

Transport Canada

Survey of Other Stakeholders - Terminal Operators, Ports and Shipping Lines

Prepared for the Rail Freight Service Review

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Executive Summary

NRG Research Group along with the University of Manitoba Transport Institute developed a series of surveys/discussion guides to gather the views of terminal operators, shippers, port authorities and ocean shipping lines as part of the research phase of the federal government's review of rail freight service in Canada. The guides focused on the satisfaction of these individuals with the performance of the rail-based logistics system and, in particular, the performance of Canada's railways. This report details the findings from a series of one-on-one interviews with senior staff from a sampling of terminals, ports and shipping lines operating in Canada.¹

NRG Research, supported by Opinion Impact for the French language interviewing, contacted companies from a sample list provided by Transport Canada and ascertained who in the organization was the appropriate individual to speak with about their rail related experiences. All the interviews making up this report were conducted by Andrew Enns (English language) or Nadia Papineau-Couture (French language). The interviews were conducted from late September to early December 2009.

In many cases, there was more than one company staff member present per interview conducted for this study. These individuals were senior members of the management team who have responsibilities for the freight transportation aspects of the organization. In particular, their responsibilities include managing their organization's relationship with the railways. In many of the interviews, the respondent was an operations manager sometimes accompanied by an individual at the Vice President or President-level.

Satisfaction with Railway Performance

Satisfaction with rail service varies widely across stakeholder groups and even within these groups.

Terminal operators and shipping lines expressed some of the strongest opinions, both positive and negative, about their satisfaction with rail services. Many of the terminal operators have reservations about their relationship with their rail provider; while others express very high levels of satisfaction. For contextual purposes, the terminal operators' satisfaction ratings (on a scale of 1 to 7, where 1 was very dissatisfied and 7 very satisfied) predominantly clustered around the 3 to 5 range with one terminal providing a rating of 7.

Among the shipping lines interviewed, there is a considerable divide in the overall satisfaction levels concerning the service they receive from Canada's freight railways. About half are

¹ The full Shipper Research Report can be accessed by visiting the Rail Freight Service Review website at: www.tc.gc.ca/policy/acg/rfs-review-examen-sfm and following the links to *Consultant Studies*.

satisfied with service (rated a 6 out of 7); while the balance are noticeably less satisfied (rating a 3-4 out of 7).

In comparison, port authorities are, overall, the least dissatisfied of the stakeholder groups interviewed with ratings ranging from the 4 to 6 range on a scale of 7. Only one port provided a rating below the 4 out of 7 mark. In large part this can be attributed to the ports having less day-to-day contact with railways.

There is no discernible difference in satisfaction levels between CN and CP primary user groups. However, there is some evidence of lower satisfaction levels with terminal operators and ports that are serviced by only one rail provider, with the exception of Prince Rupert, which is very satisfied with the service from CN.

Key Drivers of Stakeholder Satisfaction

Three areas raised frequently in all interviews as very important factors contributing to a positive impression of the railways are:

- The timeliness of the rail car supply
- The provision of the correct number of cars
- A knowledgeable and helpful contact in the railway

In ports and terminals that are operating below capacity, the issue of freight rates is a prominent concern.

Many stakeholders commented that when the system is performing well there is “*fluidity*” to the movement of freight. To maintain this constant movement of cargo, timely access to an adequate number of rail cars is critical. It should be noted that this applies to cargo destined for export as well as cargo, predominantly containers, arriving in Canada.

Another element all stakeholder groups identified as contributing to a positive experience with the railways is the presence of a very knowledgeable and helpful contact within the railway. This individual is not only able to provide accurate information to other stakeholders regarding the status of rail service, but seems genuinely interested in providing assistance. However, in conversations with stakeholders, this type of relationship was not commonly mentioned as being present. Aside from these 3 main satisfaction drivers, in Central/Eastern Canada, a fourth major concern was raised in the interviews—the provision of equipment/cars that correspond to client needs. There is a major concern relative to type of cars supplied and many stakeholders want cars to be upgraded as they need to be able to hold heavier containers and to have cars that have the capacity to stack two containers in height.

Railway Performance Issues

Most terminal operators said the railways have *met their expectations of service*. However, it is noteworthy that many of these operators indicated dissatisfaction with the service they receive, so their responses in respect to *meeting expectations* cannot always be interpreted as a sufficiently positive response. Terminal operators are of the view that the railways are generally very capable at moving freight and that the overall volume of freight moving through the system is increasing. The primary issue for terminal operators is the consistency of the movement of freight and the operational difficulties that inconsistent service creates.

Most port authorities said the railways have *not met their expectations of service*. The reason for this view was not related to a particular service function (as is the case for terminal operators), but more to do with the attitude of the railways when it comes to serving the ports. There is a perception that the railways are too focused only on the rail-side of the transportation system and do not take into account the operational requirements of the other stakeholders in the broader logistics system. One port authority sums up this point by saying, *“the rail’s asset utilization model is increasingly not fitting with the port’s asset utilization plans and this is a problem.”*

It should be noted that opinions expressed by the Prince Rupert Port Authority and terminals in the Prince Rupert port were noticeably more positive than most of the views from respondents elsewhere in the country. The key reason for this positive impression can be credited to the fact that *“CN is very engaged in the planning and marketing of the port—lots of dialogue and in-sync with terminals’ goals of growth and service.”*

Accountability of the Railways

There is a fairly strong consensus among terminal operators and shipping lines that when they experience poor service from the railways there is the potential for them to incur serious financial losses. Most terminals and lines interviewed have experienced a serious financial loss as a result of poor service from the railways. Whether it is late arrivals of freight that force terminals to employ a second shift at overtime rates, long dwell times for goods or lengthy delays in returning empty containers back to port, almost all terminal and shipping line respondents say that rail related problems lead to financial costs. Terminal operators identified the railway, almost unanimously, as the stakeholder whose actions (or inactions) are most operationally and financially disruptive. Distinctively, shipping lines generally note that the railways are a secondary problem compared to the weather, their greatest concern.

Compounding the impression that rail issues can have serious financial consequences, there is a widespread belief among stakeholders from all groups that there are no mechanisms currently in place to hold railways accountable to their customers.

Suggested Rail Related Operational Improvements

Respondents across all three stakeholder groups suggested, as a first step, that the railways and freight system stakeholders work to significantly improve the accuracy and amount of information flowing in respect to the operation of the rail system. Many terminal operators noted they have a daily conference call with the railways, which suggests communication. However in too many cases, this call does not result in accurate and reliable information, which makes it difficult for key stakeholders to make informed operational decisions.

A corollary to the previous point is a desire respondents (terminals, shipping lines and ports) raised for a greater degree of transparency regarding the relationship between the railways and other key stakeholders. In addition, there is the view that operating agreements must be in place between the main stakeholders to provide the framework for a mutually beneficial relationship. In other words, for the system to function at peak efficiency, an established and formal relationship between the main parties is necessary. Terminal operators often noted that they do not have a contract with the railways. It is noteworthy that this point elicits comments that *“this will never happen. Railways want out of agreements and move to protocols because they are less rigid and [have] no penalties for them.”* The absence of transparent and fair agreements creates challenges in terms of dealing with operational issues stakeholders encounter as a result of poor rail service.

A few port authorities and terminal operators identified that the benefit of greater transparency and collaboration among all stakeholders is, in their opinion, a very important consideration when moving forward with the national ‘Gateway’ strategy. It was noted on several occasions that the railways are, at times, operating in a manner inconsistent with their role as the key component of the overall transportation system. It was suggested that the railways need to act as a key component of the freight logistics system rather than in their own shell or cluster without taking all other players’ roles and needs into consideration.

Suggested Improvements by Other Stakeholders

A few terminal operators and shipping lines raise the suggestion that the movement of freight within the ports should be viewed as a public good. This would allow for the establishment of dedicated rail corridors into the ports that would deliver freight in a more timely fashion. The Alameda Rail Corridor in California was noted as an example.

A shipping line representative also raised the Alameda example in the context of creating an intermodal facility somewhere in proximity but relatively removed from the congestion of the Greater Vancouver Area. All inbound and outbound traffic is either brought to or collected at this hub by CN and CP. A third party rail provider (terminal railway) transports the cargo directly to and from the port. The third party supplier would maintain an adequate car supply to move the containers when required. This would take the delivery and off-loading of containers out of the Class 1 rail provider’s hands.

There were several suggestions from some terminal operators and shipping lines that the movement of cargo within the port should be managed by a port controlled terminal railway, similar to what is the case in Montréal -where the port authority owns and operates 80km of railway coordinating the freight flow/access to terminals and shipping lines. Both class 1 railways use Montréal port facilities. All stakeholders are business partners as terminals rent their facilities from the port. Montréal port also manages truck flow on its property and is the central logistics and management body for the entire freight transport system at the port of Montréal. It is thought that this approach would allow for more efficient use of the existing rail infrastructure in the port. An internal dedicated port rail service, it is hoped, would be more flexible and accommodating in meeting the requirements of the port's terminals. It was acknowledged that co-production agreements are steps in this direction, but more needs to be done in this regard. In addition, railways are currently not perceived as being focussed on being "customer friendly."

Background and Survey Objectives

The rail freight service review is being undertaken by the Government of Canada in response to concerns from shippers and other stakeholders about railway service over the last few years. The review is to examine the performance of the rail-based logistics system including the railways, shippers, terminal operators, shipping lines and ports. The review is aimed at improving the efficiency, effectiveness and reliability of the overall system in order to help Canadian shippers compete in domestic, continental and off-shore markets.

To meet this goal, it was important to develop an understanding of the rail-based logistics system from those with firsthand knowledge of its operation. NRG Research Group along with the University of Manitoba Transport Institute developed a series of surveys to gather the views of shippers, terminal operators, ports and ocean shipping companies. The surveys focused on the satisfaction of these individuals with the performance of the rail-based logistics system and, in particular, the performance of Canada's railways. This report details the findings from a series of one-on-one interviews with the senior staff from a sampling of terminals, ports and shipping lines operating in Canada.²

Survey Objectives

"The overall objective of this project is to survey shippers, terminal operators, port authorities and shipping lines about their view on railway service and performance of the rail-based logistics chain."³ The ultimate goal of this research is to assess the performance with a strong focus on identifying areas where performance is lacking and improvements can be made. This

² The full Shipper Research Report can be accessed by visiting the Rail Freight Service Review website at: www.tc.gc.ca/policy/acg/rfs-review-examen-sfm and following the links to *Consultant Studies*.

³ Stakeholder Survey Project RFP #T8080-08-0532 page 14

report outlines the findings as they pertain to the observations and recommendations from terminal operators, port authorities and shipping lines.

Study Methodology

The list of stakeholders to be surveyed for this project was provided by Transport Canada. NRG Research, supported by Opinion Impact for the French language interviewing, contacted companies on the list provided by Transport Canada and ascertained who in the organization was the appropriate individual to speak with about their rail related experiences. All the interviews making up this report were conducted by Andrew Enns (English language) or Nadia Papineau-Couture (French language).

In many cases, there was more than one respondent per interview for this study. These individuals were senior members of the management team who have responsibilities for the freight transportation aspects of their organization. In particular, their responsibilities included managing their organization's relationship with the railways. In many cases, the respondent was an operations manager sometimes accompanied in the interview by a company Vice President or President.

Each stakeholder group was interviewed using an interview guide that was slightly modified to fit with the specifics of different operations. The guides, which are available under separate cover entitles 'Survey of Other Stakeholders: Questionnaires'⁴, incorporate a combination of close-ended and open-ended, discussion based questions. While the guides were all individually designed to, as best as possible, reflect the particular operations and rail freight system interactions of the specific stakeholder groups, there are also several common themes running through each of them. These are:

- Interaction with rail freight system stakeholders
- Impressions and experiences with railways
- Important aspects of railway performance
- Suggested improvements to the system

The interviews were done either in-person or over the telephone depending the availability of the stakeholder to schedule convenient interview times. On average, each stakeholder interview lasted one hour.

How to Read this Report

As noted earlier, this document reports on the interviews from three distinct rail freight system stakeholder groups: terminal operators, shipping lines and port authorities. The survey

⁴ Located at www.nrgresearchgroup.com under Newsroom/Publications

instruments for all three populations were primarily designed to allow open-ended, discussion orientated responses from the respondents. As such, they took the form more of 'discussion guides' rather than of rigorous questionnaire instruments. The overall objectives of these instruments were similar; however, the manner in which these objectives were addressed with each group was somewhat different.

Each section in the report will begin with a brief overall summary of main findings from each of the three stakeholder groups. Following that summary will be a more detailed overview of the results from the stakeholder group in that section.

It is important to note that since the sample sizes of individual stakeholder groups were quite small, statistical reliability should not be considered applicable to the broader stakeholder population. In the interviews, 1 to 7 scales were occasionally used as a means to provide some context to a participant's views on a particular question. This report will periodically report on these scale results, however, they should not be extrapolated to the broader stakeholder population. Instead, these scales should be interpreted within the context of the accompanying, discussion-based findings.

It should be noted that this report includes direct quotes from study participants. These are identified by the use of "quotation marks" and *italics*. For example, as one terminal operator said, "*such and such.*"

Summary of Findings

Sample Characteristics

A total of 28 other stakeholders were interviewed for this phase of the project. The table below provides some detail in terms of the location and general description of the various stakeholders interviewed. In some cases, stakeholders operate in multiple locations and this is reflected in the table below.

Table 1: Sample Characteristics

	Terminal Operators (n=14)	Port Authorities (n = 8)	Shipping Lines (n=6)
Location of Operations			
West Coast	10	2	6
Central	3	4	4
East Coast	1	2	2
Commodity Type			
Containers	6	NA	5
Break Bulk	5	NA	1
Bulk	6	NA	
Primary Railway			
CN	12	3	1
CP	2		1
Both		5	4

Terminal Operators

NRG interviewed 14 terminal operations across Canada. As the table above indicates, there was a good mix of container, break bulk and bulk commodities being handled by the terminals that were included in this study. The majority of these terminals are located on the West Coast (Vancouver – 8 and Prince Rupert – 2). The remaining terminals are spread across Central Canada (including the Great Lakes and Montreal) and the East Coast.

Four of the terminals included in this study are solely or partly owned by shippers. At one terminal, one of the Class 1 railways financially invested in some infrastructure improvements for that terminal.

Respondents at all of the terminals indicate that their operation's business fluctuates throughout the year. For some commodity types, such as containers, there is seasonality to the work flow. More specifically, container traffic can increase in the August through October period with increased imports of goods for the Christmas season. On the bulk or break bulk side, the fluctuations are based on a combination of seasonal demands, such as grains in the post-harvest period, or price fluctuations for a particular commodity. Should the price for raw materials such as pulp, potash or coal change there can be an associated change in the level of shipping activity. Another factor affecting the patterns of terminal operation activities are the signing of new overseas orders. For some commodity types, such as pulp, this can cause relatively rapid increases in shipping activity. Across all terminals there are indications of fluctuations in shipping activity.

Not surprisingly, the bulk and break bulk terminals that participated in this study are almost exclusively export focused operations. A few had the occasional import, but it is not a significant aspect of their business model. In contrast, the container terminals are much more balanced between exports and imports. Most container terminals usually import more volume than they export. This year however, because of the global economic slowdown, container imports and exports are almost even and in a few cases weighted more towards exports.

Rail service provided to the terminals interviewed varies somewhat. The majority of terminals receive goods transported by both of Canada's Class 1 railways; however, there is typically only one line physically entering the terminal yards. In Montréal, the terminals are all located on Port of Montréal property and yards that belong to the port are serviced by both Class 1 railways up to the port gate. Though many terminals said they have contact with both railways, there is always a more dominant or regular carrier. Also, a few terminals are connected (via co-production or interchange agreements) with the American rail carrier, Burlington Northern Santa Fe Railway.

As noted in Table 1 on the preceding page, CN is the primary rail service provider to 12 of the 14 terminals interviewed. CP is the main carrier for two of the terminals. It is noteworthy that all of the terminals in this study serviced by CP handle bulk commodities, serving terminals at Deltaport and on the inner harbour at Vancouver.

A number of terminals are physically connected to one of the Class 1 railways by a smaller short line railway. Deltaport for example, is serviced by a jointly owned (CN and CP) rail subsidiary that operates service on BC Rail (BCR) owned rail lines. This service transports freight 24 miles from the main lines to the terminals located on the Roberts Bank peninsula. BCR Port Subdivision maintains the track and manages all train operations, recovering its costs from the three user railways based on their respective share of traffic over the line. BCR Port Subdivision is regulated provincially under the British Columbia Safety Authority.

Six of the terminals interviewed maintain their own rail crews to move and organize train cars inside the terminal yard. However, the remaining 8 terminals have an arrangement with one of the Class 1 railways (typically CN) to handle the movement of cars within the terminal. Most of

the terminals that manage the movement of cars themselves are bulk or break bulk terminals. Only two of the six terminals with their own switching crews handle predominantly container traffic. One of the bulk terminals has a situation where crews from one of the Class 1 rail providers handle the switching responsibilities for one commodity (coal), while terminal crews manage the switching for another commodity (potash). This is reportedly due to safety considerations with the coal cars. Across all terminals, there are some differences in who is responsible for moving and organizing train cars inside the terminal yard.

Shipping Lines

All of the 6 shipping lines interviewed in this study ship containers into and out of the country. The imported cargo is generally manufactured goods in containers and the exported traffic is often containerized break bulk goods (pulp or agricultural products). All shipping lines interviewed ship out of the West Coast (usually Vancouver) and another port in Eastern Canada—Montreal or Halifax. Only one line ships exclusively into and out of one Canadian port. For all shipping lines, the majority of their shipping volume is via the Port of Vancouver. Asia is the main source of imports to the West Coast and the main recipient of exports from this Canadian region. For Montreal and Halifax, Europe is the main source and destination of goods. All shipping lines reported that they are involved in the import and export of goods.

As noted with terminal operators, there are some seasonal fluctuations in the shipping lines' activities. There is usually increased activity in the summer to early fall as Canadian goods inventories are enlarged in advance of the Christmas season. One shipping line noted that the Asian holidays can sometimes create surges in activity as customers try to *"beat the holiday or are anxious to get moving right after the holiday shut down in China."*

The selection of the Class 1 railway by shipping lines is largely dependent on the ports they service. For instance, shipping lines into Prince Rupert and Halifax have no choice but to use CN for rail transportation as CP does not service those ports. Several shipping lines primarily use CP for moving freight into and out of the Ports of Vancouver and Montreal. Two of the shipping lines exclusively use only one Class 1 railway; the others use both of Canada's Class 1 railways. It should be noted that shipping lines have contractual agreements with rail carriers. These contracts establish some service parameters, but primarily they consist of rate agreements.

Port Authorities

A total of 8 Port Authorities participated in the study. These include the ports of: Prince Rupert, Vancouver, Thunder Bay, Hamilton, Montreal, Quebec City, Saint John and Halifax. All of these ports deal with a mix of commodity types (bulk, break bulk and containers) with a few being more focused on bulk and break bulk than the others (Thunder Bay, Hamilton and St. John).

The rail service into the various ports differs considerably. Several ports are what could be defined as "captive" to one rail provider. These are Prince Rupert and Halifax which are serviced only by CN. Several other ports have *indirect* service from both of Canada's Class 1

railways provided via a short line link to one of the Class 1 carriers. This is also the case for Hamilton and St. John which are served by Southern Ontario and New Brunswick Southern respectively. St. John is also able to access the Class 1 rail network via the Montreal-Maine Atlantic Railway (MMA)⁵ that can use New Brunswick Southern's line into the port. This makes St. John the only Canadian port east of Québec city *not* captive to only one of Canada's Class 1 railways. The other ports of Vancouver, Thunder Bay, Québec city and Montreal (via a port railway) are serviced by both Class 1 railways directly.

The Montréal model seems fairly distinctive as the port is also a railway operator. This enables the port to insert itself into the freight transportation process somewhat more so than is the case with other ports. The Port of Montréal secures the intermodal flow of traffic interchange and secures a "non-stop" flow by coordinating efficient turn around, gate to gate. It has to coordinate traffic flow to make sure products are at the right place at the right time. It also has to manage safety issues. The Port of Montreal is very involved in the business development of the Québec/Ontario corridor in order to maintain its competitiveness in the market.

Overall, there are significant differences in the rail service to the various ports included in this study.

Range of Stakeholder Contacts

This section outlines the different relationships various stakeholder groups have with other components of the rail freight logistics system. The other components included *Freight Forwarders, Terminal Operators, Shipping Lines* and the *Railways*. Participants were initially asked to rate their level of contact with each stakeholder group on a scale of 1 to 7. This rating was followed up with some discussion about the specifics of that relationship.

Stakeholder Summary

The most regular interaction regarding the rail freight logistics system occurs among terminals, railways and shipping lines. It is interesting that some terminal operations and shipping lines said they see themselves as acting quite often as the hub or conduit for information among the three stakeholders. Almost all terminals indicated that they are in daily contact with the railways, usually as part of a scheduled conference call in the morning. The terminals also have very regular, though less frequent, contact with the shipping lines.

Port of Montréal is the exception to this rule as the terminals deal primarily with the Port which acts as an interface or interchange among all parties/stakeholders involved. The Port of Montréal manages the contact with railways and terminals on a daily basis. In addition, there is considerable contact between the port authority and the terminals in terms of the arrival and departure of freight.

⁵ At the time of this study the MMA was still operating Canadian routes although there is some indication this situation will change in 2010 with the MMA ceasing operations of its Canadian routes.

Interestingly, in addition to the Port Authority contacts, both container terminals maintained a high level of daily contact with both railways. In part this appeared due to the fact both container terminals had been in operation for a long time and had established contacts within the railways that they were able to access. It should be noted that the bulk terminal did not deal daily with them as the transactions were done through the port authorities. In fact, Port of Montréal is instrumental in maintaining the communications between stakeholders and manages the daily information conference calls.

Of the stakeholder groups interviewed, most shipping lines have the broadest and most regular level of contact with all stakeholders in the system. Shipping lines indicated regular and frequent communications with the railways and terminals, as well as with freight forwarders and shippers.

Terminal Operators

Terminal operators have a high level of interaction with the railways. On a scale of 1 to 7, where 7 was an indication of a very high degree of contact, almost all terminals provided a rating of 7. In discussion, they indicated communication with the railways is the most structured of all the relationships with the main stakeholder groups in the freight transportation system. The terminals tend to have pre-determined (scheduled) conference calls, usually occurring in the morning, with the railways serving their facility. The purpose of these calls is to examine the daily schedule of arrivals and departures, as well as looking forward three to five days in terms of expected rail traffic. Depending on the railways servicing the terminal, it is not uncommon to have both Class 1 railways, and even a short line, represented on the call. In Montréal, one bulk terminal had a very low amount of contact with the railways as contact was managed directly by the Port of Montréal.

A few terminals indicated they have arranged access with CN to view the status of their shipments directly via CN's internal tracking system. While these terminals noted this is not always completely accurate it does provide *"another level of knowledge into what [is] happening in the system and, sometimes, the ability to verify the railway's projections."*

Most of the terminals included in this study indicated they receive rail service daily Monday to Friday. There are a number of terminal operations receiving trains 6 or 7 days a week but the norm appears to be 5 days. A few terminal operators said they would like to receive 7 day a week train service but that this is still being discussed with their primary rail provider.

Most of the terminals interviewed are receiving one train (or switch) a day with the rest on a more frequent service schedule of two trains in and out of the terminal daily. There is no strong pattern between the type of commodity (bulk or container traffic) and the frequency of train service. Here, the determining factor is likely based on the frequency of vessel service and customer orders. The few terminals interviewed that handle wood pulp tend to have somewhat more frequent trains flow through given the nature of pulp manufacturing and costs associated

with ceasing operations at those plants. It is noted, that the pulp shippers need to be constantly moving their product.

The terminals indicated that there is a typical schedule in place that sees trains arrive loaded at a regular time and then returning, again at a usual time, to pick-up the empty cars or “empties”. In many cases the arrival of a loaded train coincides with the pick-up of empties. On a daily train schedule, there is usually a 12 hour window between arrivals.

The level of contact between terminal operators and the shipping lines is also quite frequent. As with railways, there is typically daily contact, but not always through a scheduled conference call. Quite often an e-mail suffices in terms of an update from a shipping line regarding a pending vessel arrival or from the terminal regarding the load status of a vessel. On a 1 to 7 scale most responses were in the 5-7 range. Contact with the shipping lines was uniformly very high among the Port of Montréal terminals interviewed.

Contact between terminal operations and shippers was much more variable across the organizations interviewed. Those terminals that are solely or partially owned by shippers, not surprisingly, have fairly regular contact with shippers. Other terminals however, most notably container focused terminals, indicated they have relatively less contact with shippers.

Terminal contact with shippers varies mostly across the different operations interviewed. There are those terminals, quite often those owned by shippers, who have very regular and frequent contact with shippers (rated 7 out of 7 in terms contact frequency). However, there are an equal number of terminals that have very little contact with shippers (rated 1 or 2 out of 7). Ownership by the shipper, naturally, has a bearing on the closeness of the relationship. Also, there is a relatively low level of contact between terminal operators and freight forwarders compared to the contact levels with other stakeholders. It appears that terminals’ contact with shippers is quite variable in respect to the kinds of operations included in this study.

Shipping Lines

The shipping lines are quite likely to have regular and frequent contact with all the main stakeholders in the freight transportation system. Almost all of the shipping lines interviewed said they have high levels of communication (rated 7 out of 7 in terms of frequency of contact) with railways, terminals, shippers and freight forwarders.

It was noted by a few lines that when the system is running smoothly, there is likely to be less contact with the customer (freight forwarder or shipper) compared to the terminal and rail provider. There was always a need to be in contact with both these stakeholders. For some respondents, there is the view that shipping lines sometimes act as a conduit for information flow between terminal and railway. In part, this was an acknowledgement there is no contractual relationship between the terminal and railway regarding service.

Shipping line contact with the railway was generally regarding scheduling an order for cars (along with forecasting inbound and outbound demand), train status updates and the movement of empty containers back to the originating port.

Port Authorities

Port Authorities, by virtue of their position, have a fairly high degree of contact with the main rail freight stakeholders on several levels. Port Authority activities can be organized into 3 distinct areas: long term planning, marketing and day-to-day operations. All the ports said they have regular contact with the various other stakeholders during these stages of activity, albeit at differing frequency levels.

When it comes to long term planning, the ports all said they engage the other system stakeholders (terminals, shipping lines, shippers and railways) in this process. These discussions typically involve land use planning, looking at long term traffic volume forecasts and major infrastructure improvements. Many terminals said they have multi-year business plans that they would regularly review (usually annually) with the main port stakeholders. Many of the ports interviewed said they are looking at relatively significant infrastructure works in the years ahead, including activities effecting rail access.

Marketing or promotion is an ongoing activity with port authorities. All individuals interviewed said the movement of freight is a very competitive service and there is a constant effort to attract traffic through the ports. For some ports, such as Thunder Bay, Hamilton and Halifax, who are experiencing some declines in traffic, there is a particular emphasis on opening up the port to new markets and customers. Thunder Bay for example, said it is working on expanding its services to supplying the “oil patch” with its material needs. These activities are divided among domestic, North American and overseas markets. Other, busier ports such as Vancouver and Prince Rupert are aggressively seeking new markets overseas. In Vancouver, it was noted that competition for container traffic into the port is particularly stiff. All port authorities are involved in the ongoing activity of marketing or promotions. As mentioned previously, the Montréal Port Authority is aggressively working on developing the Québec/Ontario corridor.

The involvement of other stakeholders in the planning activities of the ports is quite varied across the country. In Vancouver there is a generally good involvement of all stakeholders in the Port Authority’s marketing activities. There are discussions between the port and stakeholders regarding services and possible ways to communicate added-value features to customers. Shipping lines, particularly container and break bulk carriers, were quite active in working with the port to find customers to move goods through Vancouver. The railways were noted as not being directly involved in the port’s promotional efforts; however, the port does keep the railways informed of its activities.

Prince Rupert is a somewhat distinctive port in terms of its relationship with other stakeholders in the promotion of the port. Many of the stakeholders in this port—some terminals and the one railway (CN) serving the port—are partners in the operation. This clearly is a motivating

factor for all these entities to work together to grow the port business. CN for example, was noted as vigorously pursuing new markets to serve out of Prince Rupert.

The other ports included in this study had somewhat less defined and consistent contact with other stakeholders in the conduct of port marketing activities. The terminals in the various ports are most consistently engaged with the port on marketing efforts. Coordination with transloaders on this issue was somewhat less frequent. Shipping lines were more often noted in the interviews as being the target of marketing activities as opposed to being partners in promoting the port to overseas export and import customers.

Among the non-west coast ports, there is considerably less direct engagement with the railways in the promotion of their ports. In fact, several of those interviewed suggested the railways, by not being more active and supportive in the port's promotional efforts, are hampering the growth of traffic through the port.

The day-to-day activities of the port quite often are dominated by the landlord-tenant relationship the authorities have with terminal operators. In addition, there are the required interactions with the harbour masters related to moving vessel traffic in and out of the port. In Vancouver, it was noted that community relations and the impact of port traffic on neighbourhoods in proximity to port operations is also an ongoing area of activity.

Most ports, except for Montréal, said they did not have a great deal of daily interaction with the railways. If there are some existing contacts, these usually had originated through the terminals as a result of a terminal-rail issue that required the port's attention. An example of one of these issues was the move by rail providers to build longer trains which put pressure on terminal facilities to expand their handling capacity. This issue was raised in Vancouver.

Satisfaction with the Railways

Stakeholder Summary

Satisfaction with rail service varied widely across stakeholder groups and even within these groups.

Terminal operators and shipping lines expressed some of the strongest opinions, both positive and negative. Many of the terminal operators expressed reservations about their relationship with their rail provider, while others expressed very high levels of satisfaction. For contextual purposes, terminal operator satisfaction rating (on a scale of 1 to 7 where 7 was very satisfied) predominantly clustered around the 3 to 5 range with one terminal providing a rating of 7. Among the shipping lines interviewed there was a considerable polarization in the overall satisfaction levels concerning the service received from Canada's freight railways. About half are fairly satisfied with service (rated a 6 out of 7) while the balance are less satisfied (rating a 3-4 out of 7).

Port authorities are comparatively the most satisfied of the stakeholder groups interviewed as part of this study, with ratings ranging from the 4 to 6 range on a scale out of 7. Only one port provided a rating below 4 out of 7.

There was no discernible difference in satisfaction levels of stakeholders between CN and CP. However, there is some evidence of lower satisfaction levels with terminal operators and ports that are serviced by only one rail provider. Here the exception was Prince Rupert, which is very satisfied with its service from CN. Interestingly however, most “captive” stakeholders are unsure when asked if the rail service they receive would improve should they also get service from the other Class 1 provider. These respondents indicated they would like the option of a second rail provider (even those respondents in Prince Rupert), but they are not certain that the overall level of service would be much better. While some terminal operators expressed “no love” for CN, they were fairly quick to point out that CP is quite often the “me too” railway, that is, CP typically followed CN’s lead.

In terms of current satisfaction levels compared to three years ago, the bulk and break bulk terminal operators were most likely to say their opinions of the railways have worsened over this time frame. These terminals indicated their satisfaction levels have *decreased somewhat* from what they were three years ago.

A few container terminal operators were of the opposite view indicating their impressions have improved *somewhat* from three years ago. Several, particularly in Central/Eastern Canada, however, said satisfaction with service from the railways had declined in recent years.

Most port authorities indicated satisfaction levels with the railways have *improved somewhat* or *not changed* from what they were three years ago. The same was true with most of the shipping lines interviewed.

It should be noted that many respondents across the three stakeholder groups provided some context to their responses to the question of how their satisfaction levels have changed from three years ago. It was often noted that approximately three years ago, the freight transportation system was going through a particularly busy and congested period, resulting in many delays (extended dwell times) and the slow movement of freight. The current situation, while not optimal in the view of many interviewed, is better than that particularly difficult period.

Important Factors Contributing to Rail Service Satisfaction

Stakeholder Summary

There are a range of factors which stakeholders consider in assessing their satisfaction with rail freight service. There are some factors consistent across stakeholder groups and some areas very specific to a particular group. Three areas were raised frequently in all interviews as being very important factors contributing to a positive impression of the railways. These were:

- The timeliness of the rail car supply
- The provision of the correct number of cars
- A knowledgeable and helpful contact within the railway

Many stakeholders commented that when the system was performing well there is “fluidity” to the movement of freight. There, cargo moves constantly and for this to happen timely access to an adequate number of rail cars is critical. It should be noted that this applies to cargo destined for export as well as cargo, predominantly containers, arriving in Canada.

Across all stakeholder groups, another element identified as contributing to a positive experience with the railways is the presence of a very knowledgeable and helpful contact within the railway. However, this is not the norm according to stakeholders. When stakeholders did mention that they have a very good contact person at the railway this is based on more of the personal traits of the individual and not a function of the actual job description or requirements of the position. One terminal operator noted they have a good rapport with their railway contact, but this person is due to retire and there is some concern about who is going to be their replacement. This railway contact was noted as not only being able to provide accurate information to other stakeholders regarding the status of rail service, but also seemed genuinely interested in doing so.

Terminal Operators

Other areas identified by terminal operators as particularly important service factors included:

- The railways’ response to medium and long-term volume forecasts
- Provision of switching crews when trains arrive
- Provision of crews to repair damaged equipment
- Frequency of rail service (East Coast terminals)—Designation of specific days to load for specific destinations, lack of flexibility in scheduling.
- Car capacity (container cars). Some are able to carry stacked containers while others only one container. This also limits the overall weight cars can take.

Shipping Lines

For shipping lines, a very important measure of service is dwell time—the length of time a container is sitting in the terminal—and the performance of the railway is critical in this regard. Shipping lines generally want a shorter dwell time of 2 to 3 days on average as opposed to what is perceived as the current norm of 4 to 5 days in Vancouver. Dwell times are shorter in other less busy ports.

One shipping line pointed out that dwell times can sometimes be a misleading measurement of performance in that not all a vessel’s cargo necessarily has to leave the port within 2 to 3 days

of arrival. There may be cargo that is not immediately required and, therefore, can remain in the terminal for a few extra days while other priority goods are expedited. This individual raised the point that a more accurate reflection of system performance would be tracking the percent of a vessel's cargo that moves within certain time frames. For example, if 80% of a ship's cargo leaves the terminal within 3 days, the question would be: what is the status of the remaining 20% of the cargo? And was this dwell time a result of expediting priority goods or poor management? The point being made by this individual is that by examining the percentage of cargo moved within a time frame may provide a more accurate understanding of the system's overall performance and capacity.

Shipping lines stressed the need for all components of the freight transportation to work well together to ensure a fluid and constant flow of goods. As one respondent said, *"it should work like a conveyor belt alternating in and out."* Inbound containers need to arrive on time and be unloaded efficiently. The rail cars need to be available in adequate number to move them out of the terminal. A supply of empties should be coming into the terminal at regular intervals. Several shipping lines stressed the need for terminals and railways to work particularly well together as they represent a key link in the system from their perspective. Another area mentioned in respect to good rail flow is the ability for railways to respond to unanticipated service disruptions. These might have been the result of weather related issues or a derailment, but the ability of the railways to manage their operations in light of these occurrences and provide the additional capacity to make up for backlogs is important. When probed, the movement of empty containers back to the originating port is another important service area related to the railways. From the shipping lines' perspective, what is required from the railways is a constant and predictable flow of *"empties"* back to their port of entry. The overall fluidity of the system or the constant movement of goods was often raised by shipping lines as being a critical feature of the system.

A few shipping lines raised the overall need for system stability as another important service factor. This specifically applied to the railways, but also to other stakeholders in the system. Shipping lines seemed more acutely aware of the costs of system disruptions related to strikes or infrastructure issues. It was noted in several interviews that their business is very competitive in terms of other ports into North America vying for their and their customers' business. One shipping line manager said that even the hint of labour disruptions can lead to customers or the shipping lines re-directing cargo to alternative ports. It was noted in another interview that the widening of the Panama Canal, which is scheduled for completion by 2015, will open up more options for overseas customers and lines when making decisions regarding port usage. In either case, system stability is important to shipping lines.

Port Authorities

As noted earlier, the ports and the terminals typically have a landlord-tenant relationship. To some degree, what the port authorities perceive as important often mirrored the views of the terminal operators. Many of the ports mentioned the need for a consistent level of rail service with respect to on-time delivery of cars in adequate numbers. In Montréal, there was concern

regarding the execution of the plan as the port wanted the railways to do “*what they had committed to do and not other things*”.

Many of the ports stressed the need for the railways to actively engage in the ports long-term plans in terms of expansion and new market opportunities. Rail service in general is a key component of the eventual fortunes for any port.

Several of the ports interviewed also raised the issue of freight rates as an important factor affecting satisfaction. Freight rates were raised more often by the port authorities compared to the other stakeholder groups, particularly more than terminal operators. These comments were usually in the context of the competitiveness of the port compared to other ports. It is perhaps noteworthy that several of the ports who have freight rate concerns are serviced by short lines and not by one of the main Class 1 railways. St. John, in particular, raised concerns about the short line rates and how this impacts the port’s ability to attract new business.

Performance of Railways on Important Factors

Stakeholder Summary

Stakeholders provided a range of opinions regarding how the railways are performing on the service attributes important to them. Generally speaking, terminal operators are of the view that CN and CP could be relied on to move freight and that the overall volume of freight moving through the system is increasing. However, the issue is the consistency of the movement of freight and the operational difficulties inconsistent service creates.

Most terminal operators said the railways have *met their expectations of service*, however, it should be noted that many of these operators indicated they are dissatisfied with the service received. So in respect to the interviews *meeting expectations* was not always a sufficiently positive response.

Most port authorities interviewed said the railways have *not met their expectations of service*. The reason for this view was not related to a particular service function (as was the case for terminal operators), but with the perceived general attitude of the railways when it came to serving the ports. Many individuals said that the railways are too focused on just the rail-side of the transportation system and do not take into account the requirements of the other stakeholders in the broader transportation system. One port authority summed this up by saying, “*the rail’s asset utilization model is increasingly not fitting with the port’s asset utilization plans and this is a problem.*”

Another port authority expressed serious concerns about the lack of communications from one of the Class 1 railways when it was contemplating changes in service schedules. It was noted by this port authority that in some cases the communication is nonexistent, when it came to pending rail service changes. The view was the railways are “*directive*” not “*consulting*”—they

only take their own imperatives into consideration and totally disregard the needs of other partners. They operate “en vase clos” (in isolation behind closed doors).

It should be noted that opinions from the Prince Rupert Port Authority and terminals in the Prince Rupert port are noticeably more positive than most of the views from respondents elsewhere in the country. There is a much more positive impression of the relationship with CN (the only rail provider into the port) compared to the impressions of the rail providers servicing other ports and terminals. The key reason for this positive impression can be credited to the fact that *“CN is very engaged in the planning and marketing of the port—lots of dialogue and in-sync with terminals’ goals of growth and service.”*

The question of whether the railways are meeting performance expectations was not asked of shipping lines. The discussion regarding satisfaction and the railways’ performance on specific service areas revealed attitudes that currently the performance of the railways is meeting expectations in most instances. Freight is moving off the docks in a relatively acceptable (timely) manner, although it could be better.

Terminal Operators – Areas Where Railways are Performing Well

All terminal operators indicated that the railways are performing better in terms of shipment velocity—*“trains are getting from point A to point B in good time.”* There was a good consensus that the lines through the mountains are in good shape and seem to be less vulnerable to lengthy delays. A few terminal operators, who are relatively dissatisfied with the service they are receiving from the railways, *“grudgingly”* admitted there is a *“brutal efficiency to the railway [CN in this case] approach. It’s just not very customer-friendly.”* A number of terminal operators said that they could work with the so-described *“brutally efficient railways,”* however it is when this same railway unexpectedly misses arrival times or arrives with the wrong number of cars that causes problems. The inconsistency of service is difficult to manage for these individuals.

The winter months were noted by a few individuals as still presenting some challenges, but a number of terminals commented positively on the winter contingency planning, which they said help mitigate shipping disruptions due to weather or line closures. The practice of the railways maintaining extra cars on the west side of the mountains is appreciated by a few terminal operators.

Many of the terminal operators acknowledged that the railways are beginning to make more of an effort at communicating changes in schedules or other issues that could have an impact on terminal operations. This view was more often associated with CP than with CN; although there were a few comments suggesting that the change in management at CN may lead to improvements in this area.

Terminal Operators – Areas Where Railways Performing Below Expectations

Almost all terminals said that the timeliness of train arrivals was critical to their operations. It was stated numerous times that the lateness and, at times randomness, of arrivals made scheduling crews a very challenging and often expensive undertaking. There were frequent comments raised by terminal operators on the inaccuracy of the railways' estimated time of arrivals (ETAs). This was the case even though almost all terminals are in daily contact with someone at the railways in the form of morning conference calls. In most cases, these morning conference calls were noted as not being helpful in alerting the terminals to changes in scheduled arrival times. Several respondents felt this is because the individuals representing the railways on the call are either not senior enough or experienced enough to provide an accurate forecast of a train's arrival, or that the information is not efficiently updated when a delay occurs after the conference call.

The railways have an 8 hour window in terms of what is considered an *on-time delivery*. An 8 hour delivery window is not uncommon in the freight logistics system (shipping lines operate under similar principles), however, the absence of any proactive communication from the railways in terms of updating, even within a day of arrival, makes the scheduling of labour a frustrating exercise for the terminals at times. A few terminals said that the issue of train lateness seems to be more likely later in a week—*"Mondays are usually pretty good but things start to snowball and get progressively worse as the week unfolds."*

Several terminal operators made the point during the discussion on the lateness of train arrivals that trains almost always leave the terminal as scheduled. Quite often trains leave the terminals on time, even though they may have arrived at the terminal 7 to 8 hours late. It was stated this is because even when a train arrives almost 8 hours late, it is deemed by the railway to be 'on time' and therefore the terminal must have that train ready to depart as originally scheduled. If the train is late leaving the terminal, (even though it may have arrived hours late) the operator will be penalized by the railway. In addition, one terminal operator made the point that *"usually any lateness out of the terminal chain-reactions back to us in terms of train arrivals into the terminal being delayed later in the week."* The point being the terminals ultimately bore the consequences of a late departure out of a terminal.

The provision of the correct number of cars was another common source of concern among terminal operators. One terminal described this situation such that *"[w]e order the cars we want and the railway delivers what they want."* As with late train arrivals, the fluctuations in car numbers create operational challenges for the terminal. Depending on the commodity, the arrival of more cars than expected resulted in staffing pressures to unload or clear the cargo. If fewer cars arrive, vessels can either be forced to wait for an additional train to complete its load, creating scheduling issues for the shipping line, or leave with less cargo than planned.

For several of the bulk and break bulk terminals the issue of correct number of cars was noted as particularly challenging at times. These terminals would be shorted cars without adequate notice or be informed that they would receive additional cars. This situation is in part due to a

system where the railways commit to moving a monthly allotted volume of a commodity but do not always deliver this volume throughout the month in an evenly distributed manner.

The unpredictability of car supply is a particular irritant for a few of the grain terminals interviewed. It was noted that grain is not the most profitable commodity for railways to transport, so it is sometimes re-scheduled to accommodate other commodities—“[g]rain is the bread and butter of the system... not the steak.”

Container terminals also raised concerns about car supply. Almost exclusively, their issue is in not receiving enough cars to adequately move the containers off the docks from a vessel. Several of the terminal operators expressed frustration over this issue, as they felt they provide the railways with accurate information with respect to the volumes and timing of vessel traffic, yet this does not seem to translate into the correct number of cars arriving when required. Without the required cars available, the containers are left in the terminal creating dwell time issues.

The railways' ability to manage surges as a result of sudden increases in demand or unanticipated disruptions is another problem area for many terminal operators. It was generally stated that the railways are slow to react to surges and not able (or “willing”) to increase the car supply to meet the increased shipping volumes. A few terminal operators said they understood the problem to be one of cost to the railways when activating additional cars for service.

Several of the container terminals interviewed raised the issue of vessel “bunching.” They often ask the railways to help increase either cars or trains into their terminals to assist with the backlog. Sometimes railways respond to this request favourably, but often this is not the case.

The inadequate supply of cars for double stacking containers is an issue with container terminals in Central and Eastern Canada. This issue was a cause for some concern, particularly should a hoped for economic rebound occur and freight traffic increases.

A few terminals said, that of an allotment of cars supplied by the railway, there is often a number not in proper working order which are subsequently rejected by Transport Canada inspectors. Compounding this problem is when the initial allotment is short what the terminal expected and now even more short given the inability to use some of the cars supplied. This creates delays in freight movement.

The issue of surge capacity is also a major concern for bulk terminals (particularly those shipper-owned). This is because if freight volumes cannot be increased to meet additional demand, typically as a result of new overseas orders, terminals risk losing this business. It was noted the ability to meet these orders is critical as there are other suppliers of bulk products to which buyers can turn.

Beyond the communication of train ETAs, concerns regarding communication between the railways and terminal operators were an area frequently raised in the interviews. Several terminals mentioned the recent decision by CN to end rail service into the south shore of the Port of Vancouver. This was done, according to one terminal affected, without notice and on a Friday. There were other examples raised that railways, particularly CN, do not often participate in periodic stakeholder meetings to address port-related issues such as community concerns or traffic—issues for which the railways share some responsibility.

Many terminals stated that they would like more frequent train service in and out of their terminals. In Montréal for example, there is only once a week service to some important destinations such as CN bound trains to Edmonton leaving only on Mondays, Detroit on Tuesdays and shipments for Vancouver on Wednesdays. Meanwhile there is daily service to Toronto and Chicago. Problems arise, however, when delays occur (quite often rail-related) and cars do not arrive in time to make a switch for one of these once-a-week departures since there is no ‘make-up service’. This can mean that a terminal can *“miss it’s day and, even if this is due to an error on CN’s part, they will have to wait until the following week to ship to that destination.”*

It was noted that multiple trains in a day would provide greater fluidity to the movement of cargo and empties into the system. The primary concern expressed by these terminal operators is the apparent disregard by the railways as to what level of train service they want. The view is that the railways alone determine the frequency of service.

A few terminals, particularly on the north shore of the Port of Vancouver, expressed some concern about the move by the railways to longer trains. The issue for these terminals is the physical space required to accommodate these trains in the terminal yards. Several of these terminals are pursuing expansion plans with the port in order to accept longer trains; however, the expansion of the Vancouver port is not so simple an undertaking.

Shipping Lines & Railway Performance

For the shipping lines there were four railway service areas consistently mentioned by respondents. These were:

- Movement of goods out of the terminal
- Movement of goods onto the vessel
- Movement of empties back to port
- The ability to make up volumes after a disruption

The assessment performance of the railways on the first point above—the movement of goods out of the terminal—was mixed among the shipping lines. The lines that do a significant amount of business through the Port of Vancouver said this is an area that could be improved. Trains are often late arriving and, more problematically, usually short of the required number of cars in relation to the number of containers on the vessel. A few shipping lines said they found

it difficult to understand why this is the case. Shipping lines are able to provide accurate forecasts several weeks in advance in terms of vessel arrival times in port, as well as, the volume cargo (containers) on board. As one shipping line noted, *“shipping lines are good customers for railways. We can give accurate two week forecasts in terms of arrivals and freight load.”*

Another aspect that relates to the movement of goods out of port was the availability of the correct type of cars to efficiently move the cargo. Lines indicated that cars that can accommodate stacked containers (“well” cars) are not abundantly available for shipments out of the Montréal and Halifax ports. This leads to longer dwell times in these ports.

The movement of goods onto the vessel was noted by shipping lines as being less problematic; however, when problems do arise they are generally quite serious. Several lines singled out the Coquitlam yards as being a problem area for shipments out of the Port of Vancouver—*“the black hole of Coquitlam,”* as one shipping line commented. It was noted that occasionally trains arrive in plenty of time at Coquitlam to get to the terminal for loading, but for some reason (lines typically felt delays are due to congestion in the yard) they are delayed.

The lateness of trains occasionally creates problems in terms of vessels either having to decide to delay their departure, thereby potentially creating scheduling problems in other ports, or departing on time and sailing “light” because scheduled goods did not arrive in time for loading. It was also noted that the consequence of a missed delivery does not end when the vessel sails. Typically, the product still arrives (late) at the terminal and has to be stored on the dock or in the yard until another vessel arrives. This can cause congestion in the terminal and additional expenses for the shipper.

A few shipping lines noted that agricultural products, in their opinion, seem most prone to inland shipping port delays. In some cases, a shortage of particular type of car is the problem and in other instances it is issues related to the Coquitlam yard.

The movement of empties by the railways back to the originating port is an area of some concern for shipping lines. Their concerns focussed on the timeliness of getting the empties back to port and the costs associated with this service.

Several respondents said that ideally the flow of empties back to port should be fairly regular. A few lines indicated that an empty should generally circulate back out of the country about two months after entering. As part of the shipping lines’ contract with the railways, they pay the railways for returning the empties back to the originating port. What often happens, however, is that the empties will gather in the railways yards in Edmonton and Toronto. The railways do not like to transport empty containers. They try to find a domestic use to move them back from Eastern Canada into the West. However this is not always possible, so a supply builds up in various railway yards. Eventually the railways move them back to port, but instead of the desired uniform flow they often arrive in bunches. If the vessels are unable to accommodate a

large volume of empty containers, which is often the case currently, they remain in the terminal at the expense of the shipping line.

It was also noted by one shipping line that sometimes it looks like the railways are transporting the empties for one company exclusively at the expense of any other carriers' empties. It was speculated that this may be because the line in question had indicated that they need a large number of containers back in port for transport overseas. It was felt this situation could be avoided by a more even flow of empties from all railways back to port.

The ability of the railways to manage surges in demand or make-up for service disruptions is an important issue for shipping lines. The railways are perceived to be making some positive progress in this area. The winter contingency planning was noted by a few respondents as resulting in some positive developments in this area. The maintenance of a supply of cars on the west side of the Rockies was identified as a good policy that helps avoid significant backlogs in the ports.

There are still concerns regarding the speed at which the railways could address the back log created by a disruption or respond to a situation where vessels have become bunched because of weather related delays. When these situations occur the view is that it takes the railways too long to clear the backlog. One line indicated that for every day freight movement is interrupted it takes approximately four days to recover. They felt this recovery period could be shorter.

Somewhat related to this point was the desire expressed by a few shipping lines to receive better information from the railways regarding the extent of the service disruption. One shipping line recounted an incident where they were able to get better information from the local news regarding a derailment related disruption compared to what the railway was providing. More timely information would be helpful to shipping lines to assuage any concerns their customers may have regarding the delivery of their cargo to its final destination.

There are some concerns regarding the need to run shorter trains in winter due to weather considerations. This obviously reduces freight capacity, yet the railways usually do not change the frequency of service to make up for this diminished capacity. At times, this results in higher dwell times during the winter months.

Shipping Lines – Other Container Specific Issues

Shipping line respondents were asked a few additional questions specifically about the movement of containers.

There were very different experiences among shipping lines in terms of dealing with damaged containers. Several lines indicated this is very rarely an issue, if at all. These individuals noted that there are fairly strict standards in terms of blocking the goods for transport which mitigate any issues with containers opening up during transit.

Two shipping lines, however, did indicate the incidence of containers that are damaged or opened during rail transit is higher than they felt acceptable. Both lines pointed to concerns over “*rough switching and shunting*” in the Coquitlam yards. Interestingly, in both cases CP is the railway identified as being responsible for most damaged or opened containers.

Port Authorities – Areas Where Railways are Performing Well

Several of the port authorities interviewed said the railways have improved the overall efficiency of the movement of freight. To them, there seems to be fewer disruptions and the volumes being moved is increasing. This is particularly the perspective of the West Coast ports.

It was also noted that the railways, particularly CN, is very good at making money—“*[t]he CEO has been publicly stating that maximizing shareholder value is the pre-eminent goal.*” They are perceived to be very strong and well managed Canadian companies.

Port Authorities – Areas Where Railways are Performing below Expectations

Many ports mentioned the railways’ lack of customer service as being an area that needs improvement. A few respondents described this as a “*monopolistic attitude*” where the “*customer appears almost irrelevant.*” Ports cited examples of this attitude in the form of reduction in rail service into the port without notice or consultation, as was the case recently in the Port of Vancouver, or a refusal to respond to requests for increased service.

As noted earlier, several of the ports interviewed are operating at less than full capacity and as such are aggressively seeking out new opportunities for port business. These ports often mentioned a frustration with the railways in terms of their reluctance to commit to service.

Other issues raised by the port authority resembled the concerns raised by terminal operators. These included:

- Timeliness of car delivery
- The correct number of cars
- The ability to meet unexpected demands or recover from service disruptions—“*[t]he railways could respond more expeditiously to surges but are deliberately keeping capacity tight.*”

In addition, a few ports were quite critical of the railways’ freight pricing regime. These were primarily East Coast ports.

A few ports, notably Vancouver and Halifax, stated that the performance of the railways and the service provided to their ports has the potential of tarnishing the international reputation of their facilities. These individuals noted that the efficiency and reliability of rail service is an important aspect of the port and one that overseas customers and shipping lines consider closely when deciding where to do business. In addition, these ports also raised concerns

regarding the cost of moving freight into and out of their ports. There is a view that these costs are too high and creating and placing them in an uncompetitive situation.

A Note on Prince Rupert

The Port of Prince Rupert requires some particular comments. As noted previously, the opinions and experiences from the terminal operators and the port authority in Prince Rupert were quite distinct from the views of other stakeholders. These stakeholders all had much higher levels of satisfaction and provided fewer examples of service breakdowns with the railway. There were a few concerns raised by one of the terminals in Prince Rupert. The grain terminal in Prince Rupert echoed a few of the challenges regarding consistency of delivery as heard from terminals in other ports, but the intensity of these concerns was noticeably lower.

The reason for the higher satisfaction levels almost always related back to the level of engagement of CN in terms of working with terminal operators and port officials to ensure a smooth operation. As one individual noted, *“we have a pretty elaborate relationship with CN. CN is very motivated to make the port work well for them as they have an exclusive franchise on the line to Prince Rupert.”*

Performance Differences by Class 1 Railway Provider

There were very few significant differences between CN and CP with respect to the perception of system stakeholders. CP was occasionally described as a more *open and agreeable* provider and the one more likely to engage in discussion on a service issue.

One Port Authority said they have a better rapport with CP and find them to be more engaged in port matters compared to CN. CP typically attends periodic port stakeholder meetings while CN does not. Montréal port's reaction differed depending on the railway providing services. Montréal Port Authority felt CN's equipment was adequate while CP's cars (no double stacking of containers), switching facilities and infrastructure were lacking. The ratio of 1.5/1.4 cars needed for CP to be equivalent to CN's cars was felt to be a serious issue while the tunnel between Detroit and Windsor was described as a major source of irritation.

CP was praised for its responsiveness within the limits of its equipment while, on the contrary, CN's attitude and total lack of concern and communications in its decision making process regarding its operations and services was judged to be a serious problem.

From a purely operational perspective, there was very little specific feedback from respondents that distinguishes the level of service from one of the two railway providers from that of the other. A few shipping lines commented that CP appears to be less organized compared to CN when it comes to the movement of empties back to port. That said, CP was noted as charging less and being more accommodating than CN when it comes to the storage and movement of empties.

Suggested Rail Service Improvements

Stakeholder Summary

Respondents across all three stakeholder groups suggested, as a first step, that the railways and freight system stakeholders should work to significantly improve the accuracy and amount of information flow regarding the operation of the system. Many terminal operators noted they have a daily conference call, which suggests communication, but accurate and reliable information is lacking. Stakeholders need this communication to better inform their operational decisions.

As a corollary to the above point was a desire raised by respondents (terminals, shipping lines and ports) for a greater degree of transparency and operating agreements between the railways and other key stakeholders. It was noted by terminal operators and other non-terminal respondents that for the system to function there needs to be an established relationship between the main parties. It was often noted by terminal operators that they do not have a contract with the railways. The absence of such an agreement creates challenges in terms of stakeholders' ability to deal with operational issues. It should be noted that this discussion also raised comments to the effect, *"this will never happen. Railways want out of agreements and move to protocols because they are less rigid and no penalties for them."*

The benefit of greater transparency and collaboration among stakeholders was identified by a few port authority and terminal respondents as being, in their opinion, a very important consideration when moving forward with the national "gateway" strategy. It was noted on several occasions that the railways are, at times, operating in a manner inconsistent with their role as part of a greater transportation system.

Infrastructure improvements were another suggestion that surfaced across all stakeholder groups. Suggestions regarding improved crossings, increased rail line capacity and switching facilities were noted specifically. Many of these comments singled out the Vancouver Port as an area where rail related infrastructure improvements are required.

Other Terminal Operator Suggestions

A few other suggestions raised by terminal operators included:

- More contingency plans (for unexpected disruptions) and communicate the nature of these plans to terminals
- Longer term forecasts. *"Seven days would be ideal if accurate."*
- More co-production agreements to increase traffic flow. In Vancouver, there were a few suggestions that a port rail line responsible for intra-port traffic should be considered.
- A buffer or flex supply of empty rail cars available

- The manner in which the container trains are built. *“It would be advantageous if during switching, cargo destined for one vessel could be blocked together. Also, prioritize the position of the cargo based on when it is to be loaded.”*

Terminal operators were probed on a few specific areas where the railways could invest in improving their operations.

As noted above, terminal operators were most apt to agree that investment in infrastructure works would benefit the overall rail freight transportation system. Several respondents mentioned that the railways’ move toward building longer trains adds to the stresses on some port-rail infrastructure and would need examination. There were several mentions about establishing dedicated rail corridors servicing the ports in an efficient and, from a community perspective, unobtrusive manner.

Terminal operators did not feel there was much need for investing in additional locomotives or equipment such as rail cars. The suggestion of investments in rail cars was often met with sarcastic comments to the effect, *“they don’t use the ones they’ve got in storage when we need them now. Why buy more.”*

There was some support, particularly among the Vancouver terminals, for the suggestion that additional crews may be required. This was usually associated with Coquitlam and internal terminal switching activities where it was noted that at times the railways seem short staffed.

Other Shipping Line Suggestions

Apart from what was discussed in the Stakeholder Summary introduction to this section, shipping lines had little else in terms of suggestions for railway-specific improvements.

Other Port Authority Suggestions

Apart from the areas referenced in the summary above individuals at the various ports suggested the following:

- Improving the ability to rebound from service disruptions
- Additional rail sidings to accommodate longer trains
- Additional crossings and switches

In terms of specific areas where the railways could invest and make a positive difference to the transportation system, infrastructure improvements were noted most often as being a positive move, although this is not universally the case across all ports. Vancouver, St. John and Hamilton said they felt these activities would improve the overall rail service to their port.

Increased staffing was another area where several ports felt additional investments (hiring) is required.

Suggested Improvements by Other Stakeholders

Stakeholder Summary

Many respondents, when asked this question, took the opportunity to provide a “big picture” perspective of the freight logistics system and suggest some very broad, and in some respects, “sweeping” changes to the current approach and structure. Interestingly, there was some similarity in these comments across the various stakeholder groups. It should be noted that many of the points below were raised in reference to activities involving the Port of Vancouver specifically.

One suggestion, raised by a few terminal operators and a shipping line, was to view the movement of freight within the ports as a common or public good. This would allow for the establishment of dedicated rail corridors into the ports that could deliver freight in a more timely fashion. The Alameda Rail Corridor in California was noted as an example. The respondents who raised this point felt it is an example of government’s deciding the efficient movement of freight is a public good and not one best left to the commercial interests of the railways themselves.

The Alameda example was also raised by a shipping line representative in the context of creating an intermodal facility somewhere relatively removed from the congestion of the Greater Vancouver Area. All traffic is brought to this hub by CN and CP, but from there a third party rail provider would transport the cargo directly into the port. The third party supplier would also maintain an adequate car supply to move the containers when required. This would take the delivery and off-loading of containers out of the Class 1 rail provider’s hands (and take the Coquitlam yard out of the equation).

There were several suggestions that the movement of cargo within the port should be managed by a port-controlled rail provider, similar to the system in Montréal where the communications and transport services are managed by the port, all stakeholders are linked via a common space where freight traffic flow is managed by the port authority. Both railways use the port facilities and both pay fees—they are business partners rather than simply service providers. It is thought that this approach would allow for more efficient use of the existing rail infrastructure in the port. An internal and dedicated port rail service, it is hoped, would be more flexible and accommodating to meeting the requirements of the ports’ terminals. It was acknowledged that co-production agreements are steps in this direction but that more needs to be done in this regard. In addition, the Class 1 railways are currently not very focussed on being “*customer friendly*” and there is an opinion that a port-operated railway would be more focused on the port customers.

In a similar vein, one of the shipping line respondents suggested that the Port of Vancouver look to take advantage of the numerous waterways within the port and incorporate barges to move containers from the inner harbour to terminals located further away from the city centre.

This would ease truck traffic in Vancouver and could prove to be more efficient way to move containers—*“barge containers from ocean terminals to a more trucking-conducive terminal.”*

There were several suggestions out of the three stakeholder groups about the need to rationalize and harmonize the labour (union) situation in the ports (again, Vancouver was singled out). Suggestions were made to streamline the bargaining process and avoid ongoing labour negotiations and potential threats of disruptions.

One shipping line commented that some large ports in the U.S. have structured their labour agreements to run for a longer period of time. In addition, contracts all come up for re-negotiation in roughly the same time frame. A few ports added that labour contracts at the terminals need to be structured more flexibly in terms of meeting the needs of shippers and the schedules of the railways.

Perhaps not surprisingly, the suggestion was made by the Prince Rupert Port Authority that more West Coast freight traffic could move through its facilities instead of through the relatively crowded Vancouver operations. This representative felt that the government should focus policy and investment decisions on directing freight volumes where there is clearly the capacity to handle greater volumes—*“invest where there is the most bang for the buck.”* This representative put forward the notion of perhaps considering *“one port authority for the West Coast,”* and in this manner, strategic decisions could be made regarding the efficient usage of the region’s total port capacity.

What Could “We” Do to Improve the System

Stakeholders were asked what they could do themselves to improve the overall operation of the freight transportation system.

Almost all terminal operators indicated that they are constantly considering upgrades and expansion if warranted. A few of the terminals mentioned the prospect of needing to receive longer trains as necessitating a redesign of the yards. Several of the grain terminals interviewed noted the desire to improve their ship-loading capabilities.

There was clearly a significant amount of potential investment activity at some of the terminals. However, terminals are also somewhat cautious about committing to large investments without firm service frequency commitments from the railways. Any investment has to have a reasonable time frame for pay-back. As one container terminal noted, *“we’ve increased volume capacity and can handle more but to do so requires increased rail capacity. We could perhaps start taking whole trains; however this requires a commitment from the railroads.”*

Incidence of Poor Rail Service and Accountability

Stakeholder Summary

There was a fairly strong consensus among terminal operators and shipping lines that when they experience poor service from the railways, there is a potential for them to incur serious financial losses. Many reported that often this, in fact, does happen.

Whether it is the late arrivals of freight that force terminals to employ a second shift at overtime rates, long dwell times for goods or a lengthy delay in returning empty containers back to port, almost all terminal and shipping line respondents said that rail-related problems lead to increased financial costs. The railways were identified almost unanimously as being the system stakeholder whose actions (or inactions) are most operationally and financially disruptive for terminal operators. As an exception to this “rule,” shipping lines generally noted the railways second behind weather as their biggest problem.

Compounding this situation was the equally unanimous belief among stakeholders from all groups that there are no mechanisms currently in place holding railways accountable to their customers. This almost universal observation of railways’ lack of accountability carries implications for the entire rail freight system, and is possibly the root cause of the difficulties that prompted the rail freight service review.

Generally, respondents said that shipping lines are accountable for their service based primarily on the fact that the shipping line sector is thought to be quite competitive. If customers receive poor service they move their business to another shipping line. In addition, shipping lines often have contracts in place with the railroads that stipulate certain performance expectations.

Terminal operators are another stakeholder group that many non-terminal respondents saw as being accountable. Again, competition was noted as providing some check on terminal service levels. Many shippers can direct their goods to other ports and, therefore, other terminals. In addition, it was noted that there is often a formal agreement between the shipper and the terminal that provides some guidelines regarding service levels.

Shippers were noted as having customers to whom they must answer, which provides a significant level of accountability.

Railways were the one stakeholder group that many individuals said is not really accountable for its customer service actions. According to some individuals this is because:

- No contracts with many stakeholders (terminals and many shippers)
- When contracts are in place there are no service level penalties for railways
- Monopolistic or at best a duopolistic market position
- The Canada Transportation Act is too cumbersome and expensive to utilize
- Complaints expose companies to “subtle” retaliation by railways

How Should Railways be Held Accountable

The question of how to inject more railway service accountability into the system was a far more difficult question for stakeholders to answer. Shipping lines and ports had little to offer for suggestions. A few ports suggested some form of commercial dispute resolution mechanisms, along with the development of some standard performance measures against which service levels could be judged.

The notion of developing service standards or metrics was raised by a number of terminals as something that would be a start in providing some ability to hold the railways accountable. The question remained however, if there was a service failure on the part of the railways, what is the recourse? As one terminal operator noted, *“the \$4 million question is how you give teeth to any regime. Railways have the power.”*

Some terminals suggested the need for contracts between terminals and railways setting out basic service expectations and penalties if these are not met. Contracts of this nature would address what some terminals referred to what is now a *“one-way street in terms of penalties for us and nothing for railways,”* into a *“two-way street”* of sorts. Most terminal operators are not overly optimistic that the railways would ever willingly enter into a contract with terminal operations.

Not all terminals supported the idea of establishing contracts with the railways. One terminal on the East Coast thought there is some benefit to the terminal in maintaining some distance from the railways and not being tied too closely by a contract.

Re-Regulation

There was little enthusiasm expressed by stakeholders regarding the prospect of the government re-regulating the railways. Those individuals, somewhat open to the idea of re-regulating the railways, are concerned about the extent of re-regulation and the impact this may have on other aspects of rail service. If re-regulation is considered, it was generally noted by respondents that it should focus primarily on service standards.

Demurrage

The issue of the demurrage railways charge was raised sporadically throughout many of the interviews, but the discussion of railway accountability tended to elicit some particular comments on this topic. Most of the demurrage related questions were asked of only the terminal operators.

Terminal operators said the shippers are generally the target of railway demurrage charges. A few terminals indicated that in some situations they had been charged but in most cases the shippers are ultimately responsible. Many terminal operators are actively involved in the demurrage process, generally working on behalf of their shipper clients. It was noted that quite often the data required to verify demurrage charges rests with the terminals.

There was generally a very low opinion among terminal operators regarding the “reasonableness” of demurrage charges. On scale of 1 to 7 where “1” meant very unreasonable and “7” meant very reasonable, the majority of terminals provided a rating of 1 or 2.

The main issue, and this generated some fairly animated discussion from a few terminal operators, is not the actual demurrage amount but rather the perceived consistent inaccuracy of the demurrage charges. Several terminal operators provided examples of situations where the railways sent out demurrage invoices that, when examined and ultimately disputed, were found to be very inaccurate. These operators were also quick to point out that these errors in demurrage charges were not rare occurrences. Inaccurate invoicing from the railways is a common problem, so much so that several terminals said they have dedicated staff that do nothing but examine and, quite often, challenge railway demurrage invoices. As one terminal operator noted, “[t]he ancillary charges like demurrage are getting to be more of a revenue generator for the railways and less of an incentive to better practices.” One operator suggested the current invoicing situation “forces the terminals to dispute each one in order to be sure the charges are accurate. It was mentioned that disputing these invoices is not easy. The railways are difficult to deal with and require a significant amount of data before they will review the charges.

For a few terminals, the issue goes beyond the financial aspects and time spent disputing these demurrage invoices. Another irritating aspect of demurrage for terminal operators is the fact that when invoicing mistakes are uncovered and the invoice are re-issued for the correct amount there is little or no acknowledgment by the railways that they had made a mistake. For these individuals, this issue went to the nature of the relationship they have as terminals with the railways. It was noted that, ideally, the relationship as part of the larger transportation system should be more collaborative; however, these ongoing demurrage errors lead them to feel their relationship with the railways is more adversarial.

Last Thoughts

Typically, after a relatively lengthy research discussion the opportunity for final thoughts rarely generates a great deal in additional commentary. The opportunity to provide any last comments at the conclusion of these interviews, however, often resulted in respondents providing some broad or high level assessments of the freight transportation system and the role of the railways in it.

A number of terminal operators and port authorities provided similar comments regarding the need to somehow rebalance the role of the railways in the rail freight logistics system. It was noted by individuals that a great deal of the last 45 minute interview had been devoted to discussing a range of different operational challenges related to moving freight in Canada, with many of these challenges directly tied to rail service. The feeling is that the railways have pursued a specific business model with little regard for the rest of the system. As one port authority said, “given it’s [the railway’s] almost 1000% increase in stock prices in the last 10

years and a 55% percent operating ratio it has been successful.” Yet this same individual went on to question “how much is enough before it becomes a greedy money grab.”

Another port authority perceived the current approach of the railways as resulting in service breakdowns. The concern from this individual was that it does not take much to tarnish the reputation of a port’s ability to move freight. Once this happens, vessels move elsewhere. This is not the case for the railways as it is for the other stakeholders. This is essentially the view held by a number of terminal operators and port authorities: there is a need for a rebalancing the role of railways in respect to the other stakeholders in the rail freight logistics system.

One port authority interviewee suggested that perhaps *“one needs to look at who’s paying the bills in the freight system—the shippers. The railways account for about \$15 billion in revenue while shippers account for about \$75 billion.”* The individual went on to suggest that the railways are currently the stakeholders driving certain changes, which is not necessarily a bad thing. However, there needs to be a strong role for the primary revenue generators—the shippers—in terms of determining how the rail system evolves.

A few terminal operators echoed the sentiments above with one individual saying, *“[t]he railways do not see us as integral to their business, however if shippers, railways and terminals can’t understand that working together—respecting each others’ business models—then everything will ultimately fall apart.”* It is interesting that this same individual went on to note that it is not just the railways that are not respecting the other stakeholders in the system. Shippers, likely as a result of issues with the railways, are starting to disregard the practice of trying to smooth out shipments over the year, even though they know railways would like an even flow approach. In other words, other stakeholders, namely shippers, are contributing to the imbalance in the freight rail logistics system.

Several terminal operators raised a few concerns directed specifically at CN. This railway is seen as particularly *“stand-offish”* and uncommunicative. It was noted that CN rarely sends representatives to any local stakeholder/community meetings held periodically by several of the ports. When CN does send representatives out to meet with terminal operators or shippers, they *“never send out senior people, they send out the clowns.”* One terminal operator was concerned about CN’s absence at these meetings when he said, *“they are a major player and I am very interested in what they would have to say on Pacific Gateway issues for example, but you never get that.”* These respondents interpreted this as a sign of disrespect. There were a few comments about the *“changing of the guard”* at the top of CN and how this, perhaps, will change attitudes.

One of the shipper lines ended the interview by noting that Canada's freight railways do not have the strongest reputation overseas—*“there are questions of reliability.”* This line recounted the story that when Minister Day was visiting Singapore last year, he met with the Asian head of the shipping line and heard these concerns first hand. The interviewee suggested that Canada should be focused on ensuring that the reputation of the country’s rail freight logistics system is a positive one.