proposed changes to the existing system or regulatory environment do not produce unintended consequences.

Our recommendations are a result of extensive fact-based review and experience. These recommendations have been reviewed with key stakeholder groups and while they do not represent a consensus, they are broadly supported by industry. We have also discussed our recommendations with our key railway partners. The railways have expressed general support for greater involvement among supply chain participants, performance benchmarking and expanding cooperative operational arrangements such as co-production.

We recognize the importance of rail services to the Vancouver Gateway and wish to work cooperatively with the railways and rail customers and stakeholders to improve performance. Further cooperation will promote timely investments across the supply chain that helps grow business, reap the significant trade opportunities that lie ahead, and deliver positive economic benefits to all Gateway stakeholders. A key to realizing these opportunities will be meeting customer needs in a reliable and consistent manner.