



Washington State Transportation
Commission

Statewide Rail Capacity and System Needs Study
Task 2.2 – Industry Logistics and Supply Chains

Technical

Memorandum

prepared for

Washington State Transportation Commission

by

Starboard Alliance Company

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Task 2.2 – Industry Logistics and Supply Chains

■ Summary

The objective of the WTC Rail Capacity and Needs Study Task 2.2 is to provide an up-to-date and reasonably comprehensive assessment of who uses freight-rail in Washington State and why. The analysis is timely, given the fact that industry experts and shippers believe the national transportation network, which is comprised of ports, railroads, and highways, is constrained, largely due to the rapidly rising volume of imports. Economic forecasters project that import volume will double in the next 15 to 20 years due to American demand for imported goods. Furthermore, as a result of the trend of port diversification, importers have been routing more cargo through Puget Sound ports instead of California in the past two years. This has exacerbated railroad capacity constraints in Washington.

The national transportation system should be viewed holistically as a multimodal system where cargo is handed off between different modes of transport (i.e., from ship to rail, from ship to truck, from truck to rail, from aircraft to truck, etc.). Disease in one part of the organism negatively affects the rest of the organism. The railroads' ability to perform is limited by the efficiency of port operations, and therefore, railroad processes cannot be viewed in isolation.

Besides import growth, another factor driving the increase in freight-rail traffic is the acute nationwide truck driver shortage. According to the 31 March 2006 edition of the *Memphis Business Journal*, "In the fourth quarter of 2005, the annualized national truck driver turnover rate at large truckload carriers was 136 percent, according to the American Trucking Association (ATA)." ATA forecasts the current truck driver shortage is 20,000 drivers and will be "111,000 by 2014." This ongoing problem will have a ripple affect as shippers push more cargo onto the national rail system ill-equipped to handle it.

It is imperative that Washington State legislators understand current and forecasted logistics dynamics and trends so that effective policies and strategies can be implemented to keep freight moving efficiently through and within the State. Task 2.2 will fuel discussion and provide a foundation for future work at the state level.

In order to understand how various types of shippers use the rail network in Washington, the consultant created five survey templates to capture the unique shipping profiles of rail-dependent shippers, small package integrators, intermodal marketing companies (IMC), ocean carriers, and transload warehouses. The consultant carefully selected and conducted phone interviews with 30 rail-dependent shippers from key industry sectors

that are important to Washington State's economy and 14 logistics service providers that are also heavy rail users through the State. The data obtained through the in-depth surveys was collated and analyzed to glean major themes and provide the State with a good picture of the positive elements of the rail network as well as the impediments and challenges from a shipper's perspective.

Substandard transportation service results in longer lead times and increased costs for companies. Efficient supply chains, on the other hand, are essential to corporate profitability and can enable companies to achieve competitive advantage. American companies are increasingly challenged in keeping their supply chains moving at optimal speed and minimum cost. From interviews performed under Task 2.2 with importers, exporters, domestic producers, and logistics service providers using the rail system in Washington, it became apparent that degradation of rail service continues to present enormous burdens to companies and impacts their ability to operate profitably.

From the market survey, it can be inferred that the preponderance of rail users in Washington, regardless of size and type, believe the infrastructure is highly constrained. A large number of rail service issues and infrastructure problems and chokepoints were identified. Some recommendations were offered for how the State might amend its policies and procedures to improve rail service as well as some particular infrastructure improvements the State could fund. These recommendations can be found in the Findings Section 1 and 2.

Moreover, the majority of rail users are dissatisfied to some degree with the service they receive from Class 1 and shortline railroads and believe that rail service within Washington and nationwide has declined over the past two years. The frustration level is very high and most shippers feel powerless to effect improvements. Most believe the railroads do not focus on customer service because they have more business than they can handle. The monopolistic environment under which the railroads operate fosters this attitude and results in increasingly higher rates. Moreover, many of the shippers interviewed have no viable alternative forms of transport besides rail due to the nature of their products, or are limited from using truck to a greater degree due to the nationwide shortage of drivers, or are served by only one railroad at their facilities. Many feel trapped by their need for rail service and do not feel the railroads, State or Federal governments are listening to their pleas for improved rail service. Meanwhile, supply chains keep operating at less than optimal levels and operating costs are higher. Shippers, in turn, where possible, pass those added costs to consumers.

All of this is alarming in that most shippers interviewed expect to increase the volume of cargo they move through Washington State in the next few years, further exacerbating an already constrained rail network. Planned changes to supply chains identified by shippers during the course of the survey and general supply chain trends such as larger vessels and port diversification strategies will also put more cargo on the railroads. How will Washington prepare and work with the railroads to handle the added volume?

In conclusion, rail inefficiencies and infrastructure constraints in Washington must be addressed in the near term through business process changes, complimentary legislative policies and strategies, rail and port infrastructure enhancements such as on-dock rail, and

railroad service improvements, otherwise shippers that are able to, will route cargo through other states and port gateways and Washington-based companies will be impeded from getting products to market in an expeditious and cost-effective manner. The State's economy will be adversely affected.

■ Objective

The objective of this technical memorandum is to describe how the logistics strategies and supply chain requirements of a wide variety of international and domestic shippers shape the demand for freight-rail transportation services in the U.S. and, specifically, Washington State.

Logistics strategies form an integral part of the strategic business plans that determine where companies source and purchase supplies and materials; where products are grown, harvested and manufactured; and the markets in which those products are sold.

Supply chains are the series of linked “source,” “make,” and “sell,” transactions that implement business logistics strategies. Though every supply chain is unique, many have similar aspects (i.e., mode of transportation, sourcing countries, key performance indicators in evaluating logistics service provider performance, etc.). Supply chain analysis can trace transactions involving money, information, and physical goods as they move along the source-make-sell chain. For this Study, the consultant traced the movement of physical goods – materials, commodities, parts, equipment, and finished products – that are moved into, within, and out of Washington State. Particular focus was paid to those goods that use the rail system for at least part of the journey through the supply chain.

Through in-depth interviews with a sizable number of representative companies, the consultant was able to understand how those companies source inbound products, how they distribute product within Washington State and nationwide, and how they export products grown or manufactured in the State and across the U.S. The shippers explained such things as their shipping profiles, routes and gateways, how they select and evaluate the performance of logistics service providers, and the issues they encounter in moving their products to market, particularly when using the mode of rail.

The consultant analyzed how changing logistics strategies and international trade and supply chain trends are influencing the usage of the rail network, and conversely, how the quality of transportation services affects shipper supply chain decisions and the actual performance of the supply chains themselves. Through the interviews, the consultant was able to get an idea of how these supply chains trends might aggravate or mitigate transportation problems in Washington State and the region. Moreover, the interviewees offered recommendations for how Washington State and the Federal government might intervene to improve rail service in Washington and nationwide.

The supply chain analysis done in Task 2.2 will complement many other portions of the Study, particularly Tasks 1 and 3, since it helps explain how different types of freight

travel on the Washington rail system, the quality of service delivered by the Class 1s and various shortlines, the perceived system bottlenecks, and challenges shippers face when selecting rail as the mode of transport. In addition, Task 2.2 information will be useful in subsequent tasks to illustrate how specific rail bottlenecks and operational issues affect logistics decisions, costs, and the efficiency of specific industry sectors.

■ Methodology

The findings and conclusions reported in this tech memo were developed in the following steps:

1. Defining the Group of Rail-Dependent Shippers to be Interviewed:
 - a. Based on the consultant's extensive knowledge of the nuances of international trade and transportation as well as the shippers across the Nation that use the rail system, the consultant developed a list of potential interviewees. The consultant vetted the list with and received other suggestions from WSDOT staff and various industry experts and logistics service providers including the Ports of Tacoma and Seattle. Companies on this list import, export and produce domestically and ship in containers and bulk.
 - b. The consultant reviewed technical data gathered by Cambridge Systematics team members relating to the various industry sectors that make up the Washington State economy, particularly those that are heavy rail users, to ensure the major sectors were represented in the study group.
 - c. The consultant reviewed various previous studies performed for WSDOT and the Washington Transportation Plan with the goal of better understanding Washington's economy and transportation infrastructure. These studies enabled the consultant to determine if other companies should be included in study group.
 - d. Because importers, exporters, and domestic producers are not the only heavy users of the rail system, the consultant added companies to the list within the integrator, IMC, ocean carrier, and transload warehouse industries.
 - e. Twenty-one of the 44 companies interviewed are based in Washington, with the balance having headquarters in other states. All have facilities and/or conduct business in Washington and use the Washington State rail network to some degree.
 - f. The table below represents the breakdown of the 44 companies interviewed in nine industry sectors.

Industry Sector - Shippers (Importers, Exporters, and Domestic Producers)	Commodities	Companies Interviewed
Farm Products	Grain, fruits, and vegetables	8
Forest Products	Lumber, wood pulp, paper products, linerboard, and wood pellets	5
Processed Foods and Beverages	Processed grain products, processed fruits and vegetables, seafood, and dairy products	4
Raw and Semi-Finished Natural Resources, Chemicals, and Recycled Products	Nonmetallic minerals, primary metals, scrap metals, concrete, chemicals, and petroleum products	7
Retail and Consumer Products	Machinery, general department store merchandise, and consumer products	6
Total for Industry Sector - Shippers (Importers, Exporters, and Domestic Producers)		30
Industry Sector - Logistics Service Providers	Commodities	Companies Interviewed
Integrators	Miscellaneous	2
Intermodal Marketing Companies	Miscellaneous	4
Ocean Carriers	Miscellaneous	4
Transload Warehouses	Miscellaneous	4
Total for Industry Sector - Logistics Service Providers		14

2. Development of Survey Templates:

- a. The consultant created five separate survey templates for the various types of companies in the nine industry sectors as follows: Rail-Dependent Shippers, Integrators, IMCs, Ocean Carriers, and Transload Warehouses. These surveys and the actual data collected by industry sector can be found in Appendix A.
- b. Survey questions were carefully designed to extract as much information as possible about each company's supply chain, shipping profile, and opinions about rail service.

3. Conducting Interviews:

- a. The consultant contacted each potential interviewee by phone or e-mail to explain the Study and request his or her participation. A portion declined or failed to respond.

- b. When an interviewee agreed to participate, the consultant scheduled an appointment so that the consultant could conduct the interview by phone. During the phone call, the consultant asked the interviewee all the questions in the survey appropriate for the company's industry sector and shipper type (i.e., importer, exporter, domestic producer, etc.).
4. Collating the Data:
 - a. After the interviews were completed for a certain industry sector, the consultant tabulated the data by sector.
 5. Analysis of Findings and Development of Conclusions:
 - a. In analyzing the findings of each industry sector survey, major themes, and common views about the Washington rail network and quality of rail service delivered by the railroads became evident. From the findings, the consultant formulated conclusions, which can be found below.

■ Shippers (Importers, Exporters, and Domestic Producers)

The major findings for this sector gleaned in Task 2.2 are as follows:

1. The 30 rail-dependent shippers interviewed have facilities all across the State and use the following railroads: BNSF (BN), UP, Express Trak (ET), Ballard Terminal Railroad (BTRR), Cascade & Columbia River Railroad (CSCD), Columbia Basin Railroad Company (CBRW)/West Coast Railway Company (WCRC), Columbia & Cowlitz Railway (CCR), Dakota, Minnesota & Eastern Railroad (DM&E), Great Northwest Railroad (GRNW), Kettle Falls International Railway (KFIR), Longview Switching Company (LSC), Puget Sound & Pacific Railroad (PS&P), and Tacoma Municipal Beltline (TMBL). Some use only one Class 1, while others use both the BN and UP. Some use multiple shortlines, but often it is the Class 1 that performs the switching at the shipper's rail spur. Twenty-one shippers also use various IMCs, largely in the retail and consumer products sector.
2. Twenty-two shippers require specialized equipment such as intermodal containers, bulkhead boxcars, reefers, gondolas, pressure cars, tanks, gravity flow cars, covered hopper cars, transverse cars, pneumatic cars, and centerbeams, flatracks, and chip gondolas.
3. Shippers use many key performance indicators to evaluate the performance of their rail carriers. These include:
 - a. Adequate, timely and/or consistent equipment supply;
 - b. Consistent transit times;
 - c. On-time performance;

- d. Service interruption recovery time;
 - e. Rates;
 - f. Ability to respond to spot rate requests;
 - g. Service consistency; and
 - h. Dependability and frequency of switching.
4. The consultant asked shippers to rate the performance of their Class 1s and shortlines from several service aspects ranging from ease of booking, supplying sufficient equipment in a timely manner, picking up loaded equipment from their rail spurs when requested, timely moving railcars on trains, delivering railcars to destination on schedule, to responsiveness in resolving service issues. Ratings varied by rail carrier and by service aspect, and no clear patterns can be established. Some felt they receive adequate service, while others complained vociferously about poor service quality. It did not appear to matter what type of shipper the company was (i.e., importer, exporter, domestic producer, and bulk or container shipper). It is clear, however, that most shippers believe the timeliness and predictability of providing various services needs improvement. Only one shipper strongly agreed that its rail carrier is responsive in solving the shipper's problems, which is not surprising since this specialized rail carrier, ET, provides expedited transit.
5. Most shippers believe their rail carriers do not have sufficient capacity in terms of tracks, equipment, and personnel to meet their requirements. The most common issues cited were:
- a. Congestion and chokepoints;
 - b. Slow velocity;
 - c. Transit time delays;
 - d. Equipment shortages;
 - e. Locomotive shortages; and
 - f. Crew shortages.
6. Most shippers indicated that rail service issues affect their ability to perform efficiently in terms of costs, operations, and meeting customer requirements. The most common problems include:
- a. High rates;
 - b. Constrained capacity;
 - c. Congestion and chokepoints;
 - d. Slow velocity;
 - e. Transit time delays and/or inconsistent transit times;
 - f. Inconsistent and/or insufficient regular and specialized equipment supply;

- g. Substandard equipment, particularly reefers that do not maintain proper temperature during transit;
 - h. Locomotive shortages;
 - i. Crew shortages;
 - j. Derailments, track problems and track maintenance issues;
 - k. Slow service interruption recovery;
 - l. Poor customer service; and
 - m. Lack of visibility to where railcars are during transit.
7. Twenty-two of the 30 shippers believe the quality of rail service in Washington in the past two years has declined; seven think it has remained the same; and only one believes it has improved.
8. Twenty-one of the 30 shippers believe the quality of rail service nationwide in the past two years has declined; six think it has remained the same; and three believe it has improved.
9. Twenty-two of the 30 shippers believe railroads have shifted their focus during the past two years and now give certain types of trains a higher priority. Priority trains most often mentioned were unit, intermodal, long-haul, and coal. Sixteen indicated the movement of traditional rail cargo, such as bulk commodities, has been adversely affected by the movement of intermodal cargo.
10. Most shippers intend to route more cargo through Puget Sound ports within the next five years usually due to a forecasted increase in sales and/or port diversification strategy.
11. Seventeen of the 30 shippers anticipate making changes to their supply chains within the next five years that may influence the use of rail. Possible changes include:
 - a. Increase the use of intermodal;
 - b. Switch to a 7-day production schedule to even out demand for railcars;
 - c. Produce new products that will move via rail;
 - d. Enhance the infrastructure at shipper's facility to handle increased rail shipments;
 - e. Increase the use of PNW port gateways and intermodal to U.S. interior points;
 - f. Use more all-water vessels to the East and Gulf Coasts; and
 - g. Shift more from truck to rail.
12. Shippers identified certain trends in their respective industries that will impact the use of rail in the next five years. These include:
 - a. Company mergers, acquisitions and consolidations;
 - b. People are not reading newspapers as much;

- c. Port diversification strategies;
 - d. Inventory strategies;
 - e. Favoring intermodal containers over boxcars;
 - f. Disruptive storms will increase the demand for shipper's products;
 - g. Customers' desire to purchase a wide variety of products from one supplier rather than multiple suppliers;
 - h. Increased customer demand; and
 - i. Production of new products.
13. Nearly all shippers interviewed indicated they have concerns about the future quality of rail service in Washington and nationwide. Concerns cited most often include:
- a. Railroads are already at capacity and will not be able to handle the increasing volume of imports;
 - b. Transit times will increase and/or be inconsistent and unreliable;
 - c. Quality of service will further degrade;
 - d. Service interruption recovery is poor;
 - e. Substandard rail service will affect the shipper's ability to grow and/or be competitive in domestic and international markets;
 - f. Rates will continue to escalate, but no added value will be received for the higher prices paid; and
 - g. Railroads will not invest enough to improve and increase infrastructure, service existing rail spurs, maintain railramps in convenient locations, and maintain adequate pools of regular and specialized equipment, locomotives, and personnel.
14. The availability and/or quality of rail service will impact the plans of 19 shippers to expand and/or relocate in the next two years.
15. Twenty-three shippers have taken action to resolve or mitigate rail service issues, though most feel their efforts have not borne much fruit, resulting in great frustration. Such actions include:
- a. Meeting regularly with railroad personnel to voice concerns and complaints;
 - b. Leasing or purchasing railcars;
 - c. Investing to improve the infrastructure at shipper's facility to handle rail cargo more efficiently;
 - d. Lobbying at the state and Federal levels for rail service improvements;
 - e. Using more trucks; and
 - f. Diverting cargo to other ports.

16. When asked to describe the most pressing rail infrastructure issues in Washington, eight shippers could not answer. The balance offered many, specifically:
 - a. Congestion and insufficient on-dock rail at the Ports of Tacoma and Seattle;
 - b. I-5 Corridor congestion;
 - c. Columbia Gorge congestion;
 - d. Congestion in rail yards including Bullfrog Junction, Auburn, Pasco, Longview, Interbay, Quincy, Vancouver, and Portland, Oregon; and
 - e. Lack of double tracks.

17. Fourteen shippers were not sure what policy measures and programs Washington State should establish to improve rail service in Washington. The balance recommended many initiatives including:
 - a. Simplify land use regulations and streamline permitting for infrastructure improvements;
 - b. Provide incentives, bonds and/or tax breaks for railroads to build storage tracks, holding yards, sidings and other infrastructure improvements;
 - c. Establish a baseline for rail service quality;
 - d. Foster third-party switching operations;
 - e. Change the rules so that shortlines can move both BN and UP trains on their tracks;
 - f. Support Express Trak and similar alternative rail services; and
 - g. Facilitate training programs for people wanting to work for the railroads.

18. Ten shippers were not sure what infrastructure investments Washington State should make to improve rail service in Washington. The balance suggested ideas including:
 - a. Provide land to railroads for infrastructure expansion;
 - b. Work with railroads on yard expansion and double tracking;
 - c. Create more grade separations to improve flow of autos, trucks and trains;
 - d. Increase on-dock rail at the Ports of Seattle and Tacoma;
 - e. Increase capacity over mountain passes;
 - f. Establish more freight corridors to maintain freight flow;
 - g. Establish rail ramps in Eastern and Northern Washington and the Tri-Cities; and
 - h. Help shortlines improve infrastructure to handle heavier loads.

19. Twenty shippers believe the Federal government should play a larger role in improving rail service in Washington and nationwide. Six think this is not the responsibility of government, but rather should be left in the hands of private enterprise – the railroads themselves. Recommendations offered include:

- a. Regulate the railroads in some fashion;
- b. Provide tax incentives and assistance, and/or allocate a portion of SAFETEA-LU funds to railroads to fund infrastructure improvement;
- c. Fund rail infrastructure improvements such as installing double and triple tracks and reducing at-grade crossings to meet national needs;
- d. Force the BN and UP to share tracks;
- e. Establish policies to enable railroads to expand more readily;
- f. Streamline environmental reviews;
- g. Direct the Surface Transportation Board (STB) to listen more to shippers instead of railroads and allow shippers to file complaints more easily;
- h. Direct the STB to benchmark acceptable rail service levels and get shippers involved in that process;
- i. Get railroads to be more responsive to shippers; and
- j. Help shortline improve infrastructure.

■ Logistics Service Providers

The major findings for this sector gleaned in Task 2.2 include:

1. The 14 logistics service providers interviewed use the BN, UP, and/or TMBL to move a variety of products on behalf of their customers through Washington State.
2. Nine logistics service providers believe their rail carriers do not have sufficient capacity in terms of tracks, equipment, and personnel to meet their requirements. Four are satisfied with the level of capacity. The most common issues cited were:
 - a. Insufficient track;
 - b. Locomotive shortages or locomotives in the wrong places;
 - c. Crew shortages; and
 - d. UP gate reservation system is cumbersome.
3. Eleven logistics service providers indicated that rail service issues affect their ability to perform efficiently in terms of costs, operations and meeting customer requirements. The most common problems include:
 - a. Transit time delays and/or long transit times;
 - b. Inconsistent and/or unreliable service;
 - c. Lack of capacity;
 - d. Insufficient track;

- e. Locomotive shortages; and
 - f. Crew shortages.
4. Nine logistics service providers identified chokepoints in the Washington State rail network. The ones cited most frequently were as follows:
- a. Ports of Seattle and Tacoma;
 - b. Seattle rail ramp;
 - c. South of Tacoma;
 - d. BN Argo Interchange;
 - e. Bullfrog Junction;
 - f. I-5 Corridor;
 - g. Interlocker;
 - h. Fife staging yard;
 - i. TMBL yard; and
 - j. Hinkle, Englewood, Portland, Brooklyn, and Englewood, Oregon yards.
5. Logistics service providers use many key performance indicators to evaluate the performance of their rail carriers. These include:
- a. On-time performance according to published schedules;
 - b. Consistent service;
 - c. Transit time;
 - d. Container dwell time at the origin rail terminal;
 - e. Having chassis and wheels at destination;
 - f. Rates;
 - g. Speed of service interruption recovery; and
 - h. Communication of service delays.
6. Four logistics service providers either strongly agreed or agreed that their rail carriers are responsive in solving their problems. The balance responded in a neutral manner or indicated some degree of dissatisfaction.
7. Twelve logistics service providers anticipate the volume that they will handle on behalf of their customers will increase in the next five years.
8. Twelve logistics service providers indicated there are trends in their industries that will impact the use of rail in the next five years. Key trends mentioned include:
- a. Short-haul rail usage will increase due to truck capacity constraints;
 - b. More inland intermodal centers will be established in Washington;

- c. The traditional IMC model has become blurred as IMCs offer lots of other services;
 - d. The volume of cargo moving all-water via the Panama Canal is increasing;
 - e. More ships will call Puget Sound ports;
 - f. Larger ships are entering the trade; and
 - g. Ocean carriers do not want their equipment to move inland, so there will be more transloading on the West Coast.
9. Seven logistics service providers believe the quality of rail service in Washington in the past two years has declined; four think it has remained the same; and two believe it has improved.
 10. Eleven logistics service providers think the quality of rail service nationwide in the past two years has declined; one thinks it has remained the same; and one believes it has improved.
 11. Nine logistics service providers believe railroads have shifted their focus during the past two years and now give certain types of trains a higher priority; three felt there has been no change. Priority trains most often mentioned were unit, intermodal, long-haul, carload, and bulk. Three indicated the movement of traditional rail cargo, such as bulk commodities, has been adversely affected by the movement of intermodal cargo; eight believe there has not been an impact; three were not sure.
 12. Nearly all logistics service providers interviewed indicated they have concerns about the future quality of rail service in Washington and nationwide. Concerns cited most often include:
 - a. Railroads are already at capacity and will not be able to handle the increasing volume of imports, thereby impacting the logistics service provider's ability to effectively serve its customers;
 - b. Poor customer service and insufficient staff;
 - c. Inability to keep service commitments;
 - d. Lack of visibility and real-time shipment tracking capabilities;
 - e. High rates;
 - f. Equipment shortages and imbalances;
 - g. Railroads may become less flexible in scheduling train departures and arrivals;
 - h. Railroads may not put enough locomotives on hot trains to keep them moving; and
 - i. Slow service interruption recovery.
 13. Eleven logistics service providers have taken action to resolve or mitigate rail service issues, though most feel their efforts have not borne much fruit, resulting in great frustration. Three have not done anything. Such actions include:

- a. Meeting regularly with railroad personnel to voice concerns and complaints and determine if there are ways to work more synergistically;
 - b. Using more trucks;
 - c. Adding a second shift;
 - d. Adding more all-water strings to reduce dependence on intermodal;
 - e. Blocking trains to one destination as much as possible;
 - f. Providing earlier and better demand forecasts to the railroads;
 - g. Loading and releasing trains to the railroads on time;
 - h. Working with ports to discuss how operations could be changed to improve service;
 - i. Investigating routing more cargo through Canada and Mexico; and
 - j. Lobbying at the State and Federal levels.
14. When asked to describe the most pressing rail infrastructure issues in Washington, logistics service providers offered many, specifically:
- a. I-5 Corridor;
 - b. Port of Tacoma;
 - c. Tacoma chokepoints;
 - d. Bullfrog Junction;
 - e. Sig Yard;
 - f. Insufficient on-dock rail at the Port of Seattle and Tacoma;
 - g. Insufficient double tracks;
 - h. At-grade crossings; and
 - i. Mudslides on tracks between Seattle and Portland.
15. Six logistics service providers were not sure what policy measures and programs Washington State should establish to improve rail service in Washington. The balance recommended many initiatives including:
- a. Simplify permitting and environmental studies;
 - b. Partner with ocean carriers to make rail ramps and on-dock rail easier to construct from a permitting and process standpoint;
 - c. Invest in Class 1s only in exchange for retaining regional rail capacity and service improvements;
 - d. Establish a Transportation Board with public members from the business community to work with railroads to balance service and rates;

- e. Establish a Rail Committee under the Department of Transportation that would have responsibility and domain over ports and rail operations, because currently there is no single regulating body in Washington to deal with rail issues; and
 - f. Increase the highway weight limit between ports and rail ramps.
16. Four logistics service providers were not sure what infrastructure investments Washington State should make to improve rail service in Washington. The balance suggested ideas including:
- a. Increase on-dock rail at Washington ports;
 - b. Improve highway access between marine terminals and rail terminals;
 - c. Fund double tracking;
 - d. Make improvements at the Argo, Sig and Tukwila yards;
 - e. Own and provide regional locomotives to the railroads in order to provide regional service; and
 - f. Establish off-port freight yards for rail cargo outside metropolitan areas to decrease congestion.
17. Eight logistics service providers believe the Federal government should play a larger role in improving rail service in Washington and nationwide. Four think this is not the responsibility of government, but rather should be left in the hands of private enterprise – the railroads themselves. Two were not sure. Recommendations offered include:
- a. Pass the pending Federal tax credit bill to provide the private sector with tax credits for rail network improvements;
 - b. Lay more track;
 - c. Fund rail infrastructure improvements and expansion plans;
 - d. Help railroads double track certain areas like the I-5 Corridor and Columbia Gorge;
 - e. Find a way to make the track from Seattle to Los Angeles a common track, not owned by the UP;
 - f. Subsidize rates from the PNW to interior U.S. points since rates are substantially higher than from Los Angeles, for example;
 - g. Simplify policies and procedures to allow railroads to operate more efficiently; and
 - h. Foster industry-government collaboration.

■ Conclusions

Rail is a critical mode of transport used by importers, exporters, domestic producers, and logistics service providers to move freight within and through Washington State. Yet the rail network in Washington and across the Nation is not performing satisfactorily for a variety of reasons related to infrastructure limitations and inefficient railroad business processes. The rail system is viewed by users as fragile, so even small service interruptions wreak havoc and cause ripple effects across the system. Service interruption recovery is not as fast as shippers believe it should be.

Rail users are dissatisfied with the level of service delivered by the Class 1 and shortline railroads and this poor service negatively affects supply chain efficiency and drives up operating costs. As more freight moves on the railroads over the next 15 years, velocity and overall service will suffer even more than today. The economic health of the State and of America is at risk unless actions are taken in the near term to mitigate rail infrastructure constraints and improve performance.

The State should take a proactive role in alleviating this condition before it becomes dire. In terms of policy and procedures, the State could streamline permitting and provide tax incentives to enable railroads and ports to expand and improve their infrastructures. It could establish some sort of regulatory and review board that includes private sector representatives, who understand the dynamics of transportation, logistics, and international trade to oversee the rail network. It could also support alternative forms of rail service such as Express Trak.

The State should carefully evaluate how to spend tax dollars to fund rail infrastructure improvements to gain the most benefits possible for the shipping community. Funding grade separation improvements, double and triple tracking in certain key freight corridors, and additional on-dock rail at the Ports of Seattle and Tacoma are prime initiatives to consider. Helping railroads establish new rail ramps in under-served locations and add capacity at rail ramps and between ports and rail ramps would also be worthwhile projects.

In terms of rail service performance, the State should clearly articulate to the top management at the Class 1s and shortlines that Washington shippers rely heavily on rail transportation and substandard service is a drain on the State's economy, in general, and profitability of shippers, in particular. The State could be an effective liaison between railroads and rail users so that both sides gain a better understanding of each other's needs and requirements, and work together more effectively in the future to find remedies to rail issues.

Appendix A

Appendix A contains the actual Surveys with the data collated for each of the nine industry sectors based on the 44 interviews conducted. This data was used to formulate the Finding and Conclusions of this Technical Memorandum.

Please note that the number of respondents is entered alongside each answer in the surveys. Since some interviewees furnished multiple answers to certain questions and others provided none, the total number of answers per question does not always add up to the number of respondents for that particular industry sector. When a question did not apply to a particular company, the consultant entered “N/A.”

Rail-Dependent Shipper Survey Farm Products Shippers

Conducted by
 Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	8	

General Information

QUESTION	RESPONSE
1. What kind of shipper are you? (Importer of raw materials, components, semi-finished and/or finished product? Exporter of raw material, components, semi-finished and/or finished products? Domestic producer of raw materials, components, semi-finished and/or finished products?)	Importer of raw materials - 1 Importer of finished products - 1 Exporter of raw materials - 3 Exporter of finished products - 6 Domestic producer of raw materials - 1 Domestic producer of semi-finished products - 1 Domestic producer of finished products - 6
2. In which Washington cities are your facilities located?	Wenatchee - 3, Brewster - 2, Chelan - 2, Kalama - 2, Pasco - 2, Burlington - 1, Ferndale - 1, Granger - 1, Othello - 1, Pateros - 1, Quincy - 1, Seattle - 1, Tacoma - 1, Vancouver - 1, Wapato - 1, Warden - 1, and Yakima - 1
3. Do you import or export in containers or breakbulk?	Import in containers - 3 Import in breakbulk - 2 Export in containers - 6 Export in breakbulk - 3
4. Is the volume you ship via rail within the U.S. containerized or does it move in bulk in special railcars (e.g., boxcars, centerbeams, flatracks, tanks, gondolas, etc.)?	Containerized - 6 Bulk in special railcars - 6

QUESTION	RESPONSE
5. Do you require special rail equipment? (yes/no) If so, what type?	Yes - 6; <ul style="list-style-type: none"> • Reefers - 5 • Hopper cars - 3 • 53' containers - 2 • Covered gondolas - 1 • Pneumatic cars - 1 • Rail pigs - 1 • Tanks - 1 No - 1
6. Is your company's logistics functions handled in-house or outsourced?	In-house - 8 Outsourced - 1
7. How many employees are at your facility? How many in all Washington facilities?	< 100 - 4 101 to 900 - 1 Unknown - 1; < 200 - 5 201 to 2,000 - 2 Unknown - 1
8. What is the square footage of your facilities in Washington (specify for office, warehouse, manufacturing, processing area)?	Unknown - 3 < 1,000,000 square feet - 2 1,000,001 to 2,000,000 square feet - 1 < 110 acres - 2
9. Is there an active rail spur located at your facility? (yes/no)	Yes - 7 No - 1
10. If so, which railroad provides switching service to the spur?	BN - 7 UP - 3 Columbia Basin Railroad (CBRR) - 1 N/A - 1

Containerized Imports

QUESTION	RESPONSE
1. What are your primary commodities?	Apples - 3 and pears - 2
2. What are the primary origin countries?	Argentina - 2, Chile - 2, New Zealand - 2, and Peru - 1
3. What are the primary U.S. destination cities?	Wenatchee - 2, Chelan - 1, Pasco - 1, Arizona - 1, Pennsylvania - 1, and Texas - 1
4. What was the 2005 total import volume that entered the U.S. via rail (number of rail equipment)?	N/A - 3
5. Are the shipments moving into the U.S. via rail consistent year-round or is there a peak or slow season?	N/A - 3

QUESTION	RESPONSE
6. Are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 3
7. What was the 2005 total import volume that entered the U.S. via truck (number of trucks)?	N/A - 3
8. What was the 2005 total import volume that entered the U.S. via ocean (FEUs)?	< 100 FEUs - 3
9. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	0% - 1 75% to 100% - 2
10. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Peak - February to July - 1 Peak - April to June - 1 N/A - 1
11. What percent or number of containers moved through the Port of Portland?	N/A - 3
12. Are the shipments moving through the Port of Portland consistent year-round or is there a peak or slow season?	N/A - 3
13. What percent or number of containers were moved intact to destination by the ocean carrier on a through Bill of Lading?	< 5% - 2 6% to 90% - 1
14. What percent or number of containers were transloaded by 3PL warehouses in Washington onto rail equipment for onward distribution?	N/A - 3
15. By which 3PLs in which cities?	N/A - 3
16. Which Class 1, shortline rail carriers, and/or intermodal marketing companies (IMC) do you use for rail shipments moving through Washington?	N/A - 3
17. Do you or does your IMC control the routing of intermodal cargo with the railroad? (company/IMC)	N/A - 3
18. If cargo is transloaded onto rail equipment, are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 3
19. What percent or number of containers were transloaded by 3PL warehouses in Washington onto truck equipment for onward distribution?	N/A - 2 < 10% - 1
20. By which 3PLs in which cities?	Unknown - 1 N/A - 1 N/A - 1; Cargo is transloaded by various 3PLs in California and New York - 1
21. If cargo is transloaded onto truck equipment, are your rates based on the spot market, tariff, or contracts? (spot/tariff/contract)	Spot - 1 Contract - 1 N/A - 1 Tariff - 0

QUESTION	RESPONSE
22. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive – high – 2, medium – 1 Perishable – high – 3
23. What decision criteria do you use in selecting onward movement by rail or truck?	<ul style="list-style-type: none"> • Transit time – 1 • Rail transit is too long – 1 • Rail service is too sporadic – 1 • Cost – 1 • Does not have a rail spur – 1 • Short distance from port to facility – 1 • Order volume is too small to fit into a railcar – 1
24. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	N/A – 3
25. Upon which critical service factors do you evaluate the performance of rail carriers?	N/A – 3
26. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	N/A – 3
27. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Portland in the next five years?	Increase – 2 N/A – 1 Decrease – 0 Maintain the same – 0
28. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Portland in the next five years?	<ul style="list-style-type: none"> • Production in origin countries – 1 • Increased U.S. demand – 1 • Depends on availability in origin countries – 1 N/A – 1
29. Have these factors changed over the past three to five years? (yes/no)	No – 2 N/A – 1 Yes – 0
30. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	Yes – 3; <ul style="list-style-type: none"> • East Coast – 2 • West Coast – 1 • Unknown – 1 No – 0

QUESTION	RESPONSE
<p>31. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • High price of truck fuel - 1 • Truck driver shortages - 1 • Growth in import volume - 1 • Many customers now desire one or a limited number of suppliers to handle all product needs for multiple types of produce from international and domestic sources, rather than purchasing them from multiple suppliers - 1 <p>No - 0</p>

Imports Moving as Breakbulk

QUESTION	RESPONSE
1. What are your primary commodities?	Apples - 1, cocoa - 1, grains - 1, pears - 1, and vegetable oils - 1
2. What are your primary origin countries?	Argentina - 1, Brazil - 1, Canada - 1, Chile - 1, Indonesia - 1, Ivory Coast - 1, Malaysia - 1, Netherlands - 1, and Peru - 1
3. What are the primary U.S. destination cities?	Chelan - 1, Pasco - 1, Wenatchee - 1, Arizona - 1, Texas - 1, and all over the U.S. - 1
4. What was the 2005 total import volume that entered the U.S. via rail (metric tons)?	N/A - 1 Would not divulge (WND) - 1
5. What was the 2005 total import volume that entered the U.S. via ocean (metric tons)?	< 65,000 metric tons - 1 WND - 1
6. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	< 10% - 1 N/A - 1
7. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 1 N/A - 1
8. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	N/A - 2
9. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 2
10. What percent or number of metric tons are reloaded onto rail equipment from Washington and/or Columbia River ports for onward movement to your U.S. customers?	N/A - 2
11. In which Washington cities and by which 3PLs are your products reloaded onto rail equipment?	N/A - 2
12. Which Class 1, shortline rail carriers, and/or IMCs do you use in Washington?	N/A - 2
13. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 2

QUESTION	RESPONSE
14. What percent or number of metric tons are reloaded onto trucks or barges from Washington and/or Columbia River ports for onward movement to your U.S. customers?	N/A - 2; Cargo is transloaded onto trucks in other states - 2
15. What decision criteria do you use in selecting onward movement by rail, truck, or barge?	<ul style="list-style-type: none"> • Rail transit is too long - 1 • Rail service is too sporadic - 1 • Distance from port to facility - 1 • Order volume is too small to fit into a railcar - 1
16. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	N/A - 2
17. Upon which critical service factors do you evaluate the performance of rail carriers?	N/A - 2
18. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	N/A - 2
19. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Increase - 1 N/A - 1 Decrease - 0 Maintain the same - 0
20. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	<ul style="list-style-type: none"> • Sales growth - 1 N/A - 1
21. Have these factors changed over the past three to five years? (yes/no)	No - 1 N/A - 1 Yes - 0
22. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	Yes - 2; <ul style="list-style-type: none"> • Gulf - 1 • Unknown - 1 No - 0
23. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 2; <ul style="list-style-type: none"> • Consumer demand for biofuels - 1 • High price of truck fuel - 1 No - 0

Containerized Exports

QUESTION	RESPONSE
1. What are your primary commodities?	Apples - 4, pears - 4, cherries - 3, corn - 1, grapes - 1, meats - 1, onions - 1, potatoes - 1, and soybeans - 1
2. What are the primary origin cities?	Wenatchee - 3, Brewster - 2, Pasco - 2, Chelan - 1, Othello - 1, Pateros - 1, Quincy - 1, Wapato - 1, Warden - 1, Yakima - 1, California - 1, Midwest - 1, and Planes States - 1
3. What are the primary destination countries?	Asia - 3, Malaysia - 3, Taiwan - 3, all over the world - 2, Canada - 2, Hong Kong - 2, Mexico - 2, Singapore - 2, Indonesia - 1, Japan - 1, Korea - 1, Latin America - 1, Middle East - 1, Philippines - 1, Scandinavia - 1, and UK - 1
4. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	N/A - 4 < 100 - 1 WND - 1
5. What was the 2005 total export volume that exited the U.S. via ocean (FEUs)?	< 2,000 FEUs - 3 2,001 to 5,000 - 2 WND - 1
6. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	< 30% - 1 31% to 70% - 2 71% to 95% - 3
7. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 1 Peak - June to August - 1 Peak - August to October - 1 Peak - September to October - 1 Peak - October to December - 1 Peak - October to June - 1 Peak - November to December - 1
8. What percent or number of containers moved through Columbia River ports? (specify which ports)	N/A - 3 < 15% - 1; < 5% - Portland - 2
9. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 3 Peak - August to October - 1 Peak - September to October - 1 Peak - October to December - 1 Peak - October to June - 1
10. Is the inland move from origin to the Ports of Seattle and/or Tacoma via barge, rail, or truck?	Truck - 5 Rail - 1 Barge - 0

QUESTION	RESPONSE
11. Is the inland move from origin to Columbia River ports via barge, rail, or truck?	Truck - 3 N/A - 3 Barge - 0 Rail - 0
12. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	N/A - 5 WND - 1
13. Is the inland move to the port controlled by the ocean carrier on a through Bill of Lading or do you control the routing? (carrier/company)	Company - 5 Carrier - 1
14. If you are responsible for the inland move, which barge, rail carrier and trucking companies are used?	Various trucking companies - 5 N/A - 1
15. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 5 Contract - 1 Spot - 0 Tariff - 0
16. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	N/A - 4 BN - 1 CN - 1 UP - 1
17. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - high - 5, medium - 1 Perishable - high - 5, medium - 1
18. What decision criteria do you use in selecting the inland move to the gateway port by rail, truck, or barge?	<ul style="list-style-type: none"> • Cost - 2 • Speed and efficiency in getting container to the port - 2 • Short distance to the port - 1 • Facility location - 1 • Ocean carrier handles inland move - 1 • Though shipper has rail spurs, railroads do not offer to bring empties to it - 1 • Dependability of reefer transportation - 1 • Company does not have capacity to load boxcars - 1
19. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	N/A - 5; <ul style="list-style-type: none"> • BN performs the switch - 3 • UP performs the switch - 1 < 50 miles - 1
20. If no rail spur, how far must the product be trucked to meet the rail hub?	N/A - 4 1 mile - 1 Unknown - 1

QUESTION	RESPONSE
<p>21. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>N/A - 4 Yes - 1 No - 1; • During peak harvest and Christmas holiday seasons, equipment, and capacity are strained - 1 • Service interruption recovery is slow because the rail network is fragile - 1</p>
<p>22. Upon which critical service factors do you evaluate the performance of rail carriers?</p>	<p>N/A - 5 • Cost - 1 • Transit time - 1 • Equipment availability - 1 • Ocean carrier handles the evaluation - 1</p>
<p>23. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>N/A - 4 Yes - 2; • Transit delays - 1 • Because there is no shortline nearby shipper, cargo to Canada must be trucked to Vancouver BC and loaded on the CN there, which adds costs. It has also been difficult to find truck drivers - 1 No - 0</p>
<p>24. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)</p>	<p>No - 6 Yes - 0</p>
<p>25. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)</p>	<p>Yes - 6 No - 0; Yes - 3 No - 3</p>
<p>26. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?</p>	<p>Increase - 5 Maintain the same - 1 Decrease - 0</p>
<p>27. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?</p>	<ul style="list-style-type: none"> • Demand for products in foreign markets - 3 • Sales growth - 2 • Demand and economic health of export countries - 1 • Public's desire to eat healthier - 1 • Product supply - 1
<p>28. Have these factors changed over the past three to five years? (yes/no)</p>	<p>No - 4 Yes - 1 N/A - 1</p>

QUESTION	RESPONSE
<p>29. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?</p>	<p>Yes - 4; <ul style="list-style-type: none"> • West Coast - 2 • East Coast - 2 • Portland - 1 • Unknown - 1 No - 2</p>
<p>30. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?</p>	<p>No - 3 Yes - 3; <ul style="list-style-type: none"> • Growth in volume will strain rail capacity - 2 • High price of truck fuel - 1 • Truck driver shortages - 1 </p>

Exports Moving as Breakbulk

QUESTION	RESPONSE
<p>1. What are your primary commodities?</p>	<p>Various types of grains - 3</p>
<p>2. What are your primary origin cities?</p>	<p>Midwest - 3, Eastern Washington - 1, and Oregon - 1</p>
<p>3. What are you primary destination countries?</p>	<p>Asia - 2, Africa - 1, China - 1, Europe - 1, Japan - 1, Korea - 1, Latin America - 1, Philippines - 1, and Taiwan - 1</p>
<p>4. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?</p>	<p>N/A - 2 WND - 1</p>
<p>5. What was the 2005 total export volume that exited the U.S. via ocean (metric tons)?</p>	<p>< 8,000,000 metric tons - 2 WND - 1</p>
<p>6. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?</p>	<p>< 35% - 2 WND - 1</p>
<p>7. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?</p>	<p>Peak - September to January - 1 Peak - October to March - 1 Slow season - May to August - 1 N/A - 1 Consistent - 0</p>
<p>8. What percent or number of metric tons moved through Columbia River ports? (specify which ports)</p>	<p>65% to 100% - 3; <ul style="list-style-type: none"> • Kalama - 2 • Portland - 1 • Vancouver - 1 </p>
<p>9. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?</p>	<p>Peak - September to January - 1 Slow season - May to August - 1 Consistent - 1 N/A - 1</p>

QUESTION	RESPONSE
<p>10. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)</p>	<p>40,000 to 80,000 railcars - 2 N/A - 1</p>
<p>11. Which Class 1 and shortline rail carriers do you use in Washington?</p>	<p>BN - 3 UP - 3</p>
<p>12. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)</p>	<p>Tariff - 2 Contract - 1 Spot - 0</p>
<p>13. What decision criteria do you use in selecting movement by rail, barge, or truck to the export port?</p>	<ul style="list-style-type: none"> • Barge is not an option from certain origins - 1 • Shipper has own dock - 1 • Shipper only uses rail - 1
<p>14. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>No - 3; <ul style="list-style-type: none"> • Lack of capacity during harvest - 1 • Poor service related to operating issues - 1 • Locomotive shortages - 1 • Crew shortages - 1 • Congestion between Vancouver and Seattle - 1 No - 0</p>
<p>15. Upon which critical service factors do you evaluate the performance of rail carriers?</p>	<ul style="list-style-type: none"> • On-time delivery - 1 • Adherence to schedule - 1 • Transit time - 1 • Price - 1 • Availability of locomotives - 1 • Ability of railroads to deliver railcars to shipper's dock in time to meet the vessel - 1
<p>16. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>Yes - 3; <ul style="list-style-type: none"> • Transit delays - 3 • Slow transit - 1 </p>
<p>17. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)</p>	<p>No - 2 Yes - 1</p>
<p>18. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)</p>	<p>Yes - 2 No - 1; Yes 1 No - 1</p>
<p>19. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?</p>	<p>Increase - 1 Maintain the same - 1 Decrease - 0</p>

QUESTION	RESPONSE
20. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	N/A - 2 <ul style="list-style-type: none"> • Sales growth - 1 • Shipper plans facility expansion to handle more product - 1
21. Have these factors changed over the past three to five years? (yes/no)	N/A - 2 Yes - 1 No - 0
22. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 2 Yes - 1 <ul style="list-style-type: none"> • Gulf - 1 • Mexico - 1
23. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 2; <ul style="list-style-type: none"> • Increased demand for products - 1 No - 1

Domestic Shipments

QUESTION	RESPONSE
1. What are your primary inbound commodities?	Apples - 4, pears - 4, cherries - 3, various forms of grain - 2, apricots - 1, asparagus - 1, blueberries - 1, meat - 1, onions - 1, oranges - 1, peaches - 1, potatoes - 1, and vegetable oils - 1
2. What are your primary outbound commodities?	Apples - 4, pears - 4, cherries - 3, apricots - 1, asparagus - 1, blueberries - 1, grain - 1, grain screenings and dust - 1, meat - 1, onions - 1, oranges - 1, peaches - 1, potatoes - 1, and vegetable oils - 1
3. What are your primary U.S. origin cities?	Eastern Washington - 2, Washington - 2, Oregon - 2, Kalama - 1, Wenatchee - 1, California - 1, Midwest - 1, and Planes States - 1
4. What are you primary U.S. destination cities?	All over the U.S. - 5, Oregon - 1, Washington - 1, West Coast - 1
5. What was the 2005 total volume moved via rail? (number rail equipment)	< 350 railcars - 5 WND - 1 N/A - 1
6. What percent or number of rail equipment moved through Washington?	80% to 100% - 5 < 10% - 1 N/A - 1
7. What was the 2005 total truckload volume?	< 5,000 truckloads - 4 5,001 to 20,000 truckloads - 2 WND - 1
8. What percent or number of truckloads moved through Washington?	80% to 100% - 6 < 10% - 1

QUESTION	RESPONSE
9. Do you use barge? (yes/no) If so, what quantity moved in 2005? (number containers/metric tons)	No - 7 Yes - 0
10. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Spot - 2 Tariff - 2 Contract - 2 N/A - 1
11. Are shipments consistent year-round or is there a peak or slow season?	Consistent - 2 Peak - August to October - 1 Peak - August to December - 1 Peak - September to January - 1 Peak - October to March - 1 Peak - October to April - 1
12. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - high - 6, medium - 1 Perishable - high - 5, medium - 1, low 1
13. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 6 UP - 2 CBRR - 1 Express Trak (ET) - 1 Alliance - 1 N/A - 1
14. What decision criteria do you use in selecting rail, truck, or barge for a particular shipment?	<ul style="list-style-type: none"> • Rates - 5 • Availability of temperature controlled equipment - 2 • Equipment availability - 1 • Transit time - 1 • Speed to destination - 1 • Time sensitivity of order - 1 • Customer's preference for mode - 1 • Volume of order - 1 • Whether customer can accept railcars - 1
15. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	N/A - 6; <ul style="list-style-type: none"> • BN performs the switch - 5 • UP performs the switch - 2 < 50 miles - 1
16. If no rail spur, how far must the product be trucked to meet the rail hub?	N/A - 5 1 mile - 1 Unknown - 1

QUESTION	RESPONSE
<p>17. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>No - 4;</p> <ul style="list-style-type: none"> • Inflexibility - 1 • Capacity is constrained - 1 • Equipment shortages especially during peak season - 1 • Shipper must give seven days notice to railroad in order to get an empty and then the empty may not show up, which is a problem since the product must turn quicker than that due to its perishable nature - 1 • Poor customer service and unresponsive staff - 1 • Delays in moving railcars - 1 • Idaho gets more empties for potatoes than Washington since the BN does not store many boxcars in Washington because shippers cannot guarantee volumes - 1 <p>Yes - 2 N/A - 1</p>
<p>18. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>Yes - 6;</p> <ul style="list-style-type: none"> • Transit delays - 3 • Rail is slower than truck - 2 • Service to the Southeast is unpredictable - 1 • Equipment shortages - 1 • Equipment is not available in a timely manner - 1 • Inconsistent quality of equipment - 1 • Reefer equipment not maintaining proper temperature during transit - 1 • High prices due to lack of competition - 1 • Lack of visibility to where railcars are - 1 • Lack of rail spur at shipper's facility - 1 • Some customers cannot accept railcars - 1
<p>19. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)</p>	<p>Yes - 3 No - 3 N/A - 1</p>
<p>20. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)</p>	<p>Yes - 7; Yes 4 No 3</p>

Rail Profile and Recent or Existing Rail Issues

QUESTION	Yes	No	Comments
1. Do you own or long-term lease any rail equipment? (yes/no) If so, how much rail equipment?	2	6	<ul style="list-style-type: none"> Owns a locomotive - 1 Leases and owns special railcars - 1
2. Do you participate in a guaranteed equipment availability program with a rail carrier? (yes, which ones/no)	3	5	<ul style="list-style-type: none"> BN LOGS Program - 2 Shippers have contracts for shuttle trains of 100 to 110 railcars in length from the UP - 1

Answer the following for each rail carrier used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
1. It is easy to place bookings with my rail carrier.	BN - 1	BN - 6 UP - 3 CN - 1 CBRR - 1 ET - 1				N/A - 1	Shipper controls routing - 1
2. The rail carrier supplies the requested number of empty rail equipment per the booking.		BN - 3 UP - 1	BN - 2 UP - 2 CBRR - 1	BN - 1 CN - 1 ET - 1	BN - 1	N/A - 1	Shipper controls routing - 1
3. The rail carrier supplies the empty rail equipment within the expected time period.		BN - 1	BN - 1 UP - 1 CBRR - 1	BN - 3 CN - 1 UP - 1 ET - 1	BN - 1	N/A - 1	Shipper controls routing - 1
QUESTION	0	1-2	3-7	8-14	14+		
1. On average, within how many days of the requested date does the rail carrier supply empty rail equipment?		BN - 1 UP - 1	BN - 3 CN - 1 ET - 1	BN - 1	BN - 1 UP - 1	N/A - 1 D/N - 1; inconsistent: sometimes late; sometimes early - 1	Shipper controls routing - 1

<p>QUESTION Please indicate your level of agreement with the following statements.</p>	<p>Strongly Agree</p>	<p>Agree</p>	<p>Neither Agree Nor Disagree</p>	<p>Disagree</p>	<p>Strongly Disagree</p>	<p>Don't Know/Not Applicable</p>	<p>Comments</p>
<p>2. The rail carrier picks up the loaded rail equipment within the expected time period.</p>	<p>BN - 1</p>	<p>BN - 4 UP - 1 CBRR - 1</p>			<p>BN - 1 UP - 1</p>	<p>N/A - 2</p>	<p>Shipper controls routing - 1</p>
<p>QUESTION</p>	<p>0</p>	<p>1-2</p>	<p>3-7</p>	<p>8-14</p>	<p>14+</p>		
<p>3. On average, within how many days of the requested date does the rail carrier pick up loaded rail equipment?</p>	<p>BN - 2</p>	<p>BN - 3 UP - 1 CBRR - 1</p>	<p>BN - 1 UP - 1</p>			<p>N/A - 2</p>	<p>Shipper controls routing - 1 Cumulative result of a 1- to 2-day delay equates to a \$1 million annual cost to shipper - 1</p>
<p>QUESTION Please indicate your level of agreement with the following statements.</p>	<p>Strongly Agree</p>	<p>Agree</p>	<p>Neither Agree Nor Disagree</p>	<p>Disagree</p>	<p>Strongly Disagree</p>	<p>Don't Know/Not Applicable</p>	<p>Comments</p>
<p>4. Once my loaded rail equipment is delivered to the railramp, the railroad loads and moves the equipment onto a train within the expected timeframe.</p>		<p>BN - 2 UP - 2 CN - 1 ET - 1</p>		<p>BN - 1 UP - 1</p>		<p>N/A - 4</p>	<p>Ocean carrier handles - 1</p>
<p>5. The rail carrier delivers loaded rail equipment to destination according to the rail carrier's published trip plan.</p>	<p>ET - 1</p>	<p>BN - 1 CN - 1 UP - 1</p>	<p>BN - 3 UP - 1</p>	<p>BN - 1 UP - 1</p>	<p>BN - 3 UP - 1</p>		
<p>QUESTION</p>	<p>0</p>	<p>1-2</p>	<p>3-7</p>	<p>8-14</p>	<p>14+</p>		
<p>6. On average, within how many days of the rail carrier's published trip plan does the rail carrier deliver loaded rail equipment to destination?</p>	<p>ET - 1</p>	<p>BN - 4 UP - 3 CN - 1</p>	<p>BN - 3 UP - 1</p>	<p>BN - 1</p>			
<p>7. What reasons do the rail carriers provide for the cause of delays?</p>	<ul style="list-style-type: none"> • Locomotives shortages - 3 • Congestion - 2 • Crew shortages - 2 • Weather - 1 						

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
1. The rail carrier is responsive in resolving my problems.	ET - 1	BN - 1	BN - 1 UP - 1	BN - 2 UP - 2 CBRR - 1	BN - 4 UP - 1	N/A - CN - 1	Buyer pays freight - 1
2. My company probably pays less than average rates for rail service.		1		6	1		
3. The rail rates my company pays has a direct affect on the quality of service we receive.		1		5	1	D/N - 1	
4. My company would be willing to pay 10 percent more to obtain more reliable rail service.		4	1	1	1	D/N - 1	Buyer pays freight - 1
5. Rail rates in general are competitive with truck rates.		6	1			D/N - 1	
6. Rail rates in general are competitive with barge rates.		1		1		N/A - 6	
7. It is easy for my company to switch the mode from rail to truck or barge for inbound shipments.				2	1	N/A - 5	
8. It is easy for my company to switch the mode from rail to truck or barge for outbound shipments.	1	2		2	1	N/A - 2	

General Questions

QUESTION	Comments
1. What factors influence your decision to switch from rail to truck or barge?	<ul style="list-style-type: none"> • Customer delivery requirements - 4 • Cost - 3 • Delivery time - 2 • Equipment shortages - 2 • Whether barge service is available from a certain origin - 1

QUESTION	Comments
<p>2. Does your company anticipate making changes in its supply chain during the next five years that might influence the use of rail? (yes/no) If so, what kind?</p>	<p>No - 4 Yes - 4; <ul style="list-style-type: none"> • Will use more rail due to the shortage of reefer trucks - 1 • Facility expansion will increase shipper's efficiency to handle trains and store more product - 1 • Will ship more biofuels - 1 • Shipper is considering guaranteed rail equipment programs and putting in a rail spur at its facility - 1 </p>
<p>3. Are rail carriers offering you scheduled service? (yes/no) If so, has this improved reliability? (yes/no)</p>	<p>No - 5 Yes - 3; <ul style="list-style-type: none"> • BN - 1 • UP - 1 • ET - 1; <p>Yes - 2 No - 1</p> </p>
<p>4. Are rail carriers offering you any other special programs? (yes/no) If so, what type?</p>	<p>No - 6 Yes - 2; <ul style="list-style-type: none"> • BN LOGS Program - 1 • UP - 1 </p>
<p>5. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?</p>	<p>Declined - 6 Remained the same - 2 Improved - 0</p>
<p>6. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?</p>	<p>Declined - 4 Remained the same - 4 Improved - 0</p>
<p>7. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?</p>	<p>Yes - 5; <ul style="list-style-type: none"> • Unit trains have priority - 2 • Intermodal has priority - 2 • Long-haul has priority - 1 • Coal trains have priority - 1 <p>No - 3</p> </p>
<p>8. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)</p>	<p>Yes - 4 No - 2 Unknown - 2</p>

QUESTION	Comments
<p>9. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • Lack of dependable service and delivery - 3 • Insufficient capacity to handle increased volume - 2 • Insufficient temperature controlled equipment - 2 • Inability of railroads to maintain proper temperature during transit - 2 • Service will deteriorate - 1 • High costs - 1 • On-time delivery - 1 • Increased congestion at Port of Tacoma and the corridor between Vancouver and Seattle - 1 • Shipper’s ability to obtain good service at decent rates that will allow its products to move and not be priced out of the world markets will be constrained - 1
<p>10. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<p>Yes - 5;</p> <ul style="list-style-type: none"> • Talks regularly to railroads about issues - 4 • Ships more trucks - 1 • Files claims - 1 • Belongs to industry associations - 1 <p>No - 3</p>
<p>11. What are the most pressing rail infrastructure issues in Washington?</p>	<p>Unknown - 3</p> <ul style="list-style-type: none"> • Capacity to deliver on-time service - 1 • Congestion at the Ports of Seattle and Tacoma - 1 • Inability of BN and UP to travel on each other’s tracks - 1 • Congestion in the Vancouver to Seattle corridor - 1 • Lack of ramp near Quincy for eastbound trains so they do not have to travel west first - 1 • Columbia Gorge - 1 • Lack of shortline service to shipper’s facility - 1
<p>12. What policy measures and programs should Washington State establish to improve rail service in Washington?</p>	<p>Unknown - 5</p> <ul style="list-style-type: none"> • Re-establish intermodal ramp in the Tri-Cities - 1 • Facilitate training programs for people who want to work on the railroads - 1 • Washington should support Express Trak and similar services - 1 • Due to the shortage of truck drivers, Washington needs to help the railroads improve service, equipment availability, and transit reliability - 1

QUESTION	Comments
13. What infrastructure investments should Washington State make to improve rail service in Washington?	Unknown – 2 <ul style="list-style-type: none"> • Improve the in and out efficiency of ports – 1 • Build new tracks in the Vancouver to Seattle corridor – 1 • Force the BN and UP to share tracks – 1 • Open up railroads to more competition especially on shortline tracks – 1 • Increase the focus on equipment quality – 1 • Re-establish tracks and spurs in Eastern Washington – 1 • Washington should require the railroads to make infrastructure investments to improve service – 1 • Change the rules to allow shortlines to move both BN and UP trains on their tracks – 1
14. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?	Yes – 6; <ul style="list-style-type: none"> • Fund more infrastructure improvements – 2 • Perform a comprehensive study that evaluates the 20-year projected trends in import growth and the domestic economy, and figure out the impacts to the national transportation infrastructure and how the infrastructure should be improved as a result, particularly at chokepoints – 1 • Support programs like Express Trak – 1 • Help facilitate service improvements – 1 No – 2
15. Would your company relocate if rail service were unavailable? (yes/no)	No – 7; <ul style="list-style-type: none"> • Shipper would have to cease operations because it could not move – 1 Yes – 1
16. Will the availability and/or quality of rail service impact your company’s plans to expand and/or relocate in the next two years? (yes/no)	Yes – 6 No – 2

WTC Rail Study Participation

QUESTION	Yes	No	Comments
1. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?		8	
2. Would you like to receive e-mail notices about the progress and findings of the Study?	8		
3. Would you be willing to talk further with us over the course of the study?	8		

Rail-Dependent Shipper Survey Forest Products Shippers

Conducted by
 Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	5	

General Information

QUESTION	RESPONSE
11. What kind of shipper are you? (Importer of raw materials, components, semi-finished and/or finished product? Exporter of raw material, components, semi-finished and/or finished products? Domestic producer of raw materials, components, semi-finished and/or finished products?)	Importer of raw materials - 5 Importer of finished products - 1 Exporter of raw materials - 2 Exporter of finished products - 4 Domestic producer of raw materials - 2 Domestic producer of semi-finished products - 1 Domestic producer of finished products - 4

QUESTION	RESPONSE
12. In which Washington cities are your facilities located?	Longview - 2 Tacoma - 2 Yakima - 2 Seattle - 1 Federal Way - 1 Arlington - 1 Grays Harbor - 1 Leavenworth - 1 Bellevue - 1 Moses Lake - 1 Oroville - 1 Cosmopolis - 1 Raymond - 1 Spokane - 1 N/A - 2
13. Do you import or export in containers or breakbulk?	Import in containers - 4 Import in breakbulk - 1 Export in containers - 3 Export in breakbulk - 1
14. Is the volume you ship via rail within the U.S. containerized or does it move in bulk in special railcars (e.g., boxcars, centerbeams, flatracks, tanks, gondolas, etc.)?	Containerized - 5 Bulk in special railcars - 4
15. Do you require special rail equipment? (yes/no) If so, what type?	Yes - 4; <ul style="list-style-type: none"> • Centerbeams - 4 • Flat racks - 2 • Intermodal containers - 1 • Tanks - 1 • Chip gondolas - 1 No - 1
16. Is your company’s logistics functions handled in-house or outsourced?	In-house - 5 Outsourced - 2
17. How many employees are at your facility? How many in all Washington facilities?	0 to 2,700 at facility - 5 0 to 7,400 at all Washington facilities - 5
18. What is the square footage of your facilities in Washington (specify for office, warehouse, manufacturing, processing area)?	Unknown - 3 < 20 acres - 1 21 to 100 acres - 1
19. Is there an active rail spur located at your facility? (yes/no)	Yes - 4 No - 1

QUESTION	RESPONSE
20. If so, which railroad provides switching service to the spur?	BN - 2 UP - 2 Cascade & Columbia River (CSCD) - 1 Columbia Basin (CBRW) - 1 Columbia & Cowlitz (C&C) - 1 Great Northwest Railroad (GRNW) - 1 Longview Switching Company (LSC) - 1 Puget Sound & Pacific (PS&P) - 1 N/A - 1

Containerized Imports

QUESTION	RESPONSE
32. What are your primary commodities?	Recycled paper - 1 Recycled corrugated cartons - 1 Baled bleached pulp - 1 Wood pulp - 1 Finished lumber - 1 Machinery for plants - 1
33. What are the primary origin countries?	Canada - 4 Europe - 1 South America - 1
34. What are the primary U.S. destination cities?	Longview - 2 Tacoma - 1 Lewiston, Idaho - 1 Las Vegas - 1 All over the U.S. - 1
35. What was the 2005 total import volume that entered the U.S. via rail (number of rail equipment)?	N/A - 2 < 100 railcars - 1 101 to 5,000 railcars - 1 > 5,001 railcars - 1
36. Are the shipments moving into the U.S. via rail consistent year-round or is there a peak or slow season?	N/A - 2 Consistent - 2 Intermittent - 1
37. Are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Tariff - 3 Contract - 2 N/A - 2 Spot market - 1

QUESTION	RESPONSE
38. What was the 2005 total import volume that entered the U.S. via truck (number of trucks)?	N/A - 3 3,001 to 4,500 truckloads - 1 > 4,500 truckloads - 1
39. What was the 2005 total import volume that entered the U.S. via ocean (FEUs)?	N/A - 4 < 125 FEUs - 1
40. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	N/A - 4 100% - 1
41. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	N/A - 4 Intermittent; related to facility construction projects - 1
42. What percent or number of containers moved through the Port of Portland?	N/A - 5
43. Are the shipments moving through the Port of Portland consistent year-round or is there a peak or slow season?	N/A - 5
44. What percent or number of containers were moved intact to destination by the ocean carrier on a through Bill of Lading?	N/A - 4 100% - 1
45. What percent or number of containers were transloaded by 3PL warehouses in Washington onto rail equipment for onward distribution?	N/A - 5
46. By which 3PLs in which cities?	N/A - 5
47. Which Class 1, shortline rail carriers, and/or intermodal marketing companies (IMC) do you use for rail shipments moving through Washington?	BN - 3 UP - 2 N/A - 2 KFR - 1 LSC - 1 WCRC - 1
48. Do you or does your IMC control the routing of intermodal cargo with the railroad? (company/IMC)	N/A - 3 Company - 2
49. If cargo is transloaded onto rail equipment, are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 5
50. What percent or number of containers were transloaded by 3PL warehouses in Washington onto truck equipment for onward distribution?	N/A - 5
51. By which 3PLs in which cities?	N/A - 5
52. If cargo is transloaded onto truck equipment, are your rates based on the spot market, tariff, or contracts? (spot/tariff/contract)	N/A - 5
53. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - medium - 3, high - 2; Perishable - low - 5

QUESTION	RESPONSE
<p>54. What decision criteria do you use in selecting onward movement by rail or truck?</p>	<p>N/A - 2</p> <ul style="list-style-type: none"> • Freight rates - 2 • Customer order quantity - 1 • Species of wood - 1 • Transit time - 1
<p>55. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>N/A - 2 No - 2 Yes - 1;</p> <ul style="list-style-type: none"> • Railroads are in an overcapacity situation - 1 • Insufficient crews - 1 • Insufficient locomotives - 1 • It takes a long time to get answers - 1 • Railcar supply runs hot and cold - 1 • Insufficient railcars - 1
<p>56. Upon which critical service factors do you evaluate the performance of rail carriers?</p>	<p>N/A - 2</p> <ul style="list-style-type: none"> • Adequate equipment supply - 2 • Price - 2 • Consistent transit times - 1 • On-time performance - 1 • Ability to respond to spot rate requests - 1 • Consistent equipment supply - 1 • Service interruption recovery time - 1
<p>57. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • High rates - 2 • Market pricing issues - 1 • On-time performance is lacking - 1 • Delays could cause production line to shut down - 1 • Inconsistent equipment supply - 1 • Equipment shortages - 1 <p>N/A - 2</p>
<p>58. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Portland in the next five years?</p>	<p>N/A - 4 Decrease - 1</p>
<p>59. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Portland in the next five years?</p>	<p>N/A - 4</p> <ul style="list-style-type: none"> • Facility closures - 1
<p>60. Have these factors changed over the past three to five years? (yes/no)</p>	<p>N/A - 4 Yes - 1</p>

QUESTION	RESPONSE
61. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	N/A - 4 No - 1
62. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 3; <ul style="list-style-type: none"> • Mergers and acquisitions resulting in mill closures - 1 • Consolidation of companies - 1 • The paper industry is using more intermodal containers as opposed to manifest trains - 1 No - 2

Imports Moving as Breakbulk

QUESTION	RESPONSE
24. What are your primary commodities?	Wood pulp - 1
25. What are your primary origin countries?	South America - 1
26. What are the primary U.S. destination cities?	Lewiston - 1 Las Vegas - 1
27. What was the 2005 total import volume that entered the U.S. via rail (metric tons)?	N/A - 1
28. What was the 2005 total import volume that entered the U.S. via ocean (metric tons)?	33,000 metric tons - 1
29. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	N/A - 1
30. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 1
31. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	N/A - 1
32. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 1
33. What percent or number of metric tons are reloaded onto rail equipment from Washington and/or Columbia River ports for onward movement to your U.S. customers?	N/A - 1; 100% is transloaded into railcars in a Gulf Coast port
34. In which Washington cities and by which 3PLs are your products reloaded onto rail equipment?	N/A - 1
35. Which Class 1, shortline rail carriers, and/or IMCs do you use in Washington?	BN - 1
36. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Tariff - 1 Contract - 1

QUESTION	RESPONSE
37. What percent or number of metric tons are reloaded onto trucks or barges from Washington and/or Columbia River ports for onward movement to your U.S. customers?	N/A - 1
38. What decision criteria do you use in selecting onward movement by rail, truck, or barge?	<ul style="list-style-type: none"> • Cost - 1
39. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 1; <ul style="list-style-type: none"> • Railcar shortages - 1 • Locomotive shortages - 1 • Insufficient people - 1
40. Upon which critical service factors do you evaluate the performance of rail carriers?	<ul style="list-style-type: none"> • On-time performance - 1 • Availability of railcars - 1 • Rates - 1
41. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 1; <ul style="list-style-type: none"> • Delays impact production schedules - 1 • Lack of equipment - 1 • High rates - 1
42. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	N/A - 1
43. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	N/A - 1
44. Have these factors changed over the past three to five years? (yes/no)	N/A - 1
45. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 1
46. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	No - 1

Containerized Exports

QUESTION	RESPONSE
31. What are your primary commodities?	Wood pulp - 2 Linerboard - 1 Paperboard - 1 Paper in rolls - 1

QUESTION	RESPONSE
32. What are the primary origin cities?	Longview - 2 Cosmopolis - 1 Tacoma - 1 Lewiston - 1
33. What are the primary destination countries?	Asia - 2 Mexico - 2 Japan - 1 China - 1 Korea - 1 South Pacific - 1 Canada - 1 Europe - 1
34. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	N/A - 2 < 200 boxcars - 2
35. What was the 2005 total export volume that exited the U.S. via ocean (FEUs)?	3,000 to 6,000 FEUs - 2 6,001 to 20,000 FEUs - 2
36. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	100% - 2 95% - 1 70% - 1
37. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 3 Slow season - December to January - 1
38. What percent or number of containers moved through Columbia River ports? (specify which ports)	N/A - 2 3% to 30% - Portland - 2 2% - Vancouver - 1
39. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	Consistent - 2 N/A - 2
40. Is the inland move from origin to the Ports of Seattle and/or Tacoma via barge, rail, or truck?	Truck - 4 Rail - 1
41. Is the inland move from origin to Columbia River ports via barge, rail, or truck?	N/A - 2 Truck - 1 Barge - 1
42. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	8,000 to 10,000 railcars - 2 < 2,000 railcars - 1 N/A - 1
43. Is the inland move to the port controlled by the ocean carrier on a through Bill of Lading or do you control the routing? (carrier/company)	Carrier - 4 Company - 3

QUESTION	RESPONSE
44. If you are responsible for the inland move, which barge, rail carrier and trucking companies are used?	Various - 4
45. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Tariff - 4 Contract - 1
46. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 4 UP - 3 CBRW - 1 CLC - 1 CSCD - 1 PS&P - 1
47. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - medium - 2, high - 1, low - 1 Perishable - low - 4
48. What decision criteria do you use in selecting the inland move to the gateway port by rail, truck, or barge?	<ul style="list-style-type: none"> • Cost - 2 • Short distance to the port - 1 • Sells to buyers on an FOB Mill basis, so buyers work with the ocean carriers to truck containers to the port - 1 • Service - 1 • Equipment availability - 1 • Customer delivery requirements - 1
49. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	1 to 10 miles - 3 11 to 40 miles - 2 > 41 miles - 2 N/A; BN and UP perform the switch - 1
50. If no rail spur, how far must the product be trucked to meet the rail hub?	N/A - 3 < 10 miles - 1 11 to 40 miles - 1
51. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 2; <ul style="list-style-type: none"> • Railcar shortages - 1 • The quality of the local switching service through the local area network has declined because there are fewer switching crews available, resulting in delays - 1 Yes - 2
52. Upon which critical service factors do you evaluate the performance of rail carriers?	<ul style="list-style-type: none"> • Consistent transit times - 2 • On-time performance - 2 • Consistent equipment availability - 2 • Consistent price - 1 • Price - 1

QUESTION	RESPONSE
53. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 3; <ul style="list-style-type: none"> • Inconsistent transit times - 1 • Higher fuel surcharges are a challenge - 1 • BN and UP no longer offer local car cleaning service - 1 • Inconsistent deliveries - 1 No - 1
54. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	Yes - 2 No - 2
55. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	Yes - 3 No - 1; Yes - 2 No - 2
56. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Maintain the same - 4
57. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	N/A - 4
58. Have these factors changed over the past three to five years? (yes/no)	N/A - 4
59. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 2 Yes - 2 Unknown - 2
60. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 2 <ul style="list-style-type: none"> • Company consolidations - 1 • Companies will use fewer boxcars and more intermodal containers - 1 No - 1 Unknown - 1

Exports Moving as Breakbulk

QUESTION	RESPONSE
24. What are your primary commodities?	Newsprint - 1
25. What are your primary origin cities?	Longview - 1
26. What are you primary destination countries?	Japan - 1
27. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	N/A - 1

QUESTION	RESPONSE
28. What was the 2005 total export volume that exited the U.S. via ocean (metric tons)?	> 200,000 metric tons - 1
29. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	N/A - 1
30. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	N/A - 1
31. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	100% - Longview - 1
32. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	Consistent - 1
33. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	> 3,000 railcars - 1
34. Which Class 1 and shortline rail carriers do you use in Washington?	BN - 1 CLC - 1 CSCD - 1
35. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract - 1
36. What decision criteria do you use in selecting movement by rail, barge, or truck to the export port?	<ul style="list-style-type: none"> • Cost - 1 • Distance -
37. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 1; <ul style="list-style-type: none"> • Railcar shortages - 1
38. Upon which critical service factors do you evaluate the performance of rail carriers?	<ul style="list-style-type: none"> • Transit time - 1 • Service consistency - 1
39. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 1 <ul style="list-style-type: none"> • Inconsistency of service - 1 • Lack of sound operating plans - 1 • Mudslides - 1 • Locomotive shortages - 1
40. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 1
41. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	Yes - 1; Yes - 1

QUESTION	RESPONSE
42. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Increase - 1
43. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	<ul style="list-style-type: none"> • Raw materials sourcing - 1
44. Have these factors changed over the past three to five years? (yes/no)	Yes - 1
45. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 1
46. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 1; <ul style="list-style-type: none"> • People are not reading newspapers as much as before - 1

Domestic Shipments

QUESTION	RESPONSE
21. What are your primary inbound commodities?	Logs - 4 Wood chips - 3 Recycled newspapers - 2 Wood pulp - 1 Recycled corrugated cartons - 1 Chemicals - 1
22. What are your primary outbound commodities?	Finished lumber - 4 Wood pulp - 2 Paper - 2 Finished plywood - 1 Tissue products - 1 Linerboard - 1 Paperboard - 1 Newsprint - 1 Fuel wood pellets - 1

QUESTION	RESPONSE
23. What are your primary U.S. origin cities?	Longview - 2 Leavenworth - 1 Tacoma - 1 Shelton - 1 Aberdeen - 1 Oroville - 1 Raymond - 1 Washington - 1 South Dakota - 1 Gulf States - 1
24. What are you primary U.S. destination cities?	All over the U.S. - 2 California - 2 Washington - 2 East Coast - 2 Washington - 1 7 Western States - 1 Texas - 1 Idaho - 1 Arkansas - 1 Nevada - 1 Southeast - 1 Midwest - 1
25. What was the 2005 total volume moved via rail? (number rail equipment)	4,001 to 15,000 railcars - 3 < 500 railcars - 1 501 to 4,000 railcars - 1
26. What percent or number of rail equipment moved through Washington?	100% - 4 N/A - 1
27. What was the 2005 total truckload volume?	15,001 to 50,000 truckloads - 3 5,000 to 15,000 truckloads - 2
28. What percent or number of truckloads moved through Washington?	100% - 3 50% - 1 N/A - 1
29. Do you use barge? (yes/no) If so, what quantity moved in 2005? (number containers/metric tons)	No - 3 Yes - 2; 100,000 to 375,000 metric tons - 2
30. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract - 3 Tariff - 3 Spot market - 2

QUESTION	RESPONSE
31. Are shipments consistent year-round or is there a peak or slow season?	Consistent - 4 Peak - February to August - 1 Peak - August to March - 1
32. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - low - 2, medium - 2, high - 2 Perishable - low - 5
33. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 4 UP - 4 CBRW - 1 CLC - 1 CSCD - 1 GRNW - 1 PSCP - 1 N/A - 1 Schneider - 1 Swift - 1 Exel - 1
34. What decision criteria do you use in selecting rail, truck, or barge for a particular shipment?	<ul style="list-style-type: none"> • Rates - 3 • Customer delivery requirements - 3 • Type of product - 1 • Volume of order - 1 • Destination - 1 • Customer's ability to accept rail or truck - 1 • Time sensitivity of product - 1
35. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	1 to 10 miles - 3 11 to 80 miles - 2 81 to 1,000 miles - 1 N/A - BN and UP perform the switch - 1
36. If no rail spur, how far must the product be trucked to meet the rail hub?	N/A - 4 1 to 10 miles - 1 11 to 40 miles - 1
37. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 4; <ul style="list-style-type: none"> • Inadequate railcar supply - 3 • Crew shortages - 2 • Locomotive shortages - 1 • Constrained capacity - 1 Yes - 1

QUESTION	RESPONSE
38. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 5; <ul style="list-style-type: none"> • Congestion - 2 • Inconsistent transit times - 2 • Long transit times - 1 • Delivery delays - 1 • Equipment shortages - 1 • BN and UP no longer offer local car cleaning service - 1
39. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 3 Yes - 2
40. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	Yes - 4 No - 1; Yes - 3 No - 1

Rail Profile and Recent or Existing Rail Issues

QUESTION	Yes	No	Comments
3. Do you own or long-term lease any rail equipment? (yes/no) If so, how much rail equipment?	4	1	<ul style="list-style-type: none"> • Leases 500 to 5,000 special railcars - 2 • Leases < 20 special railcars - 1 • Leases 1 switch locomotive - 1 • Owns < 20 special railcars - 1 • Owns 21 to 500 special railcars - 1
4. Do you participate in a guaranteed equipment availability program with a rail carrier? (yes, which ones/no)	4	1	<ul style="list-style-type: none"> • BN - 3 • UP - 1 • DM&E - 1

Answer the following for each rail carrier used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
4. It is easy to place bookings with my rail carrier.		BN - 4 UP - 4 GRNW - 1	BN - 1 UP - 1 LSC - 1 WCRC - 1	DM&E - 1		N/A - KFR - 1	BN controls car flow for KFR - 1
5. The rail carrier supplies the requested number of empty rail equipment per the booking.		BN - 2 UP - 2	BN - 1 UP - 1 LSC - 1 WCRC - 1	BN - 1 UP - 1 DM&E - 1	BN - 1	N/A - KFR - 1 N/A - GRNW - 1	BN controls car flow for KFR - 1
6. The rail carrier supplies the empty rail equipment within the expected time period.		BN - 1 UP - 1	BN - 3 UP - 3 DM&E - 1 LSC - 1 WCRC - 1		BN - 1	N/A - KFR - 1	BN controls car flow for KFR - 1
QUESTION	0	1-2	3-7	8-14	14+		
8. On average, within how many days of the requested date does the rail carrier supply empty rail equipment?	BN - 1 UP - 1 GRNW - 1 LSC - 1 WCRC - 1	BN - 3 UP - 3	BN - 2 UP - 2 DM&E - 1				
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
9. The rail carrier picks up the loaded rail equipment within the expected time period.	BN - 1 UP - 1 GRNW - 1	BN - 3 UP - 3 CBRW - 1 CLC - 1 CSCD - 1 DM&E - 1	BN - 1 UP - 1 LSC - 1 WCRC - 1				
QUESTION	0	1-2	3-7	8-14	14+		
10. On average, within how many days of the requested date does the rail carrier pick up loaded rail equipment?	BN - 1 UP - 1 GRNW - 1 LSC - 1 WCRC - 1	BN - 4 UP - 4 CBRW - 1 CLC - 1 CSC - 1					

		DM&E - 1 PS&P - 1					
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
11. Once my loaded rail equipment is delivered to the railramp, the railroad loads and moves the equipment onto a train within the expected timeframe.		BN - 1 UP - 1 DM&E - 1	BN - 1 UP - 1	BN - 1 UP - 1		N/A - 2	
12. The rail carrier delivers loaded rail equipment to destination according to the rail carrier's published trip plan.		GRNW - 1	BN - 2 UP - 2	BN - 2 UP - 2 DM&E - 1	BN - 1 UP - 1		
QUESTION	0	1-2	3-7	8-14	14+		
13. On average, within how many days of the rail carrier's published trip plan does the rail carrier deliver loaded rail equipment to destination?		BN - 1 UP - 1	UP - 4 BN - 3 DM&E - 1	BN - 1			
14. What reasons do the rail carriers provide for the cause of delays?	<ul style="list-style-type: none"> • Congestion - 3 • Locomotive shortage - 3 • Acts of God - 2 • Crew shortages - 2 • Train capacity - 1 • Maintenance of right-of-way projects - 1 						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
9. The rail carrier is responsive in resolving my problems.		BN - 1 UP - 1 CBRW - 1 CLC - 1 CSCD - 1 GRNW - 1	BN - 1 UP - 1 LSC - 1 WCRC - 1	BN - 3 UP - 3 DM&E - 1			
10. My company probably pays less than average rates for rail service.		1	2	2			
11. The rail rates my company pays has a direct affect on the quality of service we receive.			1	3	1		
12. My company would be willing to pay 10 percent		1		4			

more to obtain more reliable rail service.							
13. Rail rates in general are competitive with truck rates.		3	1	1			
14. Rail rates in general are competitive with barge rates.			1	2		N/A - 2	
15. It is easy for my company to switch the mode from rail to truck or barge for inbound shipments.			2	1		N/A - 2	
16. It is easy for my company to switch the mode from rail to truck or barge for outbound shipments.		4		1			

General Questions

QUESTION	Comments
17. What factors influence your decision to switch from rail to truck or barge?	<ul style="list-style-type: none"> • Customer delivery requirements - 3 • Rates - 2 • Time sensitivity of order - 1 • Transit time - 1 • Equipment availability - 1 • Approval by customer - 1 • When boxcar supply runs out, shipper switches to truck - 1
18. Does your company anticipate making changes in its supply chain during the next five years that might influence the use of rail? (yes/no) If so, what kind?	Yes - 3; <ul style="list-style-type: none"> • Will use more intermodal - 1 • Will use short-sea shipping - 1 • Shipper is trying to be more consistent in its production and may switch to a 7-day production cycle in order to work better with the railroads to level out railcar supply needs - 1 No - 2
19. Are rail carriers offering you scheduled service? (yes/no) If so, has this improved reliability? (yes/no)	No - 3 Yes - 2; No - 2
20. Are rail carriers offering you any other special programs? (yes/no) If so, what type?	Yes - 4; <ul style="list-style-type: none"> • BN LOGS Program - 4 • Car cleaning at shipper's facility - 1 No - 1
21. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?	Declined - 3 Improved - 1 Remained the same - 1

QUESTION	Comments
<p>22. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?</p>	<p>Declined - 4 Improved - 1</p>
<p>23. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?</p>	<p>Yes - 5; • Unit trains have priority - 4 • Intermodal trains have priority - 3 • Long-haul trains have priority - 1 • Coal trains have priority - 1</p>
<p>24. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)</p>	<p>Yes - 4 No - 1</p>
<p>25. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • All U.S. railroads lack comprehensive operating plans - 1 • Railroads are driven by Wall Street, so there is more downsizing and less attention to customer service - 1 • Tracks are at capacity - 1 • If rail business increases, the railroads will not be able to handle it due to congestion and gridlock on the tracks - 1 • Service interruption recovery is poor - 1 • Inconsistent transit times - 1 • Local area switching is getting harder to do - 1 • Congestion is increasing - 1 • Quality and availability of railcars - 1 • Railroads are not replenishing railcars - 1 • High prices - 1
<p>26. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<p>Yes - 4; • Shipper has regular service meetings with the railroads to resolve issues - 1 • Increased use of barge - 1 • Increased participation in guaranteed railcar programs - 1 • Leased own equipment - 1 • Worked with railroads to establish car cleaning programs - 1 • Increased number of service improvement meetings with railroads - 1 • Spends more time tracking railcars - 1 • Testified before Washington State legislators on rail service issues - 1 • Worked with railroads to improve the quality of boxcar doors - 1 • Participates in shipper organizations such as National Industrial Transportation League (NITL) - 1</p> <p>No - 1</p>

QUESTION	Comments
27. What are the most pressing rail infrastructure issues in Washington?	<ul style="list-style-type: none"> • Lack of capacity over the Cascades and along the Columbia Gorge - 1 • BN Everett Yard congestion - 1 • Lack of track capacity - 1 • Congestion in the BN Spokane yard impacts switching to the shortline - 1 • Shortlines' ability to handle heavy loads (i.e., boxcars > 286,000 lbs) due to weight limitations on bridges - 1 • Unknown - 1
28. What policy measures and programs should Washington State establish to improve rail service in Washington?	<ul style="list-style-type: none"> • Unknown - 3 • Measure railcar dwell time in yards as a performance criteria for railroads - 1 • Railroads will need more land to expand, so the State could give them land - 1
29. What infrastructure investments should Washington State make to improve rail service in Washington?	<ul style="list-style-type: none"> • Reopen John Wayne Trail to rail access - 1 • Make more overpasses so trains are not delayed - 1 • Help shortlines improve infrastructure to handle heavier loads - 1 • Work with railroads on yard expansion and double tracking - 1 • Unknown - 1
30. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?	<p>Yes - 3;</p> <ul style="list-style-type: none"> • Equate rates with service through regulation - 1 • Help shortlines improve infrastructure - 1 <p>Unknown - 2</p>
31. Would your company relocate if rail service were unavailable? (yes/no)	<p>No - 3</p> <p>Yes - 1</p> <p>Unknown - 1</p>
32. Will the availability and/or quality of rail service impact your company's plans to expand and/or relocate in the next two years? (yes/no)	<p>Yes - 3</p> <p>No - 2</p>

WTC Rail Study Participation

QUESTION	Yes	No	Comments
4. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?	1	4	
5. Would you like to receive e-mail notices about the progress and findings of the Study?	5		
6. Would you be willing to talk further with us over the course of the study?	5		

Rail-Dependent Shipper Survey Processed Food and Beverage Shippers

Conducted by
 Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	4	

General Information

QUESTION	RESPONSE
21. What kind of shipper are you? (Importer of raw materials, components, semi-finished and/or finished product? Exporter of raw material, components, semi-finished and/or finished products? Domestic producer of raw materials, components, semi-finished and/or finished products?)	Importer of raw materials - 2 Importer of finished products - 1 Exporter of semi-finished products - 1 Exporter of finished products - 2 Domestic producer of raw materials - 1 Domestic producer of finished products - 4
22. In which Washington cities are your facilities located?	Chehalis, Issaquah, Kent, Lynden, Monroe, Moses Lake, Othello, Pasco, Quincy, Seattle and Sunnyside
23. Do you import or export in containers or breakbulk?	Import in containers - 2 Export in containers - 2 N/A - 2
24. Is the volume you ship via rail within the U.S. containerized or does it move in bulk in special railcars (e.g., boxcars, centerbeams, flatracks, tanks, gondolas, etc.)?	Containerized - 3 Bulk in special railcars - 3

QUESTION	RESPONSE
25. Do you require special rail equipment? (yes/no) If so, what type?	Yes - 3; <ul style="list-style-type: none"> • Reefers - 3 • Pressure cars - 1 • Bulkhead boxcars - 1 • Tanks - 1 • Intermodal containers - 1 No - 1
26. Is your company’s logistics functions handled in-house or outsourced?	In-house - 4 Outsourced - 1
27. How many employees are at your facility? How many in all Washington facilities?	Facility - 2 to 300 - 3 Unknown - 1; Total Washington - 2 to 1,100 - 3 Unknown - 1
28. What is the square footage of your facilities in Washington (specify for office, warehouse, manufacturing, processing area)?	< 100,000 square feet - 2 Unknown - 2
29. Is there an active rail spur located at your facility? (yes/no)	Yes - 4
30. If so, which railroad provides switching service to the spur?	BN - 3 UP - 2 Columbia Basin Railroad Company (CBRW) - 1

Containerized Imports

QUESTION	RESPONSE
63. What are your primary commodities?	Frozen vegetables and semi-processed seafood
64. What are the primary origin countries?	China - 2, Chile - 1, Ecuador - 1, Israel - 1, Mexico - 1, Peru - 1, and Thailand - 1
65. What are the primary U.S. destination cities?	Monroe - 1, Moses Lake - 1, Othello - 1, Pasco - 1, Quincy - 1, Seattle - 1, Idaho - 1, and Oregon - 1
66. What was the 2005 total import volume that entered the U.S. via rail (number of rail equipment)?	N/A - 2
67. Are the shipments moving into the U.S. via rail consistent year-round or is there a peak or slow season?	N/A - 2
68. Are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 2
69. What was the 2005 total import volume that entered the U.S. via truck (number of trucks)?	N/A - 2
70. What was the 2005 total import volume that entered the U.S. via ocean (FEUs)?	< 500 - 2
71. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	< 30% - 2

QUESTION	RESPONSE
72. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Peak - October to January - 1 N/A - 1
73. What percent or number of containers moved through the Port of Portland?	N/A - 2
74. Are the shipments moving through the Port of Portland consistent year-round or is there a peak or slow season?	N/A - 2
75. What percent or number of containers were moved intact to destination by the ocean carrier on a through Bill of Lading?	< 25% - 1 N/A - 1
76. What percent or number of containers were transloaded by 3PL warehouses in Washington onto rail equipment for onward distribution?	N/A - 2
77. By which 3PLs in which cities?	N/A - 2
78. Which Class 1, shortline rail carriers, and/or intermodal marketing companies (IMC) do you use for rail shipments moving through Washington?	N/A - 2
79. Do you or does your IMC control the routing of intermodal cargo with the railroad? (company/IMC)	N/A - 2
80. If cargo is transloaded onto rail equipment, are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 2
81. What percent or number of containers were transloaded by 3PL warehouses in Washington onto truck equipment for onward distribution?	N/A - 2
82. By which 3PLs in which cities?	N/A - 1 Cargo is transloaded onto trucks in California - 1
83. If cargo is transloaded onto truck equipment, are your rates based on the spot market, tariff, or contracts? (spot/tariff/contract)	Contract - 1 N/A - 1 Spot - 0 Tariff - 0
84. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - medium - 1, high - 1 Perishable - medium - 1, high - 1
85. What decision criteria do you use in selecting onward movement by rail or truck?	<ul style="list-style-type: none"> • Cost - 1 • N/A - 1
86. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	N/A - 2
87. Upon which critical service factors do you evaluate the performance of rail carriers?	N/A - 2

QUESTION	RESPONSE
88. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	N/A - 2
89. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Portland in the next five years?	Increase - 1 N/A - 1 Decrease - 0 Maintain the same - 0
90. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Portland in the next five years?	<ul style="list-style-type: none"> • Labor savings in China - 1 • Market acceptance of new packaging - 1 • Acceptance by foreign markets of processing done by shipper - 1 N/A - 1
91. Have these factors changed over the past three to five years? (yes/no)	Yes - 1 N/A - 1 No - 0
92. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 2 Yes - 0
93. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	No - 2 Yes - 0

Imports Moving as Breakbulk

QUESTION	RESPONSE
47. What are your primary commodities?	
48. What are your primary origin countries?	
49. What are the primary U.S. destination cities?	
50. What was the 2005 total import volume that entered the U.S. via rail (metric tons)?	
51. What was the 2005 total import volume that entered the U.S. via ocean (metric tons)?	
52. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	
53. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	
54. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	
55. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	

QUESTION	RESPONSE
56. What percent or number of metric tons are reloaded onto rail equipment from Washington and/or Columbia River ports for onward movement to your U.S. customers?	
57. In which Washington cities and by which 3PLs are your products reloaded onto rail equipment?	
58. Which Class 1, shortline rail carriers, and/or IMCs do you use in Washington?	
59. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	
60. What percent or number of metric tons are reloaded onto trucks or barges from Washington and/or Columbia River ports for onward movement to your U.S. customers?	
61. What decision criteria do you use in selecting onward movement by rail, truck, or barge?	
62. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	
63. Upon which critical service factors do you evaluate the performance of rail carriers?	
64. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	
65. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	
66. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	
67. Have these factors changed over the past three to five years? (yes/no)	
68. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	
69. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	

Containerized Exports

QUESTION	RESPONSE
61. What are your primary commodities?	Frozen vegetables and canned and frozen fish
62. What are the primary origin cities?	Othello - 1, Seattle - 1, Alaska - 1
63. What are the primary destination countries?	Japan - 1, China - 1, France - 1, Poland, - 1, UK - 1, and Ukraine - 1
64. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	N/A - 2
65. What was the 2005 total export volume that exited the U.S. via ocean (FEUs)?	< 300 FEUs - 1 301 to 7,000 FEUs - 1
66. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	50% to 98% - 2
67. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Peak - July to January - 1 Peak - November to December - 1
68. What percent or number of containers moved through Columbia River ports? (specify which ports)	N/A - 2
69. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 2
70. Is the inland move from origin to the Ports of Seattle and/or Tacoma via barge, rail, or truck?	Truck - 1 N/A - 1
71. Is the inland move from origin to Columbia River ports via barge, rail, or truck?	N/A - 2
72. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	N/A - 2
73. Is the inland move to the port controlled by the ocean carrier on a through Bill of Lading or do you control the routing? (carrier/company)	Company - 2 Carrier - 1
74. If you are responsible for the inland move, which barge, rail carrier and trucking companies are used?	Various trucking companies - 2
75. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 2
76. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	N/A - 2
77. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - high - 1, medium - 1 Perishable - medium - 1, low - 1
78. What decision criteria do you use in selecting the inland move to the gateway port by rail, truck, or barge?	<ul style="list-style-type: none"> • Short distance to the port - 2 • Cost - 1 • Service - 1

QUESTION	RESPONSE
79. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	20 miles - 1 N/A - 1; UP performs the switch
80. If no rail spur, how far must the product be trucked to meet the rail hub?	N/A - 2
81. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	N/A - 2
82. Upon which critical service factors do you evaluate the performance of rail carriers?	N/A - 2
83. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	N/A - 2
84. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 2 Yes - 0
85. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	No - 1 Yes - 1; Yes - 1 Depends upon time of the year - 1 No - 0
86. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Increase - 1 Maintain the same - 1 Decrease - 0
87. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	<ul style="list-style-type: none"> • Shipper is customizing some products for foreign markets - 1 • Foreign commodity markets have been strong in the past year for semi-finished products - 1 N/A - 1
88. Have these factors changed over the past three to five years? (yes/no)	Yes - 1 N/A - 1 No - 0
89. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 1 Yes - 1; East Coast - 1
90. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	No - 1 Yes - 1; Shipper is reviewing new short-haul intermodal service being planned from Port of Quincy to Seattle - 1

Exports Moving as Breakbulk

QUESTION	RESPONSE
47. What are your primary commodities?	
48. What are your primary origin cities?	
49. What are you primary destination countries?	
50. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	
51. What was the 2005 total export volume that exited the U.S. via ocean (metric tons)?	
52. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	
53. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	
54. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	
55. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	
56. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	
57. Which Class 1 and shortline rail carriers do you use in Washington?	
58. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	
59. What decision criteria do you use in selecting movement by rail, barge, or truck to the export port?	
60. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	
61. Upon which critical service factors do you evaluate the performance of rail carriers?	
62. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	
63. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	

QUESTION	RESPONSE
64. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	
65. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	
66. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	
67. Have these factors changed over the past three to five years? (yes/no)	
68. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	
69. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	

Domestic Shipments

QUESTION	RESPONSE
41. What are your primary inbound commodities?	Processed flours, potatoes, food product ingredients, frozen and canned fish, fruit, sugar, milk, chocolate, and packaging materials
42. What are your primary outbound commodities?	Frozen vegetables, processed flours, dairy products, and finished seafood
43. What are your primary U.S. origin cities?	Idaho - 2, Oregon - 2, Alaska - 1, Washington - 1, and all over the U.S. - 1
44. What are you primary U.S. destination cities?	All over the U.S. - 2, California - 1, Texas - 1, West Coast - 1, Mountain States - 1, Southwest - 1, Midwest - 1, East Coast - 1, and Southeast - 1
45. What was the 2005 total volume moved via rail? (number rail equipment)	< 500 railcars - 2 501 to 10,000 railcars - 2
46. What percent or number of rail equipment moved through Washington?	100% - 2 40% to 65% - 2
47. What was the 2005 total truckload volume?	< 300 truckloads - 2 301 to 43,000 truckloads - 2
48. What percent or number of truckloads moved through Washington?	100% - 2 20% to 60% - 2
49. Do you use barge? (yes/no) If so, what quantity moved in 2005? (number containers/metric tons)	No - 2 Yes - 2; < 3,000 containers - 2

QUESTION	RESPONSE
50. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract – 3 Spot – 1 Tariff – 1
51. Are shipments consistent year-round or is there a peak or slow season?	Consistent – 3 Peak – August to February – 1
52. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive – high – 2, medium – 1, low – 1 Perishable – medium – 2, high – 1, low – 1
53. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN – 3 UP – 3 CBRW – 1 Exel – 1 Pacer – 1
54. What decision criteria do you use in selecting rail, truck, or barge for a particular shipment?	<ul style="list-style-type: none"> • Cost – 4 • Customer delivery requirements – 2 • Out of certain origins, barge is the only option – 1
55. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	N/A – 3; <ul style="list-style-type: none"> • BN performs the switch – 2 • UP performs the switch – 2 20 miles – 1
56. If no rail spur, how far must the product be trucked to meet the rail hub?	5 to 20 miles – 3 N/A – 2
57. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No – 4; <ul style="list-style-type: none"> • Equipment shortages – 3 • Railroad seldom supplies the required number of empties when requested – 1 • Crew shortages – 1 • Yard congestion – 1 Yes – 0
58. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes – 4; <ul style="list-style-type: none"> • Equipment shortages – 1 • When shipper cannot get the required railcars at the right price, it must find an alternative mode, which is always higher priced – 1 • Service is atrocious in terms of moving intermodal containers – 1 • Service ranges from fair to atrocious depending upon the time of the year in terms of moving boxcars – 1 • Congestion-related delays – 1 • Delays during interchange between the UP and BN in Seattle – 1 No – 0

QUESTION	RESPONSE
59. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 3 Yes - 1
60. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	Yes - 3 No - 1; Yes - 2 No - 1

Rail Profile and Recent or Existing Rail Issues

QUESTION	Yes	No	Comments
5. Do you own or long-term lease any rail equipment? (yes/no) If so, how much rail equipment?	2	2	Leases - 2 Owns - 1
6. Do you participate in a guaranteed equipment availability program with a rail carrier? (yes, which ones/no)		4	

Answer the following for each rail carrier used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
7. It is easy to place bookings with my rail carrier.	UP - 1	BN - 2 UP - 1 CBRW - 1			BN - 1 UP - 1		
8. The rail carrier supplies the requested number of empty rail equipment per the booking.		BN - 1	BN - 1 CBRW - 1	UP - 1	BN - 1 UP - 1	N/A - UP - 1	Shipper has own railcars - 1
9. The rail carrier supplies the empty rail equipment within the expected time period.			BN - 2 CBRW - 1		BN - 1 UP - 2	N/A - UP - 1	Shipper has own railcars - 1
QUESTION	0	1-2	3-7	8-14	14+		
15. On average, within how many days of the requested date does the rail carrier supply empty rail equipment?		BN - 1 CBRW - 1	BN - 1	BN - 1 UP - 2		N/A - UP - 1	Shipper has own railcars - 1

<p>QUESTION Please indicate your level of agreement with the following statements.</p>	<p>Strongly Agree</p>	<p>Agree</p>	<p>Neither Agree Nor Disagree</p>	<p>Disagree</p>	<p>Strongly Disagree</p>	<p>Don't Know/Not Applicable</p>	<p>Comments</p>
<p>16. The rail carrier picks up the loaded rail equipment within the expected time period.</p>	<p>UP - 1</p>	<p>BN - 1 CBRW - 1</p>	<p>UP - 1</p>		<p>BN - 1 UP - 1</p>		
<p>QUESTION</p>	<p>0</p>	<p>1-2</p>	<p>3-7</p>	<p>8-14</p>	<p>14+</p>		
<p>17. On average, within how many days of the requested date does the rail carrier pick up loaded rail equipment?</p>	<p>UP - 1</p>	<p>BN - 1 CBRW - 1 UP - 1</p>	<p>BN - 1 UP - 1</p>				
<p>QUESTION Please indicate your level of agreement with the following statements.</p>	<p>Strongly Agree</p>	<p>Agree</p>	<p>Neither Agree Nor Disagree</p>	<p>Disagree</p>	<p>Strongly Disagree</p>	<p>Don't Know/Not Applicable</p>	<p>Comments</p>
<p>18. Once my loaded rail equipment is delivered to the railramp, the railroad loads and moves the equipment onto a train within the expected timeframe.</p>		<p>BN - 1 UP - 1</p>	<p>UP - 1</p>			<p>N/A - 2</p>	
<p>19. The rail carrier delivers loaded rail equipment to destination according to the rail carrier's published trip plan.</p>		<p>BN - 1 UP - 1</p>		<p>BN - 2 UP - 2</p>			
<p>QUESTION</p>	<p>0</p>	<p>1-2</p>	<p>3-7</p>	<p>8-14</p>	<p>14+</p>		
<p>20. On average, within how many days of the rail carrier's published trip plan does the rail carrier deliver loaded rail equipment to destination?</p>		<p>UP - 1</p>	<p>BN - 2</p>	<p>BN - 1 UP - 2</p>			
<p>21. What reasons do the rail carriers provide for the cause of delays?</p>	<ul style="list-style-type: none"> • Interchange problems - 1 • Weather - 1 • Equipment problems - 1 • Equipment shortages - 1 • High demand for equipment in other regions - 1 • Mudslides - 1 • No reasons provided - 1 						

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
17. The rail carrier is responsive in resolving my problems.		BN - 1 UP - 1 CBRW - 1		BN - 1 UP - 1	BN - 1 UP - 1		
18. My company probably pays less than average rates for rail service.			1	2			
19. The rail rates my company pays has a direct affect on the quality of service we receive.		1		2		D/N - 1	
20. My company would be willing to pay 10 percent more to obtain more reliable rail service.		1		2	1		Shipper already pays too much - 1
21. Rail rates in general are competitive with truck rates.		4					
22. Rail rates in general are competitive with barge rates.				1		N/A - 1 D/N - 1	
23. It is easy for my company to switch the mode from rail to truck or barge for inbound shipments.		1		1		N/A - 2	
24. It is easy for my company to switch the mode from rail to truck or barge for outbound shipments.		1	1	1		N/A - 1	

General Questions

QUESTION	Comments
33. What factors influence your decision to switch from rail to truck or barge?	<ul style="list-style-type: none"> • Customer delivery requirements - 3 • Equipment shortages - 3 • Equipment loadability - 1 • Cost - 1
34. Does your company anticipate making changes in its supply chain during the next five years that might influence the use of rail? (yes/no) If so, what kind?	<ul style="list-style-type: none"> • Yes - 3; • Shipper may increase use of rail for shipments to and from Canada and Mexico - 1 • Shipper is studying intermodal options to the East Coast for some exports to Europe - 1 • Shipper continually reviews usage of railcars based on the relative costs versus truck and intermodal - 1

QUESTION	Comments
	<ul style="list-style-type: none"> • Shipper is reviewing alternatives to rail including securing better truck rates to compete with rail - 1 • No - 1
<p>35. Are rail carriers offering you scheduled service? (yes/no) If so, has this improved reliability? (yes/no)</p>	<p>No - 3 Yes - 1; No - 1 Yes - 0</p>
<p>36. Are rail carriers offering you any other special programs? (yes/no) If so, what type?</p>	<p>No - 3 Yes - 1; BN and UP offered guaranteed equipment programs - 1</p>
<p>37. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?</p>	<p>Declined - 3 Remained the same - 1 Improved - 0</p>
<p>38. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?</p>	<p>Declined - 3 Improved - 1 Remained the same - 0</p>
<p>39. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?</p>	<p>No - 2 Yes - 2; <ul style="list-style-type: none"> • Intermodal trains have priority - 1 • Boxcar trains have priority - 1 </p>
<p>40. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)</p>	<p>Yes - 2 No - 2</p>
<p>41. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • Inability of railroads to increase the infrastructure and assets quick enough to handle volume growth - 2 • Inconsistent transit times - 1 • Railroad monopoly negatively affects service and prices - 1 • Mergers were a mistake and now railroads operate from a position of greed - 1 • Railroads have not invested enough in specialized equipment - 1
<p>42. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<ul style="list-style-type: none"> • Yes - 4; • Shipper stores lots of safety stock in distribution centers, which increases costs - 1 • Shipper complained to the railroads - 1 • Shipper met with railroads to communicate issues and showed the railroad its loading process - 1 • Shipper negotiated and fought unreasonable detention charges - 1 • Shipper works with IMCs to keep the Class 1s honest - 1

QUESTION	Comments
<p>43. What are the most pressing rail infrastructure issues in Washington?</p>	<ul style="list-style-type: none"> • Need to reestablish the railramp in the Tri-Cities that was eliminated - 1 • Port of Seattle congestion - 1 • Interchange between the UP and BN in Seattle - 1 • Lynden tracks get buried underwater frequently in the winter - 1 • Portland area congestion - 1 • Unknown - 1
<p>44. What policy measures and programs should Washington State establish to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Unknown - 2 • The State should tell the Federal government that poor rail service and lack of capacity is impacting Washington’s economy - 1 • Washington should ensure that Washington rail shippers are not compromised and put at a disadvantage relative to shippers in neighboring states - 1
<p>45. What infrastructure investments should Washington State make to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Washington should help reset track on subgrades and improve at-grade crossings in the Greater Seattle area - 1 • Buy more locomotives - 1 • The State should continue to do what it is now doing because it cannot do much more - 1 • Washington should invest in freight mobility projects that have been under discussion in the past few years - 1 • Unknown - 1
<p>46. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • Clean up team tracks - 1 • Survey shippers to find out about rail service quality - 1 • The Federal government should operate in conjunction with Washington to make sure Washington shippers are not at a disadvantage - 1 • Regulate the railroads again - 1 • Force railroads to operate like honest businesses - 1 • Unknown - 1
<p>47. Would your company relocate if rail service were unavailable? (yes/no)</p>	<p>Yes - 2 No - 2</p>
<p>48. Will the availability and/or quality of rail service impact your company’s plans to expand and/or relocate in the next two years? (yes/no)</p>	<p>Yes - 4 No - 0</p>

WTC Rail Study Participation

QUESTION	Yes	No	Comments
7. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?	1	3	
8. Would you like to receive e-mail notices about the progress and findings of the Study?	4		
9. Would you be willing to talk further with us over the course of the study?	4		

Rail-Dependent Shipper Survey

Raw and Semi-Processed Natural Resources, Chemicals, and Recycled Products Shippers

Conducted by
 Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	7	

General Information

QUESTION	RESPONSE
31. What kind of shipper are you? (Importer of raw materials, components, semi-finished and/or finished product? Exporter of raw material, components, semi-finished and/or finished products? Domestic producer of raw materials, components, semi-finished and/or finished products?	Importer of raw materials - 4 Importer of semi-finished products - 2 Importer of finished products - 2 Exporter of raw materials - 2 Exporter of semi-finished products - 2 Exporter of finished products - 2 Domestic producer of raw materials - 1 Domestic producer of semi-finished products - 3 Domestic producer of finished products - 5
32. In which Washington cities are your facilities located?	Kent - 2, Tacoma - 2, Vancouver - 2, Anacortes - 1, Chehalis - 1, Everett - 1, Kalama - 1, Longview - 1, Olympia - 1, Seattle - 1, and Woodland - 1
33. Do you import or export in containers or breakbulk?	Import in breakbulk - 5 Export in containers - 2 Export in breakbulk - 4 N/A - 1

QUESTION	RESPONSE
34. Is the volume you ship via rail within the U.S. containerized or does it move in bulk in special railcars (e.g., boxcars, centerbeams, flatracks, tanks, gondolas, etc.)?	Bulk in special railcars - 7 Containerized - 1
35. Do you require special rail equipment? (yes/no) If so, what type?	Yes - 7; <ul style="list-style-type: none"> • Gondolas - 2 • Gravity flow cars - 2 • Bulkhead flatcars - 1 • Covered hopper cars - 1 • Tanks - 1 • Transverse cars - 1 No - 0
36. Is your company's logistics functions handled in-house or outsourced?	In-house - 7 Outsourced - 0
37. How many employees are at your facility? How many in all Washington facilities?	< 200 - 5 201 to 575 - 2; Washington total - < 200 - 5 201 to 575 - 2
38. What is the square footage of your facilities in Washington (specify for office, warehouse, manufacturing, processing area)?	< 60 acres - 3 61 to 3,000 acres - 1 Unknown - 3
39. Is there an active rail spur located at your facility? (yes/no)	Yes - 7 No - 0
40. If so, which railroad provides switching service to the spur?	BN - 5 UP - 3 Tacoma Beltline (TB) - 1

Containerized Imports

QUESTION	RESPONSE
94. What are your primary commodities?	
95. What are the primary origin countries?	
96. What are the primary U.S. destination cities?	
97. What was the 2005 total import volume that entered the U.S. via rail (number of rail equipment)?	
98. Are the shipments moving into the U.S. via rail consistent year-round or is there a peak or slow season?	
99. Are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	

QUESTION	RESPONSE
100. What was the 2005 total import volume that entered the U.S. via truck (number of trucks)?	
101. What was the 2005 total import volume that entered the U.S. via ocean (FEUs)?	
102. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	
103. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	
104. What percent or number of containers moved through the Port of Portland?	
105. Are the shipments moving through the Port of Portland consistent year-round or is there a peak or slow season?	
106. What percent or number of containers were moved intact to destination by the ocean carrier on a through Bill of Lading?	
107. What percent or number of containers were transloaded by 3PL warehouses in Washington onto rail equipment for onward distribution?	
108. By which 3PLs in which cities?	
109. Which Class 1, shortline rail carriers, and/or intermodal marketing companies (IMC) do you use for rail shipments moving through Washington?	
110. Do you or does your IMC control the routing of intermodal cargo with the railroad? (company/IMC)	
111. If cargo is transloaded onto rail equipment, are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	
112. What percent or number of containers were transloaded by 3PL warehouses in Washington onto truck equipment for onward distribution?	
113. By which 3PLs in which cities?	
114. If cargo is transloaded onto truck equipment, are your rates based on the spot market, tariff, or contracts? (spot/tariff/contract)	
115. How time-sensitive or perishable are your products? (high, medium, low)	
116. What decision criteria do you use in selecting onward movement by rail or truck?	
117. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	

QUESTION	RESPONSE
118. Upon which critical service factors do you evaluate the performance of rail carriers?	
119. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	
120. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Portland in the next five years?	
121. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Portland in the next five years?	
122. Have these factors changed over the past three to five years? (yes/no)	
123. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	
124. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	

Imports Moving as Breakbulk

QUESTION	RESPONSE
70. What are your primary commodities?	Cement, crude oil, hot band steel in rolls, scrap metal, steel rods, various petroleum products, and zinc
71. What are your primary origin countries?	Canada - 3, all over the world - 1, Asia - 1, Australia - 1, China - 1, and New Zealand - 1
72. What are the primary U.S. destination cities?	California - 2, Tacoma - 2, Anacortes - 1, Chehalis - 1, Everett - 1, Kalama - 1, Kent - 1, Longview - 1, Olympia - 1, Seattle - 1, Vancouver - 1, Woodland - 1, Portland - 1, Alabama - 1, Hawaii - 1, Louisiana - 1, North Dakota - 1, Utah - 1, Northeast - 1, and Southeast - 1
73. What was the 2005 total import volume that entered the U.S. via rail (metric tons)?	< 5,000 metric tons - 2 5,001 to 175,000 metric tons - 2 N/A - 1
74. What was the 2005 total import volume that entered the U.S. via ocean (metric tons)?	< 20,000 metric tons - 1 20,001 to 600,000 metric tons - 3 Unknown - 1
75. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	N/A - 4; • Tib 0% - 1

QUESTION	RESPONSE
76. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	N/A - 5
77. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	N/A - 2 100% Kalama - 1 100% Portland - 1 0% - 1
78. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 3 Consistent - 1 Fluctuates based on market conditions - 1
79. What percent or number of metric tons are reloaded onto rail equipment from Washington and/or Columbia River ports for onward movement to your U.S. customers?	N/A - 4; • Shipper has own berth - 4 20% - 1
80. In which Washington cities and by which 3PLs are your products reloaded onto rail equipment?	N/A - 4; • Shipper has own berth - 4
81. Which Class 1, shortline rail carriers, and/or IMCs do you use in Washington?	BN - 4 UP - 2 N/A - 2 Ballard Terminal Railroad (BTRR) - 1 TB - 1
82. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Spot - 2 Tariff - 1 Contract - 1 N/A - 1; • Supplier pays freight - 1
83. What percent or number of metric tons are reloaded onto trucks or barges from Washington and/or Columbia River ports for onward movement to your U.S. customers?	N/A - 3; • 100% loaded onto trucks - 1 • 100% loaded onto trucks and barges - 1
84. What decision criteria do you use in selecting onward movement by rail, truck, or barge?	N/A - 2 • Distance - 1 • Short distance to facility does not make rail a cost-effective mode - 1 • Rates - 1 • Shipper has own dock at facility - 1

QUESTION	RESPONSE
<p>85. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>Yes - 2 No - 2; • Equipment shortages - 1 • The BN cut back on leased track space in the BN yard where shipper does not have to pay demurrage to store railcars, and now BN wants shipper to use its own tracks. Shipper has spent millions of dollars to add tracks at its facility in order to keep operating - 1 • Locomotive shortages - 1 • Crew shortages - 1 N/A - 1</p>
<p>86. Upon which critical service factors do you evaluate the performance of rail carriers?</p>	<p>N/A - 2 • Dependability and frequency of switching - 2 • Equipment availability - 1 • Consistent service - 1 • Transit time - 1 • Speed in delivering empties after booking - 1</p>
<p>87. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>Yes - 3; • Inconsistent service - 1 • Equipment shortages - 1 • Some railcars have high tare weight so shipper must load less than desired, which drives up transportation costs - 1 • Switching problems impact shipper's capabilities to produce products as cheaply and efficiently as possible, and could force shipper to cut back or shut down operations, which would result in higher prices for consumers and constrained availability of product - 1 No - 1 N/A - 1</p>
<p>88. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?</p>	<p>Increase - 2 Maintain the same - 2 N/A - 1 Decrease - 0</p>
<p>89. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?</p>	<p>N/A - 3 • Sales growth - 1 • Customer demand - 1 • Economic health of the U.S. and foreign countries - 1</p>
<p>90. Have these factors changed over the past three to five years? (yes/no)</p>	<p>N/A - 3 No - 3 Yes - 0</p>

QUESTION	RESPONSE
<p>91. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?</p>	<p>Yes - 3; <ul style="list-style-type: none"> • Tacoma - 1 • Portland - 1 • Stockton, California - 1 • Gulf - 1 No - 2</p>
<p>92. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?</p>	<p>Yes - 4; <ul style="list-style-type: none"> • Sales growth - 2 • Shipper will install machines to allow it to keep the environment cleaner. It plans to produce 2,000 tons of a new product per day, which will need to be shipped out by truck. (This equates to 100 to 120 trucks or 20 to 40 railcars.) Trucks must move through the downtown area of a small city and will have to acquire permits. If this cannot be done, product will have to move via rail to PNW ports. In that case, shipper and the BN will have to build additional storage tracks - 1 • Transportation costs are rising - 1 No - 1</p>

Containerized Exports

QUESTION	RESPONSE
<p>91. What are your primary commodities?</p>	<p>Coiled steel and semi-finished shredded scrap metal</p>
<p>92. What are the primary origin cities?</p>	<p>Kalama - 1, Tacoma - 1, and California - 1</p>
<p>93. What are the primary destination countries?</p>	<p>Canada - 1, China - 1, and Southeast Asia - 1</p>
<p>94. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?</p>	<p>N/A - 2</p>
<p>95. What was the 2005 total export volume that exited the U.S. via ocean (FEUs)?</p>	<p>< 500 FEUs - 1 Unknown - 1</p>
<p>96. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?</p>	<p>100% - 1 N/A - 1</p>
<p>97. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?</p>	<p>Consistent - 1 N/A - 1</p>
<p>98. What percent or number of containers moved through Columbia River ports? (specify which ports)</p>	<p>N/A - 2</p>
<p>99. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?</p>	<p>N/A - 2</p>
<p>100. Is the inland move from origin to the Ports of Seattle and/or Tacoma via barge, rail, or truck?</p>	<p>N/A - 2</p>
<p>101. Is the inland move from origin to Columbia River ports via barge, rail, or truck?</p>	<p>N/A - 2</p>

QUESTION	RESPONSE
102. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	< 200 railcars - 1 201 to 5,000 railcars - 1
103. Is the inland move to the port controlled by the ocean carrier on a through Bill of Lading or do you control the routing? (carrier/company)	N/A - 2
104. If you are responsible for the inland move, which barge, rail carrier and trucking companies are used?	N/A - 2
105. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Spot - 1 Contract - 1 Tariff - 0
106. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 2 UP - 1 TB - 1
107. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - low - 2 Perishable - low - 2
108. What decision criteria do you use in selecting the inland move to the gateway port by rail, truck, or barge?	N/A - 2
109. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	3 miles - 1 N/A - 1; BN performs the switch - 1
110. If no rail spur, how far must the product be trucked to meet the rail hub?	N/A - 2
111. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	Yes - 1 N/A - 1 No - 0
112. Upon which critical service factors do you evaluate the performance of rail carriers?	<ul style="list-style-type: none"> • Transit time - 1 • Equipment availability - 1 • Speed in delivering empties after booking - 1
113. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	N/A - 1 Yes - 1; <ul style="list-style-type: none"> • Equipment shortages - 1
114. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 2
115. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	No - 1 Yes - 1; No - 1

QUESTION	RESPONSE
116. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Increase - 1 N/A - 1
117. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	<ul style="list-style-type: none"> Market conditions - 1 N/A - 1
118. Have these factors changed over the past three to five years? (yes/no)	Yes - 1; <ul style="list-style-type: none"> Demand from Asia has increased - 1 N/A - 1
119. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 2
120. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	No - 2

Exports Moving as Breakbulk

QUESTION	RESPONSE
70. What are your primary commodities?	Bentonite clay, ferrous and nonferrous scrap metal, fuel and petroleum products, and powdered copper concentrate
71. What are your primary origin cities?	Anacortes - 1, Seattle - 1, Tacoma - 1, Alaska - 1, California - 1, Hawaii - 1, North Dakota - 1, Nevada - 1, South Dakota - 1, Utah - 1, and WY - 1
72. What are your primary destination countries?	China - 2, Asia - 1, Canada - 1, India - 1, Japan - 1, Korea - 1, and Southeast Asia - 1
73. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	< 500 railcars - 2 N/A - 2
74. What was the 2005 total export volume that exited the U.S. via ocean (metric tons)?	400,000 to 500,000 metric tons - 2 N/A - 2
75. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	N/A - 3; <ul style="list-style-type: none"> Shipper has own berth - 1 100% - 1
76. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 2 N/A - 2
77. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	N/A - 3 100% Vancouver - 1
78. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 3 Consistent - 1

QUESTION	RESPONSE
79. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	< 200 railcars - 1 201 to 4,700 railcars - 1 Unknown - 1 N/A - 1
80. Which Class 1 and shortline rail carriers do you use in Washington?	BN - 4 UP - 1 TB - 1
81. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Spot - 2 Contract - 2 Tariff - 1
82. What decision criteria do you use in selecting movement by rail, barge, or truck to the export port?	N/A - 2 <ul style="list-style-type: none"> • Shipper has own berth - 1 • Cost - 1 • Distance - 1
83. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	Yes - 1 N/A - 1 No - 1; <ul style="list-style-type: none"> • Equipment shortages - 1
84. Upon which critical service factors do you evaluate the performance of rail carriers?	<ul style="list-style-type: none"> • Transit time - 2 • On-time performance - 1 • Equipment availability - 1 • Consistent service - 1 N/A - 1
85. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 3; <ul style="list-style-type: none"> • Transit time delays - 1 • Inconsistent transit times - 1 • Insufficient availability of specialized railcars - 1 • Railroads need to spend more capital to improve track handling capabilities in port areas - 1 • Inter-port switching is a problem - 1 N/A - 1 no - 0
86. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 3 Yes - 1
87. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	Yes - 3 No - 1; No - 2 Yes - 1

QUESTION	RESPONSE
88. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Increase - 2 N/A - 2 Decrease - 0 Maintain the same - 0
89. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	N/A - 2 <ul style="list-style-type: none"> • Market conditions - 1 • China’s purchasing decisions - 1 • Shippers’ competitiveness in the world market - 1 • Ability to deliver product to market at a reasonable transportation cost - 1 • BN’s ability to handle the volume - 1
90. Have these factors changed over the past three to five years? (yes/no)	N/A - 2 Yes - 1 No - 1
91. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	Yes - 3; <ul style="list-style-type: none"> • PNW - 1 • West Coast - 1 • Gulf - 1 • California - 1 No - 1
92. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 3; <ul style="list-style-type: none"> • There may be increased demand for ethanol, which would move via the rail. - 1 • Volume growth in the commodities market will create more demands on the rail system - 1 • Customer demand - 1

Domestic Shipments

QUESTION	RESPONSE
61. What are your primary inbound commodities?	Cement, gravel, hot band steel, liquid petroleum gas, powdered resin, sand, scrap metals, and steel rods
62. What are your primary outbound commodities?	Cement, gasoline and other fuels, liquid petroleum gas, painted or zinc-coated sheet steel, scrap metals, steel wire products, and vinyl door and window components
63. What are your primary U.S. origin cities?	Tacoma - 2, Anacortes - 1, Chehalis - 1, Everett - 1, Kalama - 1, Kent - 1, Longview - 1, Olympia - 1, Seattle - 1, Vancouver - 1, Woodland - 1, Alaska - 1, California - 1, Colorado - 1, Hawaii - 1, Oregon - 1, North Dakota - 1, Utah - 1

QUESTION	RESPONSE
64. What are your primary U.S. destination cities?	Anacortes - 1, Chehalis - 1, Everett - 1, Kalama - 1, Kent - 1, Longview - 1, Olympia - 1, Seattle - 1, Tacoma - 1, Vancouver - 1, Woodland - 1, Alabama - 1, California - 1, Louisiana - 1, all over the U.S. - 1, Utah - 1, Midwest - 1, western half of the U.S., and Rocky Mountain States - 1
65. What was the 2005 total volume moved via rail? (number rail equipment)	< 100 railcars - 2 101 to 12,000 railcars - 3 N/A - 1
66. What percent or number of rail equipment moved through Washington?	< 25% - 1 26% to 100% - 4 N/A - 1
67. What was the 2005 total truckload volume?	< 10,000 truckloads - 4 10,001 to 150,000 truckloads - 2
68. What percent or number of truckloads moved through Washington?	100% - 5 Unknown - 1
69. Do you use barge? (yes/no) If so, what quantity moved in 2005? (number containers/metric tons)	No - 3 Yes - 2; 36,000 to 5,200,000 metric tons - 2
70. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract - 3 Spot - 2 Tariff - 2 N/A - 1; Supplier pays freight - 1
71. Are shipments consistent year-round or is there a peak or slow season?	Consistent - 2 Peak - March to June - 1 Peak - April to October - 1 Slow season - January to March - 1 Fluctuates based on market demand - 1
72. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - high - 3, low - 3 Perishable -low - 4, high - 1, medium, - 1
73. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 4 UP - 3 TB - 1 N/A - 1

QUESTION	RESPONSE
<p>74. What decision criteria do you use in selecting rail, truck, or barge for a particular shipment?</p>	<ul style="list-style-type: none"> • Customer’s delivery requirements - 3 • Receiver’s receiving capabilities - 3 • Cost - 2 • Time sensitivity - 1 • Whether there is sufficient lead time - 1 • Equipment availability - 1 • Shipper’s inbound product only moves via rail and outbound only via truck - 1 • How profitable customer is to shipper - 1
<p>75. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?</p>	<p>N/A - 5;</p> <ul style="list-style-type: none"> • BN performs the switch - 4 • UP performs the switch - 2 <p>3 miles - 1</p>
<p>76. If no rail spur, how far must the product be trucked to meet the rail hub?</p>	<p>N/A - 6</p>
<p>77. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>No - 5;</p> <ul style="list-style-type: none"> • Lack of sufficient tracks - 1 • Locomotive shortages - 1 • Equipment shortages - 1 • Empties not supplied in a timely manner - 1 • Crew shortages - 1 • Inconsistent switching - 1 • Shipper needs more frequent switching - 1 • Inconsistent transit times - 1 • Railroads are not spending enough on infrastructure improvements - 1 • In the PNW, the BN has done a poor job in replacing retired workers - 1 • Increased volume has constrained the network - 1 • Service interruption recovery is not as good as before - 1 <p>N/A - 1</p> <p>Yes - 0</p>

QUESTION	RESPONSE
78. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 5; <ul style="list-style-type: none"> • Shipper loses sales when empties are not supplied in a timely manner - 1 • Lack of consistency and dependability of switching impacts shipper’s operations - 1 • Shipper needs more frequent switching - 1 • The UP frequently charges demurrage. Shipper feels the UP only provides two switches per week so that it can collect demurrage - 1 • Transit delays - 1 • Railcars spend more time at terminals waiting to be switched due to locomotive and crew shortages - 1 • Bunching (making too many railcars available to shipper at one time) causes operational problems - 1
79. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 5 Yes - 1
80. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	No - 4 Yes - 2; No - 2 Yes - 0

Rail Profile and Recent or Existing Rail Issues

QUESTION	Yes	No	Comments
7. Do you own or long-term lease any rail equipment? (yes/no) If so, how much rail equipment?	4	3	<ul style="list-style-type: none"> • Leases 15 to 1,000 special railcars - 4
8. Do you participate in a guaranteed equipment availability program with a rail carrier? (yes, which ones/no)		7	

Answer the following for each rail carrier used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
10. It is easy to place bookings with my rail carrier.	BN - 2 UP - 1	BN - 3 UP - 2 TB - 1				N/A - 2 N/A - BTRR - 1	Supplier handles - 2
11. The rail carrier supplies the requested number of empty rail equipment per the booking.		BN - 2		BN - 3 UP - 2	BN - 1 UP - 1 TB - 1	N/A - 1	Supplier handles - 1
12. The rail carrier supplies the empty rail equipment within the expected time period.		BN - 1	BN - 1	BN - 4 UP - 3 TB - 1		N/A - 1	Supplier handles - 1
QUESTION	0	1-2	3-7	8-14	14+		
22. On average, within how many days of the requested date does the rail carrier supply empty rail equipment?		BN - 1	BN - 1 UP - 1	BN - 3 UP - 2 TB - 1		N/A - 1 D/N - 1	Supplier handles - 1
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
23. The rail carrier picks up the loaded rail equipment within the expected time period.		BN - 2 UP - 1 TB - 1	BN - 1	BN - 2 UP - 1		N/A - 1	Supplier handles - 1
QUESTION	0	1-2	3-7	8-14	14+		
24. On average, within how many days of the requested date does the rail carrier pick up loaded rail equipment?	BN - 1	BN - 3 UP - 2 TB - 1	BN - 1			N/A - 1	Supplier handles - 1
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
25. Once my loaded rail equipment is delivered to the railramp, the railroad loads and moves the equipment onto a train within the expected timeframe.						N/A - 6 D/N - 1	Supplier handles - 1
26. The rail carrier delivers loaded rail equipment		BN - 2		BN - 3	BN - 1		

to destination according to the rail carrier’s published trip plan.		UP - 1 BTRR - 1		UP - 3			
QUESTION	0	1-2	3-7	8-14	14+		
27. On average, within how many days of the rail carrier’s published trip plan does the rail carrier deliver loaded rail equipment to destination?	BTRR - 1	BN - 1	BN - 3 UP - 3	BN - 1 UP - 1	BN - 1		
28. What reasons do the rail carriers provide for the cause of delays?	<ul style="list-style-type: none"> • Derailments - 1 • Crew hours of service limits - 1 • Local labor issues - 1 • Locomotive shortages - 1 • Congestion - 1 • No billing - 1 • Improper billing - 1 • No reasons provided - 1 						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
25. The rail carrier is responsive in resolving my problems.		BN - 1 TB - 1	BN - 2 UP - 2 BTRR - 1	BN - 1 UP - 1	BN - 2 UP - 1		
26. My company probably pays less than average rates for rail service.		1		5		N/A - 1	Supplier handles - 1
27. The rail rates my company pays has a direct affect on the quality of service we receive.			1	3	1	N/A - 2	Supplier handles - 1
28. My company would be willing to pay 10 percent more to obtain more reliable rail service.			1	4		N/A - 2	Supplier handles - 1
29. Rail rates in general are competitive with truck rates.		4	1	2			
30. Rail rates in general are competitive with barge rates.				3		N/A - 4	
31. It is easy for my company to switch the mode from rail to truck or barge for inbound shipments.				5		N/A - 2	
32. It is easy for my company to switch the mode from rail to truck or barge for outbound shipments.		3		2		N/A - 2	All outbound is via truck - 1

General Questions

QUESTION	Comments
49. What factors influence your decision to switch from rail to truck or barge?	<ul style="list-style-type: none"> • Ability to meet customer’s delivery requirements – 2 • Equipment availability – 2 • Market opportunities – 1 • Only switches as a last resort – 1 • Never switches inbound shipments to truck – 1 • Size of order does not allow shipper to easily switch – 1 • It is not economical to use trucks – 1
50. Does your company anticipate making changes in its supply chain during the next five years that might influence the use of rail? (yes/no) If so, what kind?	No – 4 Yes – 3; <ul style="list-style-type: none"> • Will produce new product that will need to move via rail – 1 • Will build infrastructure at facility to handle increased rail shipments – 1 • Will import through Northern California and Portland to facilitate more efficient move to U.S. interior points – 1
51. Are rail carriers offering you scheduled service? (yes/no) If so, has this improved reliability? (yes/no)	No – 5 Yes – 2; <ul style="list-style-type: none"> • BN – 2 • UP – 2 No – 1 BN – yes – 1 UP – no – 1
52. Are rail carriers offering you any other special programs? (yes/no) If so, what type?	No – 6 Yes – 1; <ul style="list-style-type: none"> • BN and UP allow extra loading time under a demurrage arrangement – 1
53. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?	Declined – 5 Remained the same – 2 Improved – 0
54. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?	Declined – 5 Remained the same – 2 Improved – 0

QUESTION	Comments
<p>55. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?</p>	<p>Yes – 7; <ul style="list-style-type: none"> • Unit trains have priority – 5 • Intermodal trains have priority – 4 • Long-haul has priority – 2 • Higher margin cargo has priority – 1 • Shippers with more than one option get priority because they force railroads to be more competitive – 1 <p>No – 0</p> </p>
<p>56. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)</p>	<p>Yes – 5 No – 1 Unknown – 1</p>
<p>57. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • Rates will be more expensive – 2 • Quality of service will degrade further – 2 • Because shipper is very rail dependent, slow velocity will impact its ability to grow – 1 • Poor service will impact shipper’s ability to be competitive in the U.S. market – 1 • Shipper has JIT requirements, but rail inconsistencies disrupt deliveries to production facilities and customers – 1 • Railroads may not spend enough money to handle captive shippers efficiently because they are focusing on unit trains – 1 • Equipment availability will decrease – 1 • There will be more equipment shortages since the railroads are forcing shippers to lease their own railcars – 1 • Shipper requires special railcars, but the railroads will not invest in building inventories of such equipment – 1 • The State is focusing more on ports and intermodal cargo than industrial shippers – 1
<p>58. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<p>Yes – 6; <ul style="list-style-type: none"> • Shipper meets regularly with the railroads to discuss poor service – 4 • Shipper tries to be diplomatic when requesting better service – 1 • Shipper established mandatory daily conference calls with suppliers, BN, and terminal operators to track cargo – 1 • Shipper leases own railcars – 1 • Shipper expanded the rail infrastructure within its facilities – 1 • Shipper invested capital to allow the BN to inspect the train within the shipper’s facility rather than moving the train outside the facility to save the BN time – 1 • Shipper established safety initiatives with the BN – 1 <p>No – 1</p> </p>

QUESTION	Comments
<p>59. What are the most pressing rail infrastructure issues in Washington?</p>	<ul style="list-style-type: none"> • Port of Tacoma - 1 • Everett chokepoint - 1 • Spokane chokepoint - 1 • There is congestion at the Vancouver Junction between the UP and BN, which creates a chokepoint because of the conflict of east/west and north/south trains - 1 • Congestion in Longview - 1 • Congestion in Auburn yard - 1 • Congestion in Pasco yard - 1 • Congestion in Tacoma yard - 1 • Congestion in Interbay yard - 1 • Rail switching yards - 1 • Freight trains have to compete with passenger trains - 1 • I-5 Corridor needs expanding or efficiencies must be built into it such as directional operation - 1 • Directional operation would improve efficiency along the Columbia Gorge - 1
<p>60. What policy measures and programs should Washington State establish to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Establish a baseline for rail service quality (norm versus standard deviation) - 1 • Rationalize the State’s investments instead of listening to every constituent that wants something - 1 • Simplify land use regulations - 1 • Streamline the permitting process for infrastructure improvements instead favoring the environment - 1 • Foster outsourcing of switching to third-party operators - 1 • Washington should scrutinize where the railroads are spending their money - 1 • Washington could provide incentives and tax breaks for railroads to build storage tracks, holding yards, and sidings - 1 • Unknown - 1
<p>61. What infrastructure investments should Washington State make to improve rail service in Washington?</p>	<p>Unknown - 3</p> <ul style="list-style-type: none"> • Create more grade separations in the Kent Valley so autos and trucks will not have to wait so long for trains to pass - 1 • Invest in double tracking - 1 • Invest in other projects that will benefit the shipping community - 1 • Vancouver Junction improvements - 1 • This is not the State’s responsibility - 1

QUESTION	Comments
<p>62. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?</p>	<p>Yes – 5; <ul style="list-style-type: none"> • Do something short of regulation – 1 • Provide tax incentives and assistance to help the railroads improve infrastructure – 1 • Railroads should get a portion of SAFETEA-LU funds for infrastructure improvements – 1 • Get the railroads to be responsive to shippers, especially captive shippers, since they are victimized by the railroads – 1 • The Surface Transportation Board should listen to shippers more instead of railroads, and allow shippers to more easily file complaints against the railroads – 1 • The STB should benchmark acceptable rail service levels and get shippers involved in that process – 1 • Work on overpasses – 1 • Reduce at-grade crossings – 1 No – 1 Unknown – 1</p>
<p>63. Would your company relocate if rail service were unavailable? (yes/no)</p>	<p>No – 4 Yes – 3; <ul style="list-style-type: none"> • Shipper cannot exist without rail service – 1 </p>
<p>64. Will the availability and/or quality of rail service impact your company’s plans to expand and/or relocate in the next two years? (yes/no)</p>	<p>Yes – 5 No – 2</p>

WTC Rail Study Participation

QUESTION	Yes	No	Comments
<p>10. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?</p>	2	5	
<p>11. Would you like to receive e-mail notices about the progress and findings of the Study?</p>	7		
<p>12. Would you be willing to talk further with us over the course of the study?</p>	7		

Rail-Dependent Shipper Survey Retail and Consumer Products Shippers

Conducted by
Cambridge Systematics
on behalf of the
Washington Transportation Commission
for the
Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	6	

General Information

QUESTION	RESPONSE
41. What kind of shipper are you? (Importer of raw materials, components, semi-finished and/or finished product? Exporter of raw material, components, semi-finished and/or finished products? Domestic producer of raw materials, components, semi-finished and/or finished products?	Importer of raw materials - 1 Importer of components - 3 Importer of semi-finished products - 1 Importer of finished products - 3 Exporter of raw materials - 1 Exporter of finished products - 4 Domestic producer of raw materials - 1 Domestic producer of components - 2 Domestic producer of semi-finished products - 1 Domestic producer of finished products - 4
42. In which Washington cities are your facilities located?	Albana, Auburn, Bellevue, Burlington, Ferndale, Renton, Richfield, and Snoqualmie N/A - 1
43. Do you import or export in containers or breakbulk?	Import in containers - 6 Export in containers - 3 Export in breakbulk - 1

QUESTION	RESPONSE
44. Is the volume you ship via rail within the U.S. containerized or does it move in bulk in special railcars (e.g., boxcars, centerbeams, flatracks, tanks, gondolas, etc.)?	Containerized - 6
45. Do you require special rail equipment? (yes/no) If so, what type?	No - 4 Yes - 2; • 45' - 1 • 53' - 2
46. Is your company's logistics functions handled in-house or outsourced?	In-house - 6
47. How many employees are at your facility? How many in all Washington facilities?	100 to 3,000 - 5; 100 to 3,000 - 5; N/A - 1
48. What is the square footage of your facilities in Washington (specify for office, warehouse, manufacturing, processing area)?	5,500 square feet to 1,000,000 square feet - 6
49. Is there an active rail spur located at your facility? (yes/no)	No - 6
50. If so, which railroad provides switching service to the spur?	N/A - 6

Containerized Imports

QUESTION	RESPONSE
125. What are your primary commodities?	General department store merchandise, auto part components, sports equipment components, plastics, textiles, and electronic machinery components
126. What are the primary origin countries?	China - 4, Canada - 2, Mexico - 2, Hong Kong - 1, Taiwan - 1, Philippines - 1, Vietnam - 1, Malaysia - 1, Netherlands - 1, Germany - 1, and Sweden - 1
127. What are the primary U.S. destination cities?	OH - 2, Tennessee - 2, California - 1, Georgia - 1, Illinois - 1, Michigan - 1, Mississippi - 1, Oklahoma - 1, Pennsylvania - 1, Texas - 1, Virginia - 1, Auburn, Burlington - 1, Renton - 1, Richfield - 1, and Snoqualmie - 1
128. What was the 2005 total import volume that entered the U.S. via rail (number of rail equipment)?	N/A - 6
129. Are the shipments moving into the U.S. via rail consistent year-round or is there a peak or slow season?	N/A - 6
130. Are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 6
131. What was the 2005 total import volume that entered the U.S. via truck (number of trucks)?	< 200 truckloads - 3 201 to 9,000 truckloads - 1 N/A - 1
132. What was the 2005 total import volume that entered the U.S. via ocean (FEUs)?	< 200 FEUs - 2 201 to 18,000 FEUs - 2 N/A - 1

QUESTION	RESPONSE
133. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	1% - 1 67% - 1 75% - 1 85% - 1 N/A - 1
134. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 2 N/A - 1 Peak - March to July - 1 Peak - August to September - 1 Peak - August to October - 1
135. What percent or number of containers moved through the Port of Portland?	N/A - 4 30% - 1
136. Are the shipments moving through the Port of Portland consistent year-round or is there a peak or slow season?	N/A - 4 Consistent - 1
137. What percent or number of containers were moved intact to destination by the ocean carrier on a through Bill of Lading?	100% - 3 5% - 1 75% - 1 N/A - 1
138. What percent or number of containers were transloaded by 3PL warehouses in Washington onto rail equipment for onward distribution?	N/A - 5; 2,000 FEUs - 1
139. By which 3PLs in which cities?	N/A - 5 various - 1; Transloaded by shipper at distribution center - 1 Transloaded by 3PL in Chicago - 1;
140. Which Class 1, shortline rail carriers, and/or intermodal marketing companies (IMC) do you use for rail shipments moving through Washington?	N/A - 3 BN - 2 UP - 2 NYK Logistics - 2 Pacer - 2 Alliance - 1 Hub - 1 JB Hunt - 1 USF Logistics - 1
141. Do you or does your IMC control the routing of intermodal cargo with the railroad? (company/IMC)	N/A - 3 IMC - 2 Company - 1

QUESTION	RESPONSE
142. If cargo is transloaded onto rail equipment, are your rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract – 3 N/A – 3 Tariff – 1 Spot – 0
143. What percent or number of containers were transloaded by 3PL warehouses in Washington onto truck equipment for onward distribution?	N/A – 4 20% – 1 60% – 1
144. By which 3PLs in which cities?	N/A – 4 Various – 1 5% transloaded by shipper at distribution center – 1
145. If cargo is transloaded onto truck equipment, are your rates based on the spot market, tariff, or contracts? (spot/tariff/contract)	Contract – 3 N/A – 3 Spot – 1 Tariff – 0
146. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive – high – 3, medium – 2, low – 1 Perishable – low – 6
147. What decision criteria do you use in selecting onward movement by rail or truck?	<ul style="list-style-type: none"> • Cost – 3 • N/A – 2 • Need date at distribution center – 1 • Need date at store – 1 • Transit time – 1 • Timeframe to meet production schedule – 1
148. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	N/A – 3 No – 3; <ul style="list-style-type: none"> • Lack of capacity – 2 • Locomotive shortages – 1 • Equipment shortages – 1 • Bullfrog Junction congestion because it is not double or triple tracked – 1 • Bottlenecks in Chicago – 1 • Slow velocity – 1 • UP gate reservation system is not helping relieve congestion. – 1
149. Upon which critical service factors do you evaluate the performance of rail carriers?	N/A – 3 <ul style="list-style-type: none"> • Transit time – 3 • Performance against guaranteed expedited train schedule – 1

QUESTION	RESPONSE
<p>150. Are there any rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>N/A - 3 Yes - 2; • Track maintenance issues cause delays - 1 • Bottlenecks in Chicago cause delays - 1 • Slow movement in entire rail network especially during peak season in 3rd and 4th quarters - 1 • Transit delays - 1 • Inconsistent transit times - 1 • Velocity is decreasing - 1 • Rates are high - 1 • High fuel costs - 1 No - 1</p>
<p>151. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Portland in the next five years?</p>	<p>Increase - 5 N/A - 1 Decrease - 0 Maintain the same - 0</p>
<p>152. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Portland in the next five years?</p>	<p>• Sales growth - 3 • Shipper has port diversification strategy and will bring more imports through Puget Sound ports rather than Los Angeles - 2 • Shipper has aggressive sales growth plan to increase international market share - 1 • Store growth - 1 • Cost to move via rail or truck - 1 • Transit time via rail or truck - 1 N/A - 1</p>
<p>153. Have these factors changed over the past three to five years? (yes/no)</p>	<p>Yes - 4 No - 1 N/A - 1</p>
<p>154. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?</p>	<p>Yes - 3; • Canada - 3 • Mexico - 2 • Portland - 1 • Norfolk - 1 No - 2 N/A - 1</p>

QUESTION	RESPONSE
<p>155. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?</p>	<p>No - 3 Yes - 3;</p> <ul style="list-style-type: none"> • Shipper has experienced delays in moving its Europe-destined cargo intermodally across the U.S. and may use more airfreight or all-water vessels - 1 • Port diversification strategies employed by importers will influence the use of all-water vessels and imports through Canada in order to bypass U.S. intermodal bottlenecks - 1 • Inventory strategies - 1 • Intense weather patterns and disruptive storms are forecasted, which will increase demand for shipper's products - 1 • Shipper is trying to improve lead times, so using rail will be a problem unless service improves - 1 • Shortage of long-haul truckers will increase demand for rail - 1

Imports Moving as Breakbulk

QUESTION	RESPONSE
93. What are your primary commodities?	
94. What are your primary origin countries?	
95. What are the primary U.S. destination cities?	
96. What was the 2005 total import volume that entered the U.S. via rail (metric tons)?	
97. What was the 2005 total import volume that entered the U.S. via ocean (metric tons)?	
98. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	
99. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	
100. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	
101. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	
102. What percent or number of metric tons are reloaded onto rail equipment from Washington and/or Columbia River ports for onward movement to your U.S. customers?	
103. In which Washington cities and by which 3PLs are your products reloaded onto rail equipment?	
104. Which Class 1, shortline rail carriers, and/or IMCs do you use in Washington?	

QUESTION	RESPONSE
105. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	
106. What percent or number of metric tons are reloaded onto trucks or barges from Washington and/or Columbia River ports for onward movement to your U.S. customers?	
107. What decision criteria do you use in selecting onward movement by rail, truck, or barge?	
108. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	
109. Upon which critical service factors do you evaluate the performance of rail carriers?	
110. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	
111. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	
112. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	
113. Have these factors changed over the past three to five years? (yes/no)	
114. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	
115. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	

Containerized Exports

QUESTION	RESPONSE
121. What are your primary commodities?	Electronic devices, sports equipment and machinery
122. What are the primary origin cities?	Auburn, Burlington, Ferndale, Snoqualmie, and Tennessee
123. What are the primary destination countries?	UK - 2, all over the world - 1, Australia - 1, Germany - 1, Netherlands - 1, NZ - 1, and Sweden - 1
124. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	< 40 railcars - 2 N/A 1

QUESTION	RESPONSE
125. What was the 2005 total export volume that exited the U.S. via ocean (FEUs)?	< 60 FEUs - 3
126. What percent or number of containers moved through the Ports of Seattle and/or Tacoma?	20% to 80% - 3
127. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Consistent - 1 Peak - October to December - 1 Peak - November to January - 1
128. What percent or number of containers moved through Columbia River ports? (specify which ports)	N/A - 3
129. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 3
130. Is the inland move from origin to the Ports of Seattle and/or Tacoma via barge, rail, or truck?	Truck - 3
131. Is the inland move from origin to Columbia River ports via barge, rail, or truck?	N/A - 3
132. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	N/A - 2 < 100 railcars - 1
133. Is the inland move to the port controlled by the ocean carrier on a through Bill of Lading or do you control the routing? (carrier/company)	Carrier - 2 Company - 1
134. If you are responsible for the inland move, which barge, rail carrier and trucking companies are used?	N/A - 2 Various trucking companies - 1
135. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract - 2 Spot - 1 N/A - 1 Tariff - 0
136. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 3 UP - 3 Exel Transportation - 1 Hub - 1 Matson - 1 Northwest Freight - 1 Pacer - 1
137. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - high - 2, medium - 1 Perishable - low - 3

QUESTION	RESPONSE
138. What decision criteria do you use in selecting the inland move to the gateway port by rail, truck, or barge?	<ul style="list-style-type: none"> • Distance to port - 2 • Ocean carrier handles inland move - 1 • No rail service available near facility - 1
139. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	N/A - 3
140. If no rail spur, how far must the product be trucked to meet the rail hub?	< 30 miles - 2 120 miles - 1 N/A - 1
141. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 3; <ul style="list-style-type: none"> • Equipment shortages - 2 • Chassis shortages - 1 • Congestion in Chicago - 1 Yes - 0
142. Upon which critical service factors do you evaluate the performance of rail carriers?	<ul style="list-style-type: none"> • Price - 1 • On-time performance - 1 • Transit time - 1 N/A - 1; <ul style="list-style-type: none"> • Ocean carrier handles evaluations - 1
143. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 3; <ul style="list-style-type: none"> • Long transit times - 1 • Delivery delays - 1 • Delays in Chicago - 1 • Difficult to obtain answers about where containers are - 1 No - 0
144. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	No - 2 Yes - 1
145. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	No - 1 Yes - 2; Yes - 2 No - 0
146. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Increase - 3 Decrease - 0 Maintain the same - 0
147. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	<ul style="list-style-type: none"> • Increased sales - 3 • Addition of new product lines - 1
148. Have these factors changed over the past three to five years? (yes/no)	No - 2 Yes - 1

QUESTION	RESPONSE
149. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No - 2 Yes - 1; Gulf, New York and New Jersey, and Norfolk - 1
150. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 2; <ul style="list-style-type: none"> • Production costs will increase due to the rising cost of natural gas - 1 • Increased bad weather - 1 • Cost of plastics is increasing since it is a petroleum-based product - 1 No - 1

Exports Moving as Breakbulk

QUESTION	RESPONSE
93. What are your primary commodities?	Machinery
94. What are your primary origin cities?	Various
95. What are you primary destination countries?	All over the world - 1
96. What was the 2005 total export volume that exited the U.S. via rail (number rail equipment)?	N/A - 1
97. What was the 2005 total export volume that exited the U.S. via ocean (metric tons)?	Unknown - 1
98. What percent or number of metric tons moved through the Ports of Seattle and/or Tacoma?	2%
99. Are the shipments moving through the Ports of Seattle and/or Tacoma consistent year-round or is there a peak or slow season?	Peak - February to April - 1
100. What percent or number of metric tons moved through Columbia River ports? (specify which ports)	N/A - 1
101. Are the shipments moving through Columbia River ports consistent year-round or is there a peak or slow season?	N/A - 1
102. In 2005, what was the total volume that moved in rail equipment from interior U.S. points, Canada and/or Mexico to your Washington facility and used in production of products exported through Puget Sound and/or Columbia River ports? (number of rail equipment)	6,000 railcars - 1
103. Which Class 1 and shortline rail carriers do you use in Washington?	BN - 1 USF Logistics - 1
104. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	N/A - 1
105. What decision criteria do you use in selecting movement by rail, barge, or truck to the export port?	Rail is not a good option due to the nature of the cargo - 1

QUESTION	RESPONSE
106. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	N/A - 1
107. Upon which critical service factors do you evaluate the performance of rail carriers?	N/A - 1
108. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	N/A - 1
109. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	N/A - 1
110. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	N/A - 1
111. Will your company increase, decrease, or maintain the volume moving through the Ports of Seattle, Tacoma and/or Columbia River ports in the next five years?	Maintain the same - 1
112. What factors will influence your decision to increase or decrease the volume moved through the Ports of Seattle, Tacoma, and/or Columbia River ports in the next five years?	<ul style="list-style-type: none"> • Customer location - 1 • More specialized ocean service is available in Houston and Los Angeles - 1
113. Have these factors changed over the past three to five years? (yes/no)	No
114. Will your company increase the use of alternate port gateways on the West Coast, East Coast, or Gulf in the next five years? (yes/no) If so, which ones?	No
115. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	No

Domestic Shipments

QUESTION	RESPONSE
81. What are your primary inbound commodities?	Auto parts and machinery components, plastics, and polyethylene powder
82. What are your primary outbound commodities?	Sports equipment, machinery, electronic devices, and instrumentation
83. What are your primary U.S. origin cities?	Auburn, Burlington, Ferndale, Snoqualmie, Illinois, Tennessee and Virginia
84. What are you primary U.S. destination cities?	All over the U.S. - 2, East Coast - 2, Arizona - 1, California - 1, Illinois - 1, Indiana - 1, Kentucky - 1, Tennessee - 1, and Washington - 1
85. What was the 2005 total volume moved via rail? (number rail equipment)	< 250 railcars - 2 251 to 9,000 railcars - 1 N/A - 1

QUESTION	RESPONSE
86. What percent or number of rail equipment moved through Washington?	80% to 100% - 3 N/A - 1
87. What was the 2005 total truckload volume?	< 400 truckloads - 3 401 to 3,500 truckloads - 1
88. What percent or number of truckloads moved through Washington?	70% to 100% - 4
89. Do you use barge? (yes/no) If so, what quantity moved in 2005? (number containers/metric tons)	No - 4 Yes - 0
90. Are rail rates based on the spot market, tariff, or contract? (spot/tariff/contract)	Contract - 3 Spot - 1 Tariff - 1 N/A - 1
91. Are shipments consistent year-round or is there a peak or slow season?	Consistent - 1 Peak - March to June - 1 Peak - August to October - 1 Peak - September to November - 1
92. How time-sensitive or perishable are your products? (high, medium, low)	Time-sensitive - high - 4 Perishable - low - 4
93. Which Class 1, shortline rail carriers, and IMCs do you use in Washington?	BN - 3 UP - 2 Pacer - 2 Exel - 1 General Freight - 1 Hub - 1 Matson - 1 Northwest Freight - 1
94. What decision criteria do you use in selecting rail, truck, or barge for a particular shipment?	<ul style="list-style-type: none"> o Will shipment arrive to meet production schedule - 2 o Customer delivery requirements - 1 o Time sensitivity of shipment moving to retailer - 1 o Rail rates are \$1,000 to \$1,500 cheaper than truck - 1
95. If you have a rail spur at your facility, what is the proximity in miles to the Class 1 rail line where the switch from the shortline to the Class 1 takes place?	N/A - 4; BN performs the switch - 1
96. If no rail spur, how far must the product be trucked to meet the rail hub?	80 to 125 miles - 3 N/A - 2

QUESTION	RESPONSE
97. Do the rail carriers you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 2; • Equipment shortages - 2 • Transit time delays - 1 Yes - 1 N/A - 1
98. Are there any rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 3; • Railcar shortages - 1 • Long transit times - 1 • Transit delays - 1 • Slow service interruption recovery - 1 • Derailments - 1 • Landslides - 1 N/A - 1 No - 0
99. Are your production, harvesting, or processing schedules flexible enough to fluctuate based on available rail capacity? (yes/no)	Yes - 2 No - 2
100. Do you have options to locally store your product if rail capacity is tight? (yes/no) If so, are these economical? (yes/no)	No - 2 Yes - 2; Yes - 2 No - 0

Rail Profile and Recent or Existing Rail Issues

QUESTION	Yes	No	Comments
9. Do you own or long-term lease any rail equipment? (yes/no) If so, how much rail equipment?		6	
10. Do you participate in a guaranteed equipment availability program with a rail carrier? (yes, which ones/no)	1	5	BN - 1

Answer the following for each rail carrier used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
13. It is easy to place bookings with my rail carrier.	BN - 2 UP - 2	BN - 1 UP - 1				N/A - 2	Ocean carrier handles - 1 IMC handles - 1
14. The rail carrier supplies the requested number of empty rail equipment per the booking.	BN - 1	BN - 1 UP - 1	BN - 2 UP - 2	UP - 1		N/A - 1	
15. The rail carrier supplies the empty rail equipment within the expected time period.	BN - 1		BN - 1 UP - 1	BN - 2 UP - 3		N/A - 1	
QUESTION	0	1-2	3-7	8-14	14+		
29. On average, within how many days of the requested date does the rail carrier supply empty rail equipment?	BN - 1	BN - 1	BN - 2 UP - 4			N/A - 1	
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
30. The rail carrier picks up the loaded rail equipment within the expected time period.						N/A - 6	
QUESTION	0	1-2	3-7	8-14	14+		
31. On average, within how many days of the requested date does the rail carrier pick up loaded rail equipment?						N/A - 6	
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
32. Once my loaded rail equipment is delivered to the railramp, the railroad loads and moves the equipment onto a train within the expected timeframe.	BN - 1	BN - 4 UP - 4					
33. The rail carrier delivers loaded rail equipment to destination according to the rail carrier's published trip plan.	BN - 1	BN - 1 UP - 1	BN - 1 UP - 1	BN - 1 UP - 1	BN - 1 UP - 2		

QUESTION	0	1-2	3-7	8-14	14+		
34. On average, within how many days of the rail carrier's published trip plan does the rail carrier deliver loaded rail equipment to destination?	BN - 1	BN - 1	BN - 3 UP - 5				
35. What reasons do the rail carriers provide for the cause of delays?	<ul style="list-style-type: none"> • Bad weather - 2 • Congestion - 2 • Locomotive shortages - 1 • Track-related issues like derailments - 1 						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
33. The rail carrier is responsive in resolving my problems.		BN - 1	BN - 2 UP - 2	BN - 1	UP - 2	N/A - 1	Ocean carrier handles - 1
34. My company probably pays less than average rates for rail service.		1	1	2	1	N/A - 1	
35. The rail rates my company pays has a direct affect on the quality of service we receive.	2			3		N/A - 1	
36. My company would be willing to pay 10 percent more to obtain more reliable rail service.		1		3	1	N/A - 1	
37. Rail rates in general are competitive with truck rates.		6					
38. Rail rates in general are competitive with barge rates.						N/A - 6	
39. It is easy for my company to switch the mode from rail to truck or barge for inbound shipments.	1	3		1		N/A - 1	
40. It is easy for my company to switch the mode from rail to truck or barge for outbound shipments.	1	3	1			N/A - 1	

General Questions

QUESTION	Comments
<p>65. What factors influence your decision to switch from rail to truck or barge?</p>	<ul style="list-style-type: none"> • Production schedule - 3 • Customer need date - 3 • Time sensitivity of shipment - 2 • Need to expedite order to meet store commitment - 1 • In-store need date - 1 • Distribution center need date - 1 • Cost - 1 • Service - 1 • Product seasonality - 1
<p>66. Does your company anticipate making changes in its supply chain during the next five years that might influence the use of rail? (yes/no) If so, what kind?</p>	<p>Yes - 4;</p> <ul style="list-style-type: none"> • Will set up regional distribution centers across the U.S. - 1 • Will use more all-water vessels - 1 • Port diversification strategy will result in move truck moves - 1 • Will shift import of certain products through PNW gateways and move these shipments intermodally to final destination - 1 • Could use more rail if railroads offered short-haul moves that were economical - 1 <p>No - 2 Unknown - 1</p>
<p>67. Are rail carriers offering you scheduled service? (yes/no) If so, has this improved reliability? (yes/no)</p>	<p>No - 5 Yes - 1;</p> <ul style="list-style-type: none"> • BN - 1
<p>68. Are rail carriers offering you any other special programs? (yes/no) If so, what type?</p>	<p>No - 4 Yes - 1;</p> <ul style="list-style-type: none"> • BN offers special backhaul rates from Washington - 1
<p>69. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?</p>	<p>Declined - 5 Remained the same - 1 Improved - 0</p>
<p>70. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?</p>	<p>Declined - 5 Improved - 1 Remained the same - 0</p>
<p>71. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • Unit trains have priority - 1 • Intermodal has priority - 1 • Long-haul has priority - 1 <p>No - 2 Unknown - 1</p>

QUESTION	Comments
72. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)	No - 4 Yes - 1 Unknown - 1
73. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?	<ul style="list-style-type: none"> • Growing imports will overwhelm rail infrastructure - 4 • Longer transit times - 2 • Availability of containers and chassis - 2 • Railroads will not be able to move the increased volume entering Puget sound ports - 1 • Double and triple tracking that is being installed nationwide will only keep up with the rapid import growth, but the railroads will not get ahead - 1 • Need more double and triple tracks - 1 • Congestion at ramps - 1 • Bottlenecks - 1 • Need improvements at chokepoints - 1 • Inability to match chassis and railcars - 1 • Lack of intermodal ramps near shipper's facility - 1
74. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?	Yes - 4; <ul style="list-style-type: none"> • Using more trucks - 2 • Diverted freight to other ports - 1 • Using more all-water vessels - 1 • Lobbies legislators at the state and Federal levels - 1 No - 2
75. What are the most pressing rail infrastructure issues in Washington?	<ul style="list-style-type: none"> • Unknown - 3 • Bullfrog Junction congestion - 2 • I-5 Corridor congestion - 1 • Congestion at the Port of Seattle and Tacoma - 1 • Need more on-dock rail at ports - 1 • Need more avenues out of ports to get to mainlines - 1 • Lack of intermodal ramps - 1 • Portland, Oregon yard congestion - 1
76. What policy measures and programs should Washington State establish to improve rail service in Washington?	<ul style="list-style-type: none"> • Unknown - 3 • Limit red tape and streamline permitting to enable railroads to expand - 2 • Washington could develop bond and tax incentives for railroads to expand infrastructure and fund capital improvements without strings attached that could limit network efficiency - 1 • Regulate fuel surcharges - 1

QUESTION	Comments
77. What infrastructure investments should Washington State make to improve rail service in Washington?	<ul style="list-style-type: none"> • Unknown - 3 • Establish a rail yard in Northern Washington - 2 • Continue to increase on-dock rail at the Ports of Seattle and Tacoma - 1 • Establish more rail freight corridors to maintain freight flow - 1 • Increase capacity over mountain passes - 1 • Increase tracks around Seattle and Tacoma - 1 • This is not the State's job - 1
78. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?	<p>No - 3 Yes - 3;</p> <ul style="list-style-type: none"> • Fund rail infrastructure projects to meet national needs - 2 • Since the government supports highways, it should support rail in some way - 1 • Establish policies to enable railroads to expand easier - 1 • Streamline environmental reviews - 1 • Some sort of regulation - 1
79. Would your company relocate if rail service were unavailable? (yes/no)	<p>No - 6 Yes - 0</p>
80. Will the availability and/or quality of rail service impact your company's plans to expand and/or relocate in the next two years? (yes/no)	<p>No - 5 Yes - 1</p>

WTC Rail Study Participation

QUESTION	Yes	No	Comments
13. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?	1	5	
14. Would you like to receive e-mail notices about the progress and findings of the Study?	6		
15. Would you be willing to talk further with us over the course of the study?	6		

Integrator Survey

Conducted by Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	2	

Shipping Profile

Imports and Exports

QUESTION	RESPONSE
1. What key import commodities do you handle that move via rail from Puget Sound and Columbia River port gateways through Washington to interior U.S. destinations?	N/A - 2
2. What are the primary U.S. import destination cities?	N/A - 2
3. What was the 2005 total import rail equipment volume that you moved from Puget Sound and Columbia River port gateways through Washington?	N/A - 2
4. Is your import rail equipment volume level from Puget Sound and Columbia River port gateways through Washington consistent year-round or is there a peak or slow season?	N/A - 2

QUESTION	RESPONSE
5. Which 3PLs in which Washington cities transload and/or deconsolidate the cargo you move via rail onto rail equipment for onward distribution?	N/A - 2
6. What key export commodities do you handle that move by rail through Washington to Puget Sound and Columbia River port gateways?	N/A - 2
7. What are the primary U.S. export origin cities?	N/A - 2
8. What was the 2005 total export rail equipment volume that you moved to Puget Sound and Columbia River port gateways through Washington from U.S. interior points?	N/A - 2
9. Is your export rail equipment volume level to Puget Sound and Columbia River port gateways through Washington consistent year-round or is there a peak or slow season?	N/A - 2
10. Which Class 1 and shortline railroads do you use in Washington?	BN - 2
11. In which Washington cities do you tender rail equipment to or pick up rail equipment from Class 1 or shortlines?	South Seattle ramp - 1 Seattle - 1
12. Do you require special rail equipment? (yes/no) If so, what type?	No - 2
13. Do you own or long-term lease any rail equipment? (yes/no) If so, how many pieces of rail equipment by type?	Yes - 2; Lease and own a large quantity - 2
14. Do you participate in a guaranteed equipment availability program with a railroad? (yes/no) If so, with which railroads?	No - 1 Yes - 1; BN - 1
15. What decision criteria do your customers use in selecting onward movement by rail or truck?	<ul style="list-style-type: none"> • Different classes of service requested by customers - 1 • Service - 1 • Cost - 1 • Time sensitivity of shipment - 1

QUESTION	RESPONSE
16. Do the railroads you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	Yes - 2
17. Upon which critical service factors do you evaluate the performance of railroads?	<ul style="list-style-type: none"> • Service - 1 • Timely delivery to meet the dedicated sort at the integrator’s hub - 1 • Rates - 1
18. Are there rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes; <ul style="list-style-type: none"> • Late deliveries impact integrator’s production/sort operations, which increases costs and dissatisfies its customers - 1 • Bad order equipment - 1 • Derailments - 1
19. Are you aware of any particular choke points in rail system in Washington? (yes/no) If so, where?	No - 2
20. Of the cargo moving through the Ports of Seattle, Tacoma and/or Columbia River ports, do you expect the amount of rail cargo that your company moves to increase, decrease, or stay the same in the next five years?	N/A - 2
21. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	No - 2

Rail Profile and Recent or Existing Rail Issues

Answer the following for each railroad used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
16. It is easy to place bookings with my railroad.	BN - 1	BN - 1					
17. The railroad supplies the requested number of empty rail equipment per the booking.	BN - 1			BN - 1			
18. The railroad supplies the empty rail	BN - 1				BN - 1		

equipment within the expected time period.							
QUESTION	0	1-2	3-7	8-14	14+		
36. On average, within how many days of the requested date does the railroad supply empty rail equipment?	BN - 1		BN - 1				
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
37. When my company delivers loaded rail equipment to the ramp, the railroad loads and moves the equipment on the train within the expected period of time.	BN - 1	BN - 1					
QUESTION	0	1-2	3-7	8-14	14+		
38. On average, within how many days of delivery to the rail ramp does the railroad load and move my rail equipment on trains?	BN - 2						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
39. The railroad delivers loaded rail equipment to destination according to the railroad's published trip plan.		BN - 1	BN - 1				
QUESTION	0	1-2	3-7	8-14	14+		
40. On average, within how many days of the railroad's published trip plan does the railroad deliver loaded rail equipment to destination?	BN - 1	BN - 1					
41. What reasons does the railroad provide for the cause of delays?	<ul style="list-style-type: none"> • Derailments - 1 • Unknown - 1 						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
41. The railroad is responsive in resolving my problems.			BN - 2				
42. My company probably pays less than average rates for rail service.				1	1		

43. The rail rates my company pays has a direct affect on the quality of service we receive.		1	1				
44. My company would be willing to pay 10 percent more to obtain more reliable rail service.	1	1					
45. Rail rates in general are competitive with truck rates.			1	1			

General Questions

QUESTION	Comments
1. Are railroads offering you scheduled service? (yes, which ones/no) If so, has this improved reliability? (yes/no)	Yes - 2; BN - 2 CSX - 1 NS - 1 UP - 1; Sometimes - 1
2. Have the railroads offered you other special programs? (yes, which ones/no) If so, what type?	No - 2
3. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial trains versus unit trains, carload versus intermodal, or long-haul versus short-haul)? If so, what type?	Yes - 2; • Bulk, carload, and less time-sensitive cargo has priority - 1
4. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)	Unknown - 2
5. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?	• Railroads may not put enough locomotives on hot trains to keep them moving on schedule - 1 • Equipment shortages - 1 • Railroads may favor less time-sensitive cargo - 1 • Railroads may not be able to keep service commitments - 1
6. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?	Yes - 2; • Maintains close relationships with counterparts at the railroads on corporate, regional and local levels - 1
7. What are the most pressing rail infrastructure issues in Washington?	Unknown - 2
8. What policy measures and programs should Washington State establish to improve rail service in Washington?	Unknown - 2

QUESTION	Comments
9. What infrastructure investments should Washington State make to improve rail service in Washington?	Unknown - 2
10. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?	Unknown - 2

WTC Rail Study Participation

QUESTION	Yes	No	Comments
16. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?		2	
17. Would you like to receive e-mail notices about the progress and findings of the Study?	2		
18. Would you be willing to talk further with us over the course of the study?	2		

Intermodal Marketing Company (IMC) Survey

Conducted by Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	Yes - 4	0

Shipping Profile

Imports and Exports

QUESTION	RESPONSE
22. What key import commodities do you handle that move via rail from Puget Sound and Columbia River port gateways through Washington to interior U.S. destinations?	<ul style="list-style-type: none"> • Retail and consumer goods - 4 • General department store merchandise - 1 • Apparel - 1
23. What are the primary U.S. import destination cities?	<ul style="list-style-type: none"> • Chicago - 2 • Memphis - 2 • All over the U.S. - 1 • Seattle - 1 • Tacoma - 1 • Quincy - 1 • Pasco - 1 • Atlanta - 1 • Kearney, New Jersey - 1
24. What was the 2005 total import rail equipment volume that you moved from Puget Sound and Columbia River port gateways through Washington?	21,000 to 40,000 FEUs
25. Is your import rail equipment volume level from Puget Sound and Columbia River port gateways through Washington consistent year-round or is there a peak or	<ul style="list-style-type: none"> • Consistent year-round - 1 • Peak - January to February - 1

QUESTION	RESPONSE
slow season?	<ul style="list-style-type: none"> • Peak – July to November – 1 • Peak – August to January – 1 • Peak – September to October – 1
26. Which 3PLs in which Washington cities transload and/or deconsolidate the cargo you move via rail onto rail equipment for onward distribution?	<ul style="list-style-type: none"> • Schneider/American Port Services, Auburn – 3 • Hudd, Sumner – 1 • Mitco, Kent – 1 • Target’s DCs, Lacy and Auburn – 1 • N/A – 1
27. What key export commodities do you handle that move by rail through Washington to Puget Sound and Columbia River port gateways?	<ul style="list-style-type: none"> • N/A – 2 • hay, grass seed and straw – 1 • processed potatoes and vegetables – 1 • fruit – 1 • manufactured goods – 1 • auto parts – 1
28. What are the primary U.S. export origin cities?	<ul style="list-style-type: none"> • N/A – 2 • All over the U.S. – 1 • Washington – 1 • Oregon – 1
29. What was the 2005 total export rail equipment volume that you moved to Puget Sound and Columbia River port gateways through Washington from U.S. interior points?	<ul style="list-style-type: none"> • N/A – 2 • 100 to 55,000 railcars
30. Is your export rail equipment volume level to Puget Sound and Columbia River port gateways through Washington consistent year-round or is there a peak or slow season?	<ul style="list-style-type: none"> • N/A – 2 • Consistent year-round – 1 • Peak – March to May – 1 • Peak – September to November – 1
31. Which Class 1 and shortline railroads do you use in Washington?	BN – 3 UP – 4
32. In which Washington cities do you tender rail equipment to or pick up rail equipment from Class 1 or shortlines?	<ul style="list-style-type: none"> • Seattle – 4 • Tacoma – • Quincy – 1 • Pasco – 1
33. Do you require special rail equipment? (yes/no) If so, what type?	Yes – 3; <ul style="list-style-type: none"> • 53’ – 2 • Double-stack cars – 1 No – 1
34. Do you own or long-term lease any rail equipment? (yes/no) If so, how many pieces of rail equipment by type?	Yes – 4; <ul style="list-style-type: none"> • 200 to 40,000 53’ – 2 • 18,800 railcars – 1 • 45 well set railcars – 1

QUESTION	RESPONSE
35. Do you participate in a guaranteed equipment availability program with a railroad? (yes/no) If so, with which railroad?	No - 4 Yes - 0
36. What decision criteria do your customers use in selecting onward movement by rail or truck?	<ul style="list-style-type: none"> • Rates - 3 • Transit time reliability - 3 • Timeliness of delivery - 1 • Current transit on the railroads - 1 • Equipment availability - 1 • Equipment quality - 1 • Customer service - 1 • Seasonality (i.e., Christmas and other holidays) - 1 • Claims processing - 1
37. Do the railroads you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.	No - 4; <ul style="list-style-type: none"> • The UP does not have enough crews and locomotives, which causes delays primarily to cargo moving to the Southeast. Capacity to Chicago seems adequate - 1 • Te UP has too much volume for existing flat cars and locomotives to handle - 1 • Because ocean carriers are moving more intermodal containers over Puget Sound ports instead of Southern California, it is impacting capacity in the PNW - 1 • The UP's gate reservation system is an impediment. A reservation is required to get into the yard gate, but this does not guarantee a slot on the train - 1 Yes - 0
38. Upon which critical service factors do you evaluate the performance of railroads?	<ul style="list-style-type: none"> • On-time performance according to published schedule - 3 • Transit time - 1 • Rates - 1 • Service interruption recovery - 1 • Claims processing - 1 • Communication of service delays - 1
39. Are there rail service issues that affect your company's ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?	Yes - 4; <ul style="list-style-type: none"> • Inconsistent and unreliable service - 1 • Long transit times - 1 • Transit delays - 1 • Even when railroads load containers on trains, the containers may sit on a siding because of limited space at the ramp - 1 • When delays occur, the IMC must notify its customers, and the customers blame the IMC rather than the railroad - 1 • Lack of capacity in certain lanes - 1 • Lack of locomotives and crews - 1 No - 0
40. Are you aware of any particular choke points in rail	Yes - 3;

QUESTION	RESPONSE
<p>system in Washington? (yes/no) If so, where?</p>	<ul style="list-style-type: none"> • Bullfrog Junction - 1 • BN Argo Interchange - 1 • Seattle ramp - 1 • Port of Tacoma - the BN and UP do not have sufficient capacity to handle their commitments - 1 • Tacoma Municipal Beltline where trains are built - 1 • UP Portland and Brooklyn Yards - 1 • UP gate reservation system is very cumbersome - 1 <p>Unknown - 1 No - 0</p>
<p>41. Of the cargo moving through the Ports of Seattle, Tacoma and/or Columbia River ports, do you expect the amount of rail cargo that your company handles to increase, decrease, or stay the same in the next five years?</p>	<p>Increase - 4;</p> <ul style="list-style-type: none"> • The IMC's volume will increase. - 1 • The BN is telling ocean carriers to route intermodal cargo through Puget Sound ports rather than California ports, which is eating up Washington State capacity - 1 <p>Decrease - 0 Stay the same - 0</p>
<p>42. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?</p>	<p>Yes - 4;</p> <ul style="list-style-type: none"> • Import growth entering PNW gateways will impact the rail system - 1 • Railroads are getting out of the rail equipment ownership business - 1 • Railroads have abandoned certain lanes since they are trying to rationalize their businesses - 1 • Short-haul rail usage will increase due to truck capacity constraints - 1 • More inland intermodal centers will be established in Washington to promote an efficient statewide transportation system - 1 • The traditional IMC model has become blurred as IMCs offer lots of other services - 1 <p>No - 0</p>

Rail Profile and Recent or Existing Rail Issues

Answer the following for each railroad used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
19. It is easy to place bookings with my railroad.		BN - 2 UP - 3	BN - 1 UP - 1				
20. The railroad supplies the requested number of empty rail equipment per the booking.		UP - 1	BN - 1 UP - 1	BN - 2 UP - 2			
21. The railroad supplies the empty rail equipment within the expected time period.		UP - 2	BN - 1 UP - 1	BN - 2 UP - 1			
QUESTION	0	1-2	3-7	8-14	14+		
42. On average, within how many days of the requested date does the railroad supply empty rail equipment?	UP - 1		BN - 2 UP - 3	BN - 1			
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
43. The railroad picks up the loaded rail equipment within the expected time period.		UP - 1		BN - 1		N/A - 3	
QUESTION	0	1-2	3-7	8-14	14+		
44. On average, within how many days of the requested date does the railroad pick up loaded rail equipment?	UP - 1		BN - 1			N/A - 3	

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
45. When my company delivers loaded rail equipment to the rail ramp, the railroad loads and moves the equipment on the train within the expected period of time.		BN - 1 UP - 1	BN - 2 UP - 3				
46. The railroad delivers loaded rail equipment to destination according to the railroad's published trip plan.	BN - 1		UP - 1	BN - 1 UP - 1	BN - 1 UP - 2		
QUESTION	0	1-2	3-7	8-14	14+		
47. On average, within how many days of the railroad's published trip plan does the railroad deliver loaded rail equipment to destination?	UP - 1	BN - 2	UP - 2	UP - 1	BN - 1		
48. What reasons does the railroad provide for the cause of delays?	<ul style="list-style-type: none"> • Congestion - 2 • Capacity constraints on shared track primarily on the I-5 Corridor - 1 • Locomotive shortages - 1 • Flatcar shortages - 1 • Crew shortages - 1 • Bad weather - 1 • Rebuilding tracks - 1 						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
46. The railroad is responsive in resolving my problems.		BN - 1	UP - 1	BN - 1	BN - 1 UP - 3		
47. My company probably pays less than average rates for rail service.		1	2	1			
48. The rail rates my company pays has a direct affect on the quality of service we receive.	1		3				

49. My company would be willing to pay 10 percent more to obtain more reliable rail service.		1			1	D/N - 2	
50. Rail rates in general are competitive with truck rates.		1	3				

General Questions

QUESTION	Comments
81. Are railroads offering you scheduled service? (yes, which ones/no) If so, has this improved reliability? (yes/no)	Yes - 4; <ul style="list-style-type: none"> • BN - 3 • UP - 3; Yes - 3 No - 1
82. Have the railroads offered you other special programs? (yes, which ones/no) If so, what type?	Yes - 2; <ul style="list-style-type: none"> • During peak season, the UP brings in an outside equipment provider that the IMC can use and obtain a credit (% off the invoice) - 1 • UP offers it's Blue Streak guaranteed container program - 1 • BN and UP offer door-to-door service, which include drayage at origin and destination - 1 No - 2
83. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?	<ul style="list-style-type: none"> • Declined - 3 • Remained the same - 1 • Improved - 1
84. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?	<ul style="list-style-type: none"> • Declined - 4 • Remained the same - 0 • Improved - 1
85. In the past two years, have you noticed any changes in traffic priorities on the railroads in the past two years (e.g., partial trains versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?	Yes - 3; <ul style="list-style-type: none"> • Long-haul trains have priority - 1 • Unit trains have priority - 1 • Carload trains have priority - 1 • Bulk commodities are higher rated than intermodal, so locomotives are dedicated to bulk trains - 1 No - 1

QUESTION	Comments
<p>86. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)</p>	<p>No - 3</p> <ul style="list-style-type: none"> • Bulk trains have priority - 1 • Intermodal service has degraded so some other commodities must be getting more attention - 1 <p>Yes - 1</p>
<p>87. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • Rail service will substantially worsen in Washington - 1 • If imports continue to grow, the U.S. will not have the infrastructure to handle it because the rail system is at capacity already - 1 • Lack of capacity - 1 • High rates - 1 • Poor service will affect the IMC's ability to provide good service to its customers - 1 • Railroads need better service interruption recovery to remain competitive with trucking - 1
<p>88. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • The IMC changed top leadership in order to negotiate better contracts and forge better relationships with the railroads - 1 • The IMC lobbied at state and Federal levels - 1 • IMC's management went to Omaha to visit UP management to present its business case - • The IMC provides a weekly projection of demand to the railroads so the railroads can preplan - 1 <p>No - 1</p>
<p>89. What are the most pressing rail infrastructure issues in Washington?</p>	<ul style="list-style-type: none"> • Capacity choke points in Tacoma - 1 • Track capacity - 1 • I-5 Corridor - 1 • Locomotive shortages - 1 • Mudslide on tracks between Seattle and Portland - 1 • Unknown - 1
<p>90. What policy measures and programs should Washington State establish to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • The State should invest in Class 1s only in exchange for retaining regional rail capacity and service improvements - 1 • Unknown - 3

QUESTION	Comments
<p>91. What infrastructure investments should Washington State make to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • The State could own and provide regional locomotives to the railroads in order to provide regional service - 1 • Argo, Sig, and Tukwila Yards need infrastructure improvements - 1 • Washington could take over ownership from the UP of the track from Seattle to Los Angeles and make it a common track - 1 • The State could help railroads double track certain lanes like the I-5 Corridor and Columbia Gorge - 1 • This is not the State's responsibility - 1 • Unknown - 1
<p>92. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?</p>	<p>Yes - 2;</p> <ul style="list-style-type: none"> • The Federal government should pass the pending Federal tax credit bill to provide the private sector with tax credits for rail network improvements. The Class 1s want this for investments in locomotives and tracks. IMCs could use these tax credits for container lift equipment to handle intermodal moves - 1 <p>No - 2;</p> <ul style="list-style-type: none"> • Reregulation is not a good idea. However, from a competitive perspective, there is a railroad duopoly. The Justice Department has allowed too much merger and acquisition activity to take place. The Federal government should let the situation play out by itself to see if the trucking industry can compete with rail - 1 • States should have more control - 1

WTC Rail Study Participation

QUESTION	Yes	No	Comments
<p>19. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?</p>	1	3	
<p>20. Would you like to receive e-mail notices about the progress and findings of the Study?</p>	4		
<p>21. Would you be willing to talk further with us over the course of the study?</p>	4		

Ocean Carrier Intermodal Department Survey

Conducted by Cambridge Systematics
 on behalf of the
 Washington Transportation Commission
 for the
 Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	4	

Shipping Profile

Imports and Exports

QUESTION	RESPONSE
43. What was the 2005 total import intermodal volume that you moved on a through Bill of Lading from the Ports of Seattle, Tacoma, and Portland through Washington (FEUs) to interior U.S. points?	25,000 FEUs to 56,000 FEUs
44. Is your import intermodal volume level from the Ports of Seattle, Tacoma, and Portland through Washington consistent year-round or is there a peak or slow season?	Consistent - 2; Peak - August to November - 2
45. What was the 2005 total export intermodal volume that you moved on a through Bill of Lading to the Ports of Seattle, Tacoma, and Portland through Washington from U.S. interior points (FEUs - empties and loads)?	0 FEUs to 52,000 FEUs
46. Is your export intermodal volume level to the Ports of Seattle, Tacoma, and Portland through Washington consistent year-round or is there a peak or slow season?	Peak - August to November - 2 Consistent - 1 N/A - 1
47. Which Class 1 and shortline railroads do you use in Washington?	BN - 2 UP - 2 Tacoma Municipal Beltline (TMBL) - 1

QUESTION	RESPONSE
<p>48. In which Washington cities do you tender intermodal containers to or pick up intermodal containers from Class 1 or shortlines?</p>	<p>Seattle - 1 Seattle UP Yard - 1 South Seattle Terminal - 1 Seattle Intermodal Gateway Terminal - 1 Seattle Berth 18 Yard - 1 Tacoma - 1 Port of Tacoma - 1 Tacoma South Intermodal Yard - 1 BN Portland Terminal - 1</p>
<p>49. What decision criteria do your customers use in selecting your company to move containers intermodally to or from U.S. interior points on a through Bill of Lading as opposed to on a port-to-port basis?</p>	<p>Price - 3 Speed of getting containers from the port onto the train - 1 Transit time - 1 On-time performance - 1 Ease of obtaining information - 1 Convenience of using door-to-door rates - 1 Customers that do not want to do customs clearance at the port use intermodal rates - 1 Customers that do not have local PNW consumption cargo use intermodal - 1</p>
<p>50. Do the railroads you use have sufficient capacity (tracks, equipment, personnel) to meet your requirements? (yes/no) If no, explain the issues.</p>	<p>No - 3; • There are insufficient locomotives and locomotives are in the wrong places to serve the ocean carrier’s needs. - 2 • The ocean carrier furnishes the railroad with a forecast of train length seven to 10 days in advance so the railroad can calculate whether three or four locomotives are required. At times, the railroad bleeds off assets (i.e., by removing two locomotives in Portland and then sending the train to Seattle with two instead of four locomotives). The impact is that the ocean carrier’s train are delayed due to lack of power or the railroad will shorten the train by waylaying cars on a siding - 1 • The PNW is not a stronghold for the UP since the BN controls tracks and the UP must wait for permission to move trains - 1 • Constrained rail terminal capacity - 1 • Although the issue of lack of crews improved in 2005 over 2004, at times there are shortages - 1 • Westbound trains usually have mostly empty containers, so less power is needed. Once the trains arrive in Washington, they need more locomotives to move eastbound, and the UP sometimes does not have enough available - 1 • Trackage is woefully inadequate in Washington and south of Tacoma. BN controls the traffic flow, so sometimes UP trains are negatively affected - 1</p> <p>Yes - 1</p>

QUESTION	RESPONSE
<p>51. Upon which critical service factors do you evaluate the performance of railroads?</p>	<ul style="list-style-type: none"> • On-time departure of eastbound trains carrying imports- 3 • On-time arrival of westbound trains carrying exports - 1 • Container dwell time at the origin rail terminal - 1 • Actual versus published transit - 1 • Time of arrival at the destination terminal and when containers are made available to the ocean carrier - 1 • East and westbound transit time goals set by the ocean carrier - 1
<p>52. Are there rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>Yes - 4;</p> <ul style="list-style-type: none"> • The system is so fragile that even small interruptions wreak havoc - 1 • Delays in on-time arrivals and departures - 1 • Insufficient locomotives or locomotives in the wrong place - 1 • Crew shortages - 1 • Weather problems - 1 • When there are insufficient locomotives, crews and equipment, delays result and this costs the ocean carrier more to deliver containers to customers. The ocean carrier may have to truck the container, or intercept the container en route and truck it the rest of the way to destination to meet the customer’s requirements - 1 • Inconsistent service affects customers’ ability to plan in advance to receive containers - 1 • Insufficient track in Washington and south of Tacoma - 1 • When westbound trains are late, the ocean carrier may have a crew waiting that still has to be paid even if the work is not accomplished - 1 <p>No - 0</p>
<p>53. Are you aware of any particular choke points in rail system in Washington? (yes/no) If so, where?</p>	<p>Yes - 4;</p> <ul style="list-style-type: none"> • Port of Tacoma - The Port does not have enough infrastructure to handle the increased number of containers and not enough space to handle the trains necessary to move the intermodal cargo. The number of trains is regulated by infrastructure, and now the Port has to slot trains by appointment - 2 • Bullfrog Junction - 2 • I-5 Corridor where freight trains compete with passenger trains - 1 • Port of Seattle T-5 Global Gateway North because the UP has to cross BN’s West Seattle tracks - 1 • Interlocker where BN’s line crosses the UP’s lines south of the UP yard, since it is controlled by the BN - 1 • Where dual main lines go into one single line south of Tacoma - 1 • UP staging area in Fife, which is undersized for current volume and cannot hold a full train without blocking mainline trains - 1 <p>No - 0</p>

QUESTION	RESPONSE
54. Of the cargo entering or exiting the Ports of Seattle, Tacoma, and/or Columbia River ports, do you expect the amount of intermodal rail cargo that your company handles to increase, decrease, or stay the same in the next five years?	Increase - 4 Decrease - 0 Remain the same - 0
55. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?	Yes - 4; <ul style="list-style-type: none"> • The volume moving all-water through the Panama Canal is increasing, thereby reducing the number of transcontinental intermodal rail moves because intermodal is not as inexpensive or fast as it used to be - 2 • Because of increased imports, more ships will come to the Puget Sound because the Panama Canal and Los Angeles are saturated. The railroads cannot grow fast enough to accommodate the rapid influx of imports - 1 • Ships are getting larger, and therefore, dump more cargo off at ports at once, which strains rail capacity - 1 • Port infrastructure capacity will be stretched with increased import volume - 1 No - 0

Rail Profile and Recent or Existing Rail Issues

Answer the following for each railroad used for cargo moving through PNW port gateways.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
22. It is easy to place bookings with my railroad.	BN - 1 UP - 2 TMBL - 1	BN - 1					
23. The railroad builds unit trains with the intermodal containers my company tenders.	UP - 1	BN - 2	UP - 1			N/A - 2	Ocean carrier builds own trains

<p>QUESTION Please indicate your level of agreement with the following statements.</p>	<p>Strongly Agree</p>	<p>Agree</p>	<p>Neither Agree Nor Disagree</p>	<p>Disagree</p>	<p>Strongly Disagree</p>	<p>Don't Know/Not Applicable</p>	<p>Comments</p>
<p>49. The railroad loads and moves my intermodal containers on trains within the expected time period.</p>		<p>BN - 1; UP for on-dock trains - 1</p>	<p>UP - 1</p>	<p>UP for off-dock trains - 1</p>	<p>BN - 1</p>	<p>N/A - TMBL - 1</p>	
<p>QUESTION</p>	<p>0</p>	<p>1-2</p>	<p>3-7</p>	<p>8-14</p>	<p>14 +</p>		
<p>50. On average, within how many days of delivery to the rail ramp does the railroad load and move my intermodal containers on trains?</p>	<p>UP - 1</p>	<p>BN - 1; UP for off-dock trains - 1</p>	<p>BN - 1</p>				
<p>QUESTION Please indicate your level of agreement with the following statements.</p>	<p>Strongly Agree</p>	<p>Agree</p>	<p>Neither Agree Nor Disagree</p>	<p>Disagree</p>	<p>Strongly Disagree</p>	<p>Don't Know/Not Applicable</p>	<p>Comments</p>
<p>51. The railroad delivers intermodal containers to destination according to the railroad's published trip plan.</p>			<p>BN - 1; UP - 1</p>	<p>BN - 1</p>	<p>UP - 1</p>		
<p>QUESTION</p>	<p>0</p>	<p>1-2</p>	<p>3-7</p>	<p>8-14</p>	<p>14 +</p>		
<p>52. On average, within how many days of the railroad's published trip plan does the railroad deliver intermodal containers to destination?</p>		<p>UP -2</p>	<p>BN - 2</p>				
<p>53. What reasons does the railroad provide for the cause of delays?</p>	<p>Locomotive shortages - 3 Congestion - 3 Bad weather - 2 Crew shortages - 1 Too much volume - 1 Track maintenance - 1 Delays in service interruption recovery - 1 Derailments - 1</p>						

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
51. The railroad is responsive in resolving my problems.		BN - 1 TMBL - 1	UP - 1	UP - 1	BN - 1		UP listens to complaints, but is not very effective in addressing issues. Results leave room for improvement - 1
52. My company probably pays less than average rates for rail service.	1	1	1	1			
53. The rail rates my company pays has a direct affect on the quality of service we receive.				2	2		
54. My company would be willing to pay 10 percent more to obtain more reliable rail service.		1		1	1	D/N - 1	
55. Rail rates in general are competitive with truck rates.		3			1		

General Questions

QUESTION	Comments
93. Are railroads offering you scheduled service? (yes, which ones/no) If so, has this improved reliability? (yes/no)	Yes - 4; BN - 2; UP - 2; <ul style="list-style-type: none"> • All of ocean carrier's trains are on a scheduled service - 1 • The railroad puts in extra trains if the ocean carrier has increased volume - 1 No - 4 Yes - 0
94. Have the railroads offered you other special programs? (yes, which ones/no) If so, what type?	No - 3 Yes - 1; <ul style="list-style-type: none"> • UP's Focus Program: Trains in Seattle get a special Focus Program designation so the UP runs them with minimal delays and moves other trains out of the way that are in front to minimize disruptions - 1

QUESTION	Comments
<p>95. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?</p>	<p>Declined - 4; worse than nationally - 1; • The increased volume has put a strain on the rail system - 1 • Improved - 0 • Remained the same - 0</p>
<p>96. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?</p>	<p>Declined - 4 Improved - 0 Remained the same - 0</p>
<p>97. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., unit train versus partial train, carload versus intermodal, or long-haul versus short-haul)? (yes/no) If so, what type?</p>	<p>Yes - 3; • Unit trains have priority - 2 • The UP prioritizes trains based on an attempt to survive, not for malicious reasons. Sometimes the UP delays the ocean carrier's train if another train is in the way because the UP does not want to have to move trains twice if possible - 1 No - 1</p>
<p>98. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)</p>	<p>No - 3; It's the reverse - 1 Unknown - 1 Yes - 0</p>
<p>99. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • Congestion will increase and hamper the ocean carrier's ability to service its customers - 1 • Capacity of terminals, track and assets may not be sufficient to meet the continued volume growth - 1 • Class 1s may restrict service to ocean carriers so they will not have as much flexibility to serve customers as before. Class 1s may offer only cookie-cutter service and tell ocean carriers they will move their trains only on certain days, whereas now, ocean carriers can forecast needs based on anticipated ship arrivals each week and advise the railroads when they want a train pulled out - 1 • The Port of Tacoma does not seem to be as well organized and professionally run as it could be. There is not enough vision and management is out-of-step and behind the times compared with California ports. The Port of Tacoma built a large facility, but does not have a good plan, especially for dealing with intermodal cargo and rail issues. The infrastructure is constrained and is the most difficult problem to overcome - 1

QUESTION	Comments
<p>100. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<ul style="list-style-type: none"> • Yes – 3; • The ocean carrier conducts regularly scheduled and ad hoc meetings with the railroad to discuss service – 2 • The ocean carrier is looking at establishing more all-water vessel strings to avoid using the railroads – 1 • The ocean carrier changes routing based on service issues – 1 • The ocean carrier is working with the railroad to block trains better to one destination as much as possible rather than having to stop trains in Chicago to break them apart – 1 • The ocean carrier is trying to load and release trains to the railroad on time – 1 • The ocean carrier changes the port in which it discharges containers for certain lanes in order to access better rail service – 1 • The ocean carrier is involved at the local level with port and local officials to help improve rail service – 1 • The ocean carrier is investigating Canadian ports such as Price Rupert as well as Mexican ports to determine if they make sense – 1 • No – 1
<p>101. What are the most pressing rail infrastructure issues in Washington?</p>	<ul style="list-style-type: none"> • Too many single tracks – 2 • Port of Tacoma – 1 • Insufficient terminal and track capacity – 1 • Bullfrog Junction – 1 • Various chokepoints – 1 • Rail infrastructure will not be able to keep pace with increased import volume, so railroad and shipper business processes must change because it is impossible to build enough tracks to keep up – 1
<p>102. What policy measures and programs should Washington State establish to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Washington could make it easier to build rather than making it a 10-year ordeal by simplifying permitting and environmental studies – 2 • Washington could streamline the process to make it easier for railroads and ports to expand and improve capacity – 1 • Washington could increase the highway weight limits between ports and rail terminals – 1 • Washington should establish a Rail Committee under the Department of Transportation that would have responsibility and domain over ports and rail operations. Currently, there is no single regulating board in Washington to deal with rail issues, so problems do not get resolved – 1

QUESTION	Comments
<p>103. What infrastructure investments should Washington State make to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Washington could provide improved highway access between marine terminals and rail terminals in Seattle - 1 • Washington could fund double tracks - 1 • Washington could build a bridge to avoid congestion - 1 • Washington could establish off-port freight yards for rail cargo outside metropolitan areas to decrease congestion - 1 • Unknown - 1 • This is not the State’s responsibility; it is the railroads’ - 1
<p>104. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?</p>	<ul style="list-style-type: none"> • Yes - 3; • The Federal government should consider assisting railroads with infrastructure expansion plans - 1 • The government should decide what the country’s goal is for rail service, and if it is the best way to move cargo. If the answer is yes, then the government should make serious investments to make the rail system work efficiently - 1 • The Federal government could simplify policies and procedures to allow railroads to operate more efficiently - 1 • The Federal government should foster industry-government collaboration - 1 • No - 1

WTC Rail Study Participation

QUESTION	Yes	No	Comments
<p>22. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?</p>		4	
<p>23. Would you like to receive e-mail notices about the progress and findings of the Study?</p>	4		
<p>24. Would you be willing to talk further with us over the course of the study?</p>	4		

Transload Warehouse Survey

Conducted by Cambridge Systematics
on behalf of the
Washington Transportation Commission
for the
Washington Statewide Rail Capacity and Needs Study

QUESTION	Yes	No
Do you desire your answers be kept confidential?	4	

Shipping Profile

QUESTION	RESPONSE
56. Where are your facilities in Washington?	<ul style="list-style-type: none"> • Kent - 2 • Auburn - 1 • Sumner - 2
57. What key import commodities that enter through the Ports of Seattle, Tacoma, and Portland do you transload or deconsolidate in your Washington facility?	General department store merchandise - 2 Retail goods - 1 Apparel - 1 Footwear - 1
58. Who are your primary transload and deconsolidation customers?	Various
59. In 2005, how many FEUs did you transload in your Washington facility onto rail equipment for onward movement to U.S. interior points?	1,400 to 22,000 FEUs
60. Is the volume transloaded onto rail equipment consistent year-round or is there a peak or slow season?	Peak - 4 <ul style="list-style-type: none"> • July to November - 2 • July to October - 1 • August to November - 1 Consistent - 0
61. In 2005, how many FEUs did you transload in your Washington facility onto trucks for onward movement to U.S. interior points?	2,000 to 5,600 FEUs

QUESTION	RESPONSE
<p>62. Is the volume transloaded onto trucks consistent year-round or is there a peak or slow season?</p>	<p>Peak – 4</p> <ul style="list-style-type: none"> • July to November – 2 • July to October – 1 • August to November – 1 <p>Consistent – 0</p>
<p>63. To which Class 1, shortline railroads, and/or IMCs do you deliver transloaded rail equipment in Washington?</p>	<p>BN – 4 UP – 3 IMCs: Pacer – 2 Hub – 2 JB Hunt – 2 Mitco – 1 NYK Logistics – 1 Alliance – 1 Swift – 1 Global Logistics – 1 Schneider – 1</p>
<p>64. In which Washington cities do you tender rail equipment to Class 1, shortlines and/or IMCs?</p>	<p>Seattle – 3 Tacoma – 1 Tukwila – 1</p>
<p>65. What percent of containers that you transload and deconsolidate in Washington are routed by your customers with railroads and IMCs, and what percent are you responsible for choosing routing?</p>	<p>Customer: 100% – 3 40% – 1 Transload Warehouse: 0% – 3 60% – 1</p>
<p>66. Do you require special rail equipment? (yes/no) If so, what type?</p>	<p>Yes – 3</p> <ul style="list-style-type: none"> • 53’ rail containers – 3 • 48’ rail containers – 1 <p>No – 1</p>
<p>67. Do you own or long-term lease any rail equipment? (yes/no) If so, how many pieces of rail equipment by type?</p>	<p>No – 3 Yes – 1 Quantity: 40,000</p>
<p>68. Do you participate in a guaranteed equipment availability program with a railroad? (yes, which ones/no)</p>	<p>No – 3 Yes – 1</p> <ul style="list-style-type: none"> • Swift – 1 • Hub – 1 • Pacer – 1 • Global Logistics – 1

QUESTION	RESPONSE
<p>69. What decision criteria do your customers use in selecting onward movement by rail or truck?</p>	<ul style="list-style-type: none"> • Price – 3 • Speed to destination – 1 • Transit time – 1 • In-store need date – 1 • Ability to provide shipment visibility tracking, reporting and Automated Shipment Notices (ASN) – 1 • Ability to accurately report the cargo that was unloaded from ocean containers and reloaded into truck or rail containers – 1
<p>70. Do the railroads your customers use have sufficient capacity (tracks, equipment, personnel) to meet their requirements? (yes/no) If no, explain the issues.</p>	<p>No – 2 Yes – 1 Unknown – 1</p> <ul style="list-style-type: none"> • Shortage of locomotives – 1 • UP gate reservation system is cumbersome; it helps with yard congestion, but not with getting trains moved – 1 • Railroads are working in an overcapacity market. Los Angeles plays a role in what happens on the entire West Coast. When ocean carriers shift intermodal containers to the PNW from Los Angeles, it eats up capacity and equipment in the PNW – 1
<p>71. Upon which critical service factors do you evaluate the performance of railroads?</p>	<ul style="list-style-type: none"> • Equipment availability – 2 • Train schedule – 1 • On-time performance – 1 • Consistent on-time performance – 1 • Timeline for loading cars at the ramp – 1 • Having chassis and wheels at destination – 1 • Bunching (when the railroad makes too many containers available to the customer at destination on one day, which overloads the customer’s operations) – 1 • N/A; IMC evaluates the railroads – 1
<p>72. Are there rail service issues that affect your company’s ability to perform efficiently (in terms of costs, operations, etc.) and meet customer requirements? (yes/no) If so, what type?</p>	<p>No – 2 Yes – 2</p> <ul style="list-style-type: none"> • Locomotive shortages – 1 • Crew shortages – 1 • Transit time delays – 1 • When bunching occurs, the transload warehouse must dray containers to an off-site yard for staging and pay a per diem and an additional dray charge – 1

QUESTION	RESPONSE
<p>73. Are you aware of any particular choke points in rail system in Washington? (yes/no) If so, where?</p>	<p>Yes – 2</p> <ul style="list-style-type: none"> • South of Tacoma – 1 • Hinkle and Englewood, Oregon yards – 1 • UP Portland and Brooklyn, Oregon yards – 1 • BN Agro interchange – 1 • Bullfrog Junction – 1 <p>No – 1</p> <p>Unknown – 1</p>
<p>74. Of the cargo entering through the Ports of Seattle, Tacoma and/or Portland, do you expect the amount of cargo that your company transloads or deconsolidates onto rail equipment to increase, decrease, or stay the same in the next five years?</p>	<p>Increase – 4</p> <p>Decrease – 0</p> <p>Remain the same – 0</p>
<p>75. Are there any trends in your industry that will impact the use of rail in the next five years? (yes/no) If so, what?</p>	<p>Yes – 3;</p> <ul style="list-style-type: none"> • Ocean carriers do not want containers to move inland, so there will be more transloading on the West Coast – 1 • IMCs cannot always get sufficient empties westbound for transloading and it's hard to balance equipment eastbound and westbound – 1 • The rail industry is converting more containers into trailers – 1 • It is a challenge to get enough truck drivers to perform local drays from warehouses to rail ramps – 1 • There is a shortage of long-haul truck drivers – 1 • Importers are using more all-water services to the East Coast and Gulf – 1 • Some customers are moving cargo back through Los Angeles that had been moving over Puget Sound ports in 2005 due to Los Angeles congestion – 1 • Under a new supply chain strategy, a major importer intends to shift imports of certain hard good lines from East and Gulf Coast ports to the Ports of Seattle and Tacoma. The importer will move approximately 24,000 FEUs between July and December 2006 intermodally through Chicago where the cargo will be deconsolidated. <p>No – 1</p>

Rail Profile and Recent or Existing Rail Issues

Answer the following for each railroad used.

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
24. It is easy to place bookings with my railroad.		BN - 1 UP - 2				N/A - 2	Customer books with railroad - 1; Transload warehouse books with IMC - 2
25. The railroad supplies the requested number of empty rail equipment per the booking.		BN - 1 UP - 1		BN - 1 UP - 1		D/N - 2	Transload warehouse books with IMC - 2
26. The railroad supplies the empty rail equipment within the expected time period.		BN - 1 UP - 1		BN - 1 UP - 1		D/N - 1	Transload warehouse books with IMC - 2
QUESTION	0	1-2	3-7	8-14	14+		
54. On average, within how many days of the requested date does the railroad supply empty rail equipment?		BN - 1 UP - 1	BN - 1 UP - 1			D/N - 2	IMC handles - 1
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
55. When my company delivers loaded containers to the rail ramp, the railroad loads and moves the containers on the train within the expected period of time.		BN - 2 UP - 2		BN - 1 UP - 1		N/A - 1	IMC handles - 1
56. The railroad delivers loaded rail equipment to destination according to the railroad's published trip plan.		BN - 1 UP - 1	BN - 1 UP - 1	BN - 1 UP - 1		N/A - 1	IMC handles - 1

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
QUESTION	0	1-2	3-7	8-14	14+		
57. On average, within how many days of the railroad's published trip plan does the railroad deliver loaded rail equipment to destination?		BN - 3 UP - 1	UP - 2			N/A - 1	IMC handles - 1
58. What reasons does the railroad provide for the cause of delays?	Weather - 2 Congestion at switching yards and on tracks- 2 Lack of capacity - 1 Locomotive shortages - 1 Engineer shortages - 1 Track problems - 1 Unknown - 1						
QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
56. The railroad is responsive in resolving my problems.					BN - 2 UP - 2	N/A - 1 D/N - 1	IMCs handle complaints - 2; Railroads will not invest to improve customer service if it affects earnings because customers have no other place to go - 1
57. My company probably pays less than average rates for rail service.				3		N/A - 1	IMC handles - 1
58. The rail rates my company pays has a direct affect on the quality of service we receive.		1		2		N/A - 1	IMC handles - 1
59. My company would be willing to pay 10 percent more to obtain more reliable rail service.				2		N/A - 2	IMC handles - 1

QUESTION Please indicate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/Not Applicable	Comments
60. Rail rates in general are competitive with truck rates.		1		2		N/A - 1	IMC handles - 1

General Questions

QUESTION	Comments
105. Are railroads offering you scheduled service? (yes, which ones/no) If so, has this improved reliability? (yes/no)	No - 3 Yes - 1 <ul style="list-style-type: none"> • BN - 1 • UP - 1 Yes - 1 No - 0
106. Have the railroads offered you other special programs? (yes, which ones/no) If so, what type?	No - 2 Yes - 2 <ul style="list-style-type: none"> • During peak season, the UP, in particular, will bring in an outside equipment provider that the transload warehouse can use and obtain a credit on the invoice price - 1 • Transload warehouse uses the Rail Line system to track shipments nationally with the BN and UP - 1
107. Has the quality of rail service in Washington improved, remained the same, or declined in the past two years?	Remained the same - 3 Improved - 1 Declined - 0
108. Has the quality of rail service nationally improved, remained the same, or declined in the past two years?	Declined - 3 Remained the same - 1 Improved - 0
109. In the past two years, have you noticed any changes in traffic priorities on the railroads (e.g., partial trains versus unit trains, carload versus intermodal or long-haul versus short-haul)? (yes/no) If so, what type?	No - 3 Yes - 1; Unit trains have priority - 1
110. Has the movement of traditional rail cargo (e.g., bulk commodities) been affected negatively by the movement of intermodal cargo? (yes/no)	Yes - 2 No - 2

QUESTION	Comments
<p>111. What concerns, if any, does your company have about the quality of rail service in Washington and nationwide in the future?</p>	<ul style="list-style-type: none"> • Capacity issues - 2 • Railroads' ability to handle volume increases - 1 • Lack of visibility and real-time shipment tracking capabilities - 1 • Destination ramp congestion - 1 • Limitations on free time - 1 • Poor customer service and not enough staff - 1 • Pricing - 1 • Transload warehouse's ability to service its customers when rail service needs improvement - 1 • Equipment imbalances - 1 • Ocean carriers impact the rail system because of their attempt to reposition empty equipment back to the West Coast at very low rates - 1 • Railroads are trying to push through major rate increases to intermodal customers to cover IT, infrastructure, and quality of service improvements demanded by customers - 1
<p>112. Has your company taken any action to resolve or mitigate rail service issues? (yes/no) If so, what?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • Uses more trucks - 1 • Leased subyard to stage westbound containers for delivery to avoid rail demurrage - 1 • Leased own trucks to hostel containers - 1 • Management holds synergy meetings with the railroad to try to mitigate rate increases - 1 • Put on a 2nd shift in the warehouse - 1 • Management discussed opportunities with the UP to create a competitive situation with the BN - 1 • Management discussed with the BN how the transload warehouse could tender loads to make BN's operations more efficient - 1 <p>No - 1</p>
<p>113. What are the most pressing rail infrastructure issues in Washington?</p>	<ul style="list-style-type: none"> • Track along the I-5 Corridor - 1 • Yard capacity management - 1 • At-grade crossings in Seattle - 1 • Sig Yard - 1 • Insufficient on-dock rail at Washington ports - 1 • Urban encroachment on tracks and railramps - 1

QUESTION	Comments
<p>114. What policy measures and programs should Washington State establish to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Washington needs to understand that rail issues are a problem in Seattle - 1 • Washington should establish a Transportation Board with public members from the business community to work with railroads to balance service and rates - 1 • Direct discharge from vessels to trains at ports is needed to avoid going through port gates on chassis to get to railramps - 1 • The State could partner with ocean carriers to make ramps and on-dock rail easier to construct from a permitting and process standpoint - 1 • Unknown - 1
<p>115. What infrastructure investments should Washington State make to improve rail service in Washington?</p>	<ul style="list-style-type: none"> • Increase on-dock rail at Washington ports - 1 • Washington should use the Los Angeles Alameda Corridor as a model to find a way to move trains exiting the Port of Seattle more effectively, perhaps by revamping the Viaduct - 1 • The Argo, Sig, and Tukwila Yards have terrible infrastructures. The State and City of Seattle have argued a long time about what to do to improve the rail infrastructure - 1
<p>116. Should the Federal government be more involved in improving rail service in Washington and nationally? (yes/no) If so, how?</p>	<p>Yes - 3;</p> <ul style="list-style-type: none"> • Help railroads double track certain areas like the I-5 Corridor and Columbia Gorge - 1 • Find a way to make the track from Seattle to Los Angeles a common track, not owned by the UP - 1 • Lay more tracks - 1 • The government could subsidize rates from the PNW to inland U.S. points since, for example, rail rates from PNW points to the East Coast are \$200 higher than from Los Angeles to the East Coast - 1 <p>No - 1</p>

WTC Rail Study Participation

QUESTION	Yes	No	Comments
<p>25. Were you aware of the Washington State Rail Study prior to being contacted by Cambridge Systematics?</p>		4	
<p>26. Would you like to receive e-mail notices about the progress and findings of the Study?</p>	4		
<p>27. Would you be willing to talk further with us over the course of the study?</p>	4		