

Task 8 Technical Memorandum

Analysis of Freight User Fee Funding Sources

technical

memorandum

DRAFT

prepared for

Washington State Joint Transportation Committee

prepared by

Cambridge Systematics, Inc.

with

Foster Pepper, LLC
Gil Hicks

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September 2008

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1.0 Introduction

There are hundreds of wholly or partially unfunded transportation projects of importance to the freight industry in Washington State. Project lists are maintained by the Washington State Department of Transportation (DOT), the Freight Mobility Strategic Investment Board, the FAST Corridor coalition, the Washington State Legislature, and other groups. The cumulative size of the need exceeds the funding capacity of existing revenues (e.g., motor fuel tax, license fees), especially given recent declines in motor fuel tax revenues¹.

To address the need for new revenue sources for freight projects, the Joint Transportation Committee of the Washington State Legislature initiated the *Washington State Freight Investment Study*. To date, the study has produced a report on existing and potential freight funding sources (Task 1 through 4)² and an analysis of the impacts of a fee on freight container movements (Task 6)³.

Task 8 of the study requires the consultant team to investigate user fees and special taxes in more detail, going beyond the analysis of general public sources of transportation funding contained in the Tasks 1 to 4 report and in the *Long-Term Transportation Finance Study* completed previously⁴. The specific sources described in this Task 8 memorandum were selected from a longer list by the Joint Transportation Committee Policy Group at their June 2008 meeting.

The purpose of the analysis is to inform the ongoing discussion of new funding sources by the JTC Policy Group and the Freight Stakeholder Group formed for this study⁵. It is not intended to recommend any particular source. Each source has advantages and disadvantages that must be evaluated in the context of the projects being funded, since some funding sources are more appropriate for

¹ See a recent article in the Olympian: *Gasoline prices cost state tax revenue – motorists cut back to save money, and that means less for road projects* (<http://www.theolympian.com/112/story/507035.html>).

² The Task 1-4 Report is accessible at: <http://www.leg.wa.gov/documents/LTC/jtc/Freight/20070926%20Cambridge%20Draft%20Working%20Paper%20Tasks%201-4.pdf>.

³ The Task 6 economic analysis of container fees is accessible at: http://www.leg.wa.gov/documents/LTC/jtc/Freight/Leachman_Report.pdf.

⁴ The Long-Term Transportation Financing Study was prepared by Cambridge Systematics for the Washington Joint Transportation Committee. It is accessible at: <http://www.leg.wa.gov/JTC/CompletedStudies/>.

⁵ The Freight Investment Study Policy Group includes 10 legislators, one transportation commissioner, and a representative from the Governor's office. The Freight Investment Study Stakeholder Group is composed of industry representatives (e.g., ports, trucking, railroads, shipping industry, labor associations, etc.), and other groups.

certain projects than others. By “appropriate”, we mean that the funding source has sufficient yield and reliability and would be efficient and practical to implement and administrate. In addition, the source should provide for a close nexus between project benefits and the amount of the user fee. Port-related user fees, for example, are more appropriate for projects that are both in close proximity to the port and beneficial to port users, rail charges are more appropriate for rail projects, and so forth.

The Stakeholder Group has insisted that this nexus between funding sources and project benefits must be a priority in assembling the funding portfolio for any project. This nexus also sends a strong price signal to users that pay the fee thus promoting the efficient use of the infrastructure being improved. In addition to these criteria, both the Policy and Stakeholder groups have agreed to consider three other criteria for describing the advantages and disadvantages of each of these user fee sources:

- The potential yield of each source;
- Reliability, including suitability for bonding; and
- Implementation issues, including any administrative or legal barriers to implementing the funding source.

This technical memorandum provides information for each of the criteria above. It provides background on the fee, including examples of where it is currently implemented, what is the fee level, and by whom it is paid. The fees are grouped into port-related fees, road user fees, and rail user fees.

1.1 WHAT IS A USER FEE?

Before proceeding, it is helpful to clarify the definition of user fees, since they are sometimes confused with other sources of public revenue. For each of the sources in this paper, an argument can be made that it meets the definition of a user fee. However, some fit the definition better than others, and not all would necessarily qualify as a user fee under Washington State law.

Hugh Spitzer of the law firm Foster Pepper PLLC has written a paper clarifying the definition of user fees and taxes as established under Washington State Law⁶. According to the paper, taxes are general purpose sources of revenue that may be imposed anywhere and used for anything. User fees are intended to offset the cost of commodities, burdens, and regulation.

- **Commodity charges** are fees allocated directly to consumers of government products and services (public goods). Economists sometimes treat

⁶ Spitzer, H., Taxes vs. Fees: A Curious Confusion, *Gonzaga Law Review*, Volume 38, 2002/2003.

commodity charges as a means to account, allocate, and pay for positive externalities created by public goods. In the transportation context, roadway tolls qualify as a commodity charge, since they are fees paid to use a specific government service.

- **Burden offset charges** are fees intended to allocate and recover the cost of ongoing programs and to handle negative impacts from those who cause them. Economists view these charges as an efficient way of internalizing the cost of negative externalities. In the transportation context, the diesel fuel tax comes close to the definition of a burden offset charge, since the funds collected are proportional to the burden (i.e., roadway maintenance) imposed on the transportation system by diesel trucks.
- **Regulatory charges (inspection and processing fees)** are charges to individuals or entities whose actions give rise to special regulatory oversight. A transportation licensing fee meets this definition if the funds are used only to cover the cost of regulation. This is not the case for most licensing fees in Washington State.

Table 1.1 summarizes the differences between commodity charges, burden offset charges, and regulatory charges, as defined in Washington State. Note that state law requires user fees to be deposited into a special account dedicated to projects that benefit or offset the impact of those who pay the fee.

Table 1.1 General Classification of Taxes and User fees

Classification	Examples	Basic Characteristics	Protections	Accounting
Taxes	Property taxes, excise taxes, income taxes, certain license fees	Imposed to raise money for any governmental purpose. No relationship between tax burden and benefits to an individual taxpayer.	Express statutory authority always required. Subject to limits, uniformity requirements and other controls on tax levels and allocation of burden among taxpayers.	Maybe deposited in general fund or any other funds. Maybe used for any lawful governmental purpose.
User Fees				
Commodity Charges	Electrical rates, water rates, connection charges, irrigation assessments	Imposed to pay for the provision of commodities or services of direct benefits to consumer	Commodity charges must be uniform within classes of customers and classes of service. May not exceed allocable share of cost.	Must be deposited in special fund. May not be transferred to general fund or other special funds for purposes of those funds.
Burden Offset Charges	Sewer rates, garbage rates, storm water utility charges, growth impact fee	Imposed to offset cost of handling burdens on others and on public resources (“externalities”) caused by payer’s activities.	May not exceed payer’s allocable share of cost of programs or improvements to handle burdens caused by payer’s activities. Must be uniform within classes of service and classes of users. Certain impact fees must be used within certain time periods for identified facilities.	Must be deposited in special fund. May not be transferred to general fund or other special funds. Must be used to pay for program facilities or activities.
Processing and Inspection Fees (True “Regulatory Fees”)	Building permit fees, housing inspection fees, professional licensing fees	Imposed to pay costs of government handling of payer’s applications or request, or to pay for inspection and control of payer’s activities.	May not exceed allocable share of cost of processing, licensing or inspection and enforcement programs.	Must be used to pay for processing or program activities.

Special Assessments	LID, ULID, LUD< RID Assessments	Imposed on property to offset costs of capital improvements that directly increase the value of that property.	May not exceed increase of value of property (“benefit”) from improvement. Must be fairly allocated among all benefited properties.	Must be deposited to special assessment fund or bond fund. May not be transferred to general fund or any other special funds. Must be used for specified improvements.
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Source: Spitzer, H, Taxes vs. Fees: A Curious Confusion, *Gonzaga Law Review*, Volume 38, 2002/2003.

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2.0 Port User fees

2.1 INTRODUCTION

User fees are frequently collected at ports to pay for services or improvements within the port area. Some of the many user fees already paid by the maritime industry include berthage and moorage fees, on-dock rail fees, and others.

Some ports (specifically the Ports of Los Angeles and Long Beach) have instituted additional fees to cover infrastructure costs or freight-related environmental impacts beyond the port itself. Recent new charges include container fees, which are fees on the movements of marine boxes through the ports, and bulk cargo fees. This section discusses these types of fees and their potential applicability to the Puget Sound ports.

Container Fees

Collection Mechanism

There are several ways that fees on containers could be collected. Some mechanisms include the following:

- **Collection at the port gates.** Ports are generally bounded by gates controlled by the port authority, which are a convenient location for collecting fees. The Ports of Los Angeles and Long Beach currently collect fees on containers at the port gates (the PierPass Traffic Mitigation Fee), and will be expanding that collection mechanism for a new container fee (Infrastructure Fee) to be implemented in 2009. Trucks carrying loaded containers pass through the gates and are recognized by Radio Frequency Identification (RFID) tags on their side view mirrors. The RFID number is then connected to a database that links each truck to its customer [the cargo owner, or Beneficial Cargo Owner (BCO) as it is termed in the industry]. A nonprofit corporation responsible for administering the fee sends a bill to the cargo owner charging them for each container movement. Table 2.4 and Table 2.7 contain more detail on the collection mechanism for the Infrastructure Fee and the Traffic Mitigation Fee. Note that although these fees are charged to the BCOs at the Ports of Los Angeles and Long Beach, truckers could also be charged the fee directly.
- **Collection through tolls in the vicinity of the Port.** Ports are connected to the surrounding area by a limited number of access routes (either rail or road). A series of tolls imposed on one or more of these close-in access points would approximate a container fee, since it would largely impact container-carrying port traffic. The best example of such a toll is the Alameda Corridor in Southern California. Container fees are charged to rail intermodal moves

along the corridor between the Ports and the rail hubs east of downtown, whether they are by truck or by rail. The fee is collected by the Alameda Corridor Joint Powers Authority (JPA), and is collected primarily through self-reporting by the railroads. Table 2.8 contains more detail on the collection and administration of the Alameda Corridor container fee. An alternative tolling mechanism would be for the local jurisdiction (e.g., the Cities of Seattle or Tacoma) to set up a series of toll gantries on the roads leading up to the port. Such a system may require legislative approval.

- **Other mechanisms.** It is possible that the city or cities encompassing the port could charge a business and occupation (gross receipts) tax on either the container carriers or the cargo owners. This would not be so much a container fee as a fee on the economic activity involving containers. In Washington State, there is some precedent for using business and occupation taxes for transportation purposes (transit districts may use it to raise revenue, subject to voter approval). Nevertheless, more research would be needed to determine whether it could be legally extended as a means to pay for port infrastructure. If it could be implemented in Washington State, the funds would be controlled by the Cities of Seattle and Tacoma or by a special taxing district.

Yield and Reliability

The potential yield from a container fee will vary with the following:

- The fee level, which may be set based on a revenue goal or as a means of meeting a funding deficit on a set of projects;
- The application of the fee (e.g., whether it is applied to all containers, imported and exported, loaded and unloaded, or only to a subset of containers); and
- Container volumes into the ports.

Container volumes into the Puget Sound ports are shaped by a number of forces, including the health of the world economy, the shifting trade relationships with the United States and its neighbors, the size of the local consumer market in the Puget Sound Region, and the relative cost of using ports. The cost of using the ports includes both the time and direct monetary cost associated with moving goods through the ports to their final destination. As discussed in Dr. Robert Leachman's paper *Port and Modal Elasticity of Containerized Asian Imports Via the Seattle-Tacoma Ports*, imposition of fees at the Puget Sound ports could cause a decrease in their relative attractiveness vis-a-vis competitor ports. Dr. Leachman found that fees above \$30 per container are likely to cause some cargo to begin shifting to competitor ports, but was unable to determine the effect of fees below \$30.

The following scenario looks at estimating the range of annual revenue collected by charging a fee between \$1.00 and \$30 per Twenty-Foot Equivalent Units

(TEU) on all loaded containers: imports, exports, and domestic. Container volumes are assumed to correspond to 2007 volumes published by the Ports of Seattle and Tacoma. Table 2.1 (below) shows these container volumes for the two ports.

Table 2.1 2007 Container Volumes
In TEUs

	International Loaded	International Empty	Domestic	Total	Total Excluding Empty
Port of Seattle	1,314,143	314,351	345,010	1,973,504	1,659,153
Port of Tacoma	1,139,903	262,979	522,052	1,924,934	1,661,955
Totals	2,454,046	577,330	867,062	3,898,438	3,321,108

Source: Port of Seattle 2007 Annual Statistics and Port of Tacoma 2007 Annual Statistics.

The following assumptions have been applied to the revenue forecast:

- **Fees are charged only on loaded containers.** This follows the practice adopted by Ports of Los Angeles and Long Beach, where an Infrastructure Cargo Fee (ICF) will be implemented beginning January 2009. The ICF will be levied on the owners of the cargo; and since an empty container has no cargo to own, no fee is imposed on empty containers.
- **No diversion of containers.** This assumption was made for the purposes of calculating the short-term, maximum yield from the imposition of a fee less or equal to \$30. In the short-term, demand tends to be less elastic than in the long term for multiple reasons (e.g., vessel schedules, lift and storage capacities, warehousing contracts, etc.); and since steamship lines are committed to relatively long-term port contracts, shifts in supply chains and vessel service do not happen immediately and may take years to become apparent and significant. This lag may be caused by some combination of contract rigidities between shippers and steamship lines; alternative ports might face capacity constraints; and as other ports implement user fees, as is currently happening at Ports of Los Angeles and Long Beach, the incentives for relocating cargo diminish.
- **Existing deficiencies remain.** Existing impedances to container flows (due to congestion, delays, etc.) were assumed to remain. This assumption ignores the certainty that the fee revenues would be dedicated to improving container flow. In his analysis for the Southern California ports, Dr. Leachman showed that the removal of bottlenecks and subsequent improvements to container flow offset the diversionary effects of a fee. We do not assume that these results would occur for the Puget Sound ports. Unlike Southern California, the levels of congestion within and outside the

Ports of Seattle and Tacoma are not as severe as Southern California, nor is the regional market (i.e., local consumption) for imported goods as significant as it is for imported cargo in Southern California.

- **Fees are charged only on imported containers.** There are several reasons to focus the container fee on imports and to avoid charging exports. First, although Dr. Leachman’s diversion analysis only evaluated the effects of fees on imported cargo, he did comment orally during his presentation to the Stakeholder Group (January 23, 2008) that exports have much higher sensitivity to cost, thus he would advise not charging exports. Second, a significant share of exported cargo originates from Washington State, where its production, processing, and manufacture generate economic activity for the State. Third, agricultural products comprise the majority of exported cargo that originates from Washington State. Domestic agricultural industries, and especially growers, receive substantial government subsidies and assistance. These policies would conflict with a container fee charge on exports. It should be noted, however, that there may be Federal constitutional issues associated with charging fees only on import containers. Care would have to be taken to ensure the charge would not be characterized as an unconstitutional duty or impost. Table 2.2 below shows the relative flows of imported and exported containers by port.

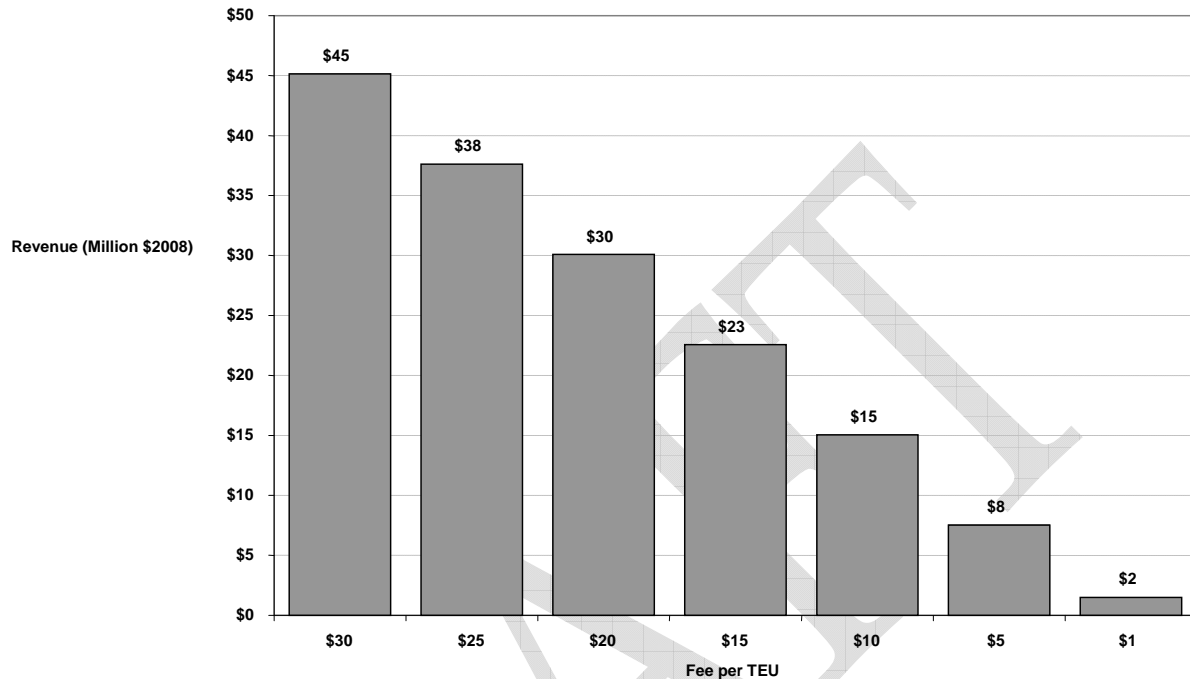
Table 2.2 2007 Container Volumes by Port
In TEUs

	Imported	Exported	Domestic	Empty	Total
Port of Seattle	810,453	503,690	345,010	314,351	1,973,504
Port of Tacoma	694,032	445,871	522,052	262,979	1,924,934
Total	1,504,485	949,561	867,062	577,330	3,898,438

Source: Port of Seattle 2007 Annual Statistics and Port of Tacoma 2007 Annual Statistics.

Given these assumptions and based on 2007 imported container volumes, fees ranging between \$1.00 and \$30 per loaded TEU would result in annual revenue ranging between \$2 million and \$45 million, respectively (Figure 2.1). If a fee were charged on both imported, exported and empty containers, annual revenues from a \$1 per TEU fee would generate \$3 million and a \$30 fee would generate \$100 million. This is roughly double what could be raised by applying the fee to imports only.

Figure 2.1 Range of Annual Revenue from Fees on Imported Containers Only
In 2008 Million Dollars



Source: Cambridge Systematics, Inc.

Reliability and Bonding Capacity

Historical data show that containerized cargo is sensitive to economic cycles. For example, volumes of loaded containers at the Port of Seattle grew at an annual average rate of 4.5 percent between 1999 and 2007, but dropped 16.5 percent during the economic downfall of 2001 and achieved maximum growth at 30 percent in 2004⁷.

Bonding capacity depends on several variables, such as the term of the bond, the conditions of the financial markets that reflect the levels of the interest rates, the reliability of the revenue against which the bond will be issued, and the rating of the issuer. It is necessary to make assumptions for each of these variables in order to approximate the bonding capacity. The bonding capacity of a container fee revenue stream in a given year could be up to 10 times the amount of the stream if the following assumptions are made:

⁷ Source: <http://www.portseattle.org/seaport/statistics/pos10yearhistory.shtml>.

- Twenty-year bond maturity.
- Interest rate of 4.7 percent for AA rated bonds, based on 2008 data from FMS Bond Inc., a municipal bond specialist.
- A 1.3 required coverage factor. This is a typical value equivalent to setting aside 30 percent of revenues to cover the debt.

Table 2.3 shows the bonding capacity for the different container fees.

Table 2.3 Bonding Capacity from Different Fee Levels on Imported Containers
In 2008 Dollars

Container Fee (In Dollars)	Annual Revenue (In Millions of Dollars)	Bonding Capacity (In Millions of Dollars)
\$30	\$45.1	\$444
\$25	\$37.6	\$370
\$20	\$30.1	\$296
\$15	\$22.6	\$222
\$10	\$15.0	\$148
\$5.00	\$7.5	\$74
\$1.00	\$1.5	\$15

Source: Cambridge Systematics, Inc.

Administrative and Legal Issues

The administrative cost and legal defensibility of a container fee depends on many factors, such as the incidence of the fee (e.g., which types of containers, who pays the fee); the institution designated for fee collection; and the use of the fee revenues. Some considerations are listed below.

Need for Creation of New Institutions

Imposition of a container fee may require the creation of new institutions. Collection of container fees at the gates of the Los Angeles/Long Beach ports necessitated the creation of two new nonprofit organizations (PierPass, which collects the Traffic Mitigation Fee; and NewCo, which will collect the new infrastructure fee in 2009). The nonprofits were created primarily to ensure that fee revenues are used solely for the purposes for which they were intended.

In Washington State, an interlocal agreement among Puget Sound ports could create a similar entity to collect the fees. Such agreements are made possible through the Shipping Act of 1984, which gave antitrust immunity to ports and marine terminal operators to establish agreements, including, but not limited to

labor practices, infrastructure development, tariffs, railroad practices and services, and environmental policy.

Information Technology Requirements

Imposition of container fees may require substantial information technology improvements. For example, collection of the Traffic Mitigation and Infrastructure Fees in Los Angeles/Long Beach required the creation of a comprehensive database linking cargo owners and the trucks that serve them, and also required the distribution of RFID tags to all trucks. To the consultant's knowledge, no such database exists in Puget Sound. If trucks were charged directly, however, this database would not be necessary.

A tolling approach to collection of a container fee may require investment in new toll infrastructure (gantries, distribution of transponders, back office support, etc.). The Alameda Corridor JPA avoided such costs by collecting the toll through self-reporting by the railroads. Self-reporting, however, is susceptible to fee evasion, and may require audits.

Legal Defensibility

The following legal issues should be considered in the design of a container fee charge:

- **Need for legal authority to collect the fee.** The institution collecting the fee must have the legal authority to do so. Under the Revised Code of Washington (RCW) 53.08.070, ports may institute wharfage, docking, warehousing, and port and terminal charges without right of appeal. A new container fee imposed by a port must be designed such that it qualifies as a "port and terminal charge."
- **Need for nexus study.** To the extent that the container fee is understood to be a user fee (not a tax), it must be supported by a study demonstrating the connection between the fee and the benefits (or mitigated impacts) made possible by it. In other words, revenue generated from user fees must benefit the payees or mitigate their impact, and must be deposited into a special fund for those purposes alone (see Table 1.1 above for more detail). In the absence of a defensible nexus study (e.g., an engineering study showing the benefits of the new infrastructure to port users paying a container fee), the fee could be construed to be an unauthorized tax. Ports may not impose taxes unless authorized to do so by the legislature.
- **Interference with existing agreements.** There is a risk that a new container charge could be challenged on the grounds that it violates existing lease agreements between the port and its lessees, if such agreements set caps on the lease rate. The container fee could be construed as an additional charge above the cap on the lease. The nature of existing lease agreements in the Puget Sound ports would need to be scrutinized in order to address this potential issue.

- **Interference with international trade.** Any new container fee program should be structured so as to avoid being characterized as a duty on international trade. A container fee imposed only on imports could be challenged as a hidden import duty. Article I, Section 10 of the U.S. Constitution bars states from imposing “imposts or duties on imports or exports” without the consent of Congress. Container fees on exports might also contravene international trade agreements. Research regarding major agreements may be appropriate.

Table 2.4 Infrastructure Cargo Fee, Ports of Los Angeles/Long Beach

	Infrastructure Cargo Fee
Where implemented	The Infrastructure Cargo Fee (ICF) will be implemented beginning January 1 st , 2009, at the Ports of Los Angeles/Long Beach
Fee Amount	The ports are expected to charge a fee of \$15 on loaded TEU cargo containers entering or leaving any terminal at either port by truck or train. The fee amounts may need to be adjusted depending on which projects funded by the fee are ready to begin construction.
Who Pays	The ICF will be levied on the owners of the cargo carried in containers. Since an empty container has no owner, no fee is imposed on empty containers.
Payment Mechanism	The fee will be collected in a similar manner to the existing PierPass Traffic Mitigation Fee; the main difference being that bulk cargo and on-dock rail also will be charged (PierPass only charges containers). Trucks entering or exiting the port gates with loaded containers will be identified by an RFID tag on the exterior of the truck. The truck will then be linked to a booking number (the identifier of the container and the BCO) through a database. Beneficial cargo owners are responsible for paying for each container before it reaches the gates. The mechanism for collecting the fee on bulk cargo has not yet been established – see Table 2.6.

Fee Administration and Use	<p>A new nonprofit organization (NewCo) is being created to administer the fee and maintain the database of BCOs and booking numbers. The fee is expected to generate about \$1.4 billion for a series of highway and railroad projects to improve traffic flow and air quality in the harbor area.</p> <p>The fee amount was calibrated to finance a specific set of infrastructure projects identified by the port. The share of public and private funding dedicated to each project will be determined through the share of trucks (converted to passenger car equivalents) using the corridors designated for improvement. For example, trucks (converted to passenger car equivalents) represent 66 percent of the volume on the Gerald Desmond Bridge. Therefore, 66 percent of the non-Federal share of the project will be paid through the infrastructure fee, and 34 percent will be paid from public sources.</p>
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Source: Gil Hicks and Associates.

Bulk Cargo Fee

A bulk cargo fee is a levy on noncontainerized cargo (e.g., grains, scrap metal, molasses) moving through the ports. Such cargo represents 31 percent of the total tonnage handle at the Port of Seattle and 33 percent of the total tonnage at Port of Tacoma. To the consultant's knowledge, this fee has not been imposed anywhere in the United States for infrastructure funding, but will be a component of the new infrastructure fee at the Ports of Los Angeles and Long Beach. More detail on the Los Angeles/Long Beach Bulk Cargo fee is listed in Table 2.6.

Collection Mechanism

The collection mechanism for bulk cargo fees has not yet been established at the Ports of Los Angeles and Long Beach. See administrative/implementation issues for more detail.

Yield and Reliability

Revenue estimates for non-containerized cargo were assessed for fees ranging between \$0.20 and \$1.00 per metric ton. Tonnage corresponds to 2007 volumes published by the Ports of Seattle and Tacoma. Table 2.5 shows the most recent volumes for the two ports. As with the container fee, it was assumed that no cargo diversion to other ports would occur.

**Table 2.5 Non-containerized Imported and Exported Cargo by Port
2007**

Metric Tons in 2007

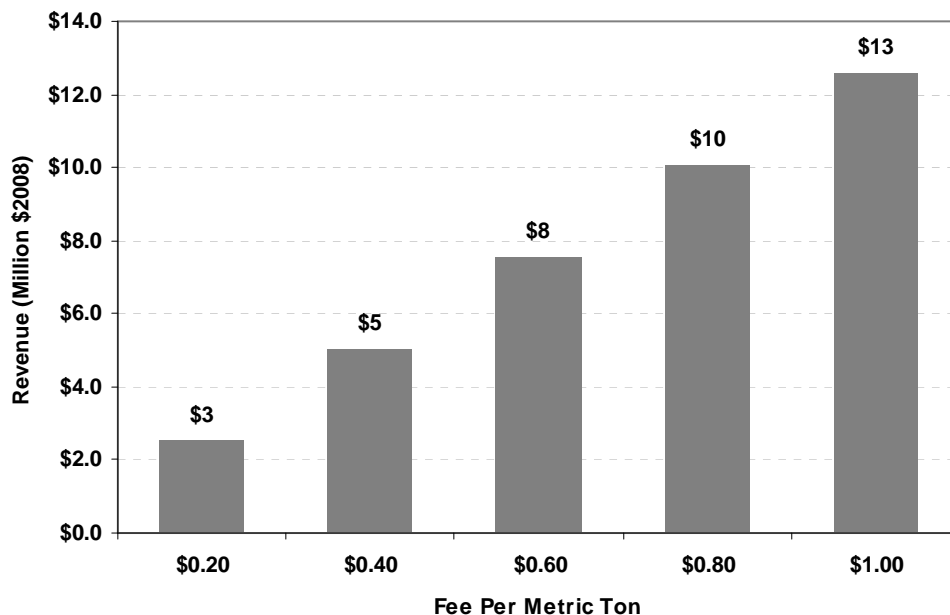
Port of Tacoma	6,009,490
Port of Seattle	6,560,981
Total	12,570,471

Source: Port of Seattle 2007 Annual Statistics and Port of Tacoma 2007 Annual Statistics.

Assuming no diversion of bulk cargo because of the fee and based on 2007 tonnage, fees ranging between \$0.20 and \$1.00 per ton would result in annual revenue ranging between \$3 million and \$13 million, respectively (Figure 2.2). These tonnage rates are similar to those being proposed at the Ports of Los Angeles and Long Beach.

Bulk cargo volumes appear to be highly sensitive to economic fluctuations. Bulk cargo at the Port of Seattle grew at an average annual rate of 12 percent between 1999 and 2007, but experienced a significant drop of 35 percent in 2002 and a major increase at 44 percent in 2003. This instability might reduce the bonding capacity of a bulk cargo fee.

Figure 2.2 Annual Revenue from Fees on Non-containerized Cargo
In 2008 Million Dollar



Source: Cambridge Systematics, Inc.

Administrative and Implementation Issues

The collection of a bulk cargo fee may be difficult and/or expensive, depending on how the fee is assessed. In the Ports of Los Angeles and Long Beach, the yards that store bulk cargo are typically manned only by a security guard. Collection of a gate charge at the yards requires hiring of additional unionized labor, which would come with significant expense. Moreover, movements of bulk cargo are not tracked electronically, making collection a difficult and potentially expensive exercise. To avoid these expenses, the Ports are considering simply adding a line item to the wharfage fees already collected on bulk cargo.

Bulk cargo fees could be vulnerable to some of the same legal challenges as container fees (e.g., from existing lease agreements, U.S. Constitution, international trade agreements, etc.).

Table 2.6 Bulk Cargo Fee

	Bulk Cargo Fee
Where Implemented	This fee has not yet been implemented, but will be a component of the 2009 ICF at the Ports of Los Angeles and Long Beach.
Fee Amount	The fee amount has not been set. A fee of about 35 cents per metric ton has been proposed, since that would roughly approximate the amount earned from a container full of bulk cargo.
Who Pays	Bulk cargo owners.
Payment Mechanism	The payment mechanism has not yet been established. Collecting the fee is more difficult than for container fees, since trucks carrying bulk cargo may not have RFID tags, and yards containing the cargo are not typically manned, except by a security guard. The Ports wish to avoid paying for clerks at yards containing bulk materials, and are investigating the possibility of simply adding a line item to wharfage fees already paid for bulk cargo.
Fee Administration and Use	The ICF will generate funds for a series of highway and railroad projects to improve traffic flow and air quality in the harbor area. The fee will be administered by NewCo, a new nonprofit organization created by the Ports.

Source: Gil Hicks and Associates.

Table 2.7 PierPass Traffic Mitigation Fee

PierPass Traffic Mitigation Fee	
Where Implemented	Ports of Los Angeles and Long Beach
Fee Amount	The TMF is \$100 per 40-foot container (FEU) and \$50.00 per TEU.
Who Pays	Any loaded ocean container picked up at or delivered to the Ports of Los Angeles or Long Beach by road during peak hours – 3:00 a.m. to 6:00 p.m. Monday through Friday – is subject to the PierPASS TMF.* Payment is the responsibility of the BCO (the importer or exporter); the trucking community and water carriers are not responsible for payment.
Payment Mechanism	Trucks entering or exiting the port gates with loaded containers are identified by an RFID tag on the exterior of the truck. The truck is linked to a booking number in a database, which identifies the load and the BCO. BCOs pay for each of their containers moving through the gates.
Fee Administration and Use	To administer the fee, the West Coast marine terminal operators created a new nonprofit entity called “PierPass.” The purpose of the fee is to incent greater use of the Port during uncongested off-peak hours; fee revenues are used to compensate the terminals for the extra cost associated with keeping the terminals open at night. The program is credited with diverting up to 30 percent of the truck traffic out of the peak period.

*The TMF does not apply to empty containers or to full intermodal containers departing or arriving via the Alameda Corridor for import or export and/or that pay the waterborne Alameda Corridor Transportation Authority (ACTA) fee.

Table 2.8 Alameda Corridor Fee

	Alameda Corridor Fee
Where Implemented	Los Angeles, Alameda Corridor
Fee Amount	\$18.67/loaded TEU (\$15 in 2002); \$4.73/empty TEU (\$4.00 in 2002); \$9.45/other rail car (\$8.00 in 2002). Railroads also pay fees for containers trucked to off-dock rail yards (Hobart and East Los Angeles).
Who Pays	Payment must be made for any containers leaving the 11-county metropolitan area by rail, regardless of whether the container traveled on the Alameda corridor or was trucked around the corridor. Locally moving containers and those coming from or going to the inland via truck are not subject to the fees. Railroads are responsible for paying the fee and for obtaining reimbursement from BCO.
Payment Mechanism	Railroads pay the JPA. The amount due is calculated by the railroads based on their records of usage of the corridor. The JPA can check the veracity of the reports by comparing them to data collected by PierPass, since containers that have already paid the ACTA fee do not have to pay the PierPass fee. Thus, if a container is listed as exempt in the PierPass database based on having paid the ACTA fee, ACTA checks its records to ensure it has in fact been paid for that container.
Fee Administration and Use	The Alameda Corridor Fee is collected by the JPA with members from the Port of Long Beach, the Port of Los Angeles, the Los Angeles City Council, and the Metropolitan Transportation Authority. The fee is used to pay back revenue bonds used to construct the Alameda corridor.

3.0 Road User fees

3.1 EXISTING FREIGHT-RELATED ROAD USER FEES

There are two major fees in Washington State that are already paid by freight users.⁸ These are the Combined License fee, which is a license and weight fee paid by trucking companies; and a tax on diesel fuel, also paid by trucking companies. These sources flow into various transportation accounts and are used to fund a broad range of transportation investments⁹. Another source, the Motor Vehicle Excise Tax, was repealed several years ago. This source could be reinstated, and the funds collected from trucks and passenger vehicles divided (this was not done in the past).

The approximate yield that could be derived from adding an increment to any one of these sources is shown in Figure 3.1. Of the taxes and fees shown, a Motor Vehicle Excise Tax (MVET) of one percent, applied only to trucks¹⁰ would generate the most revenue at \$240 million, while increasing the special fuel tax by three percent annually would generate the least revenue at \$19 million.

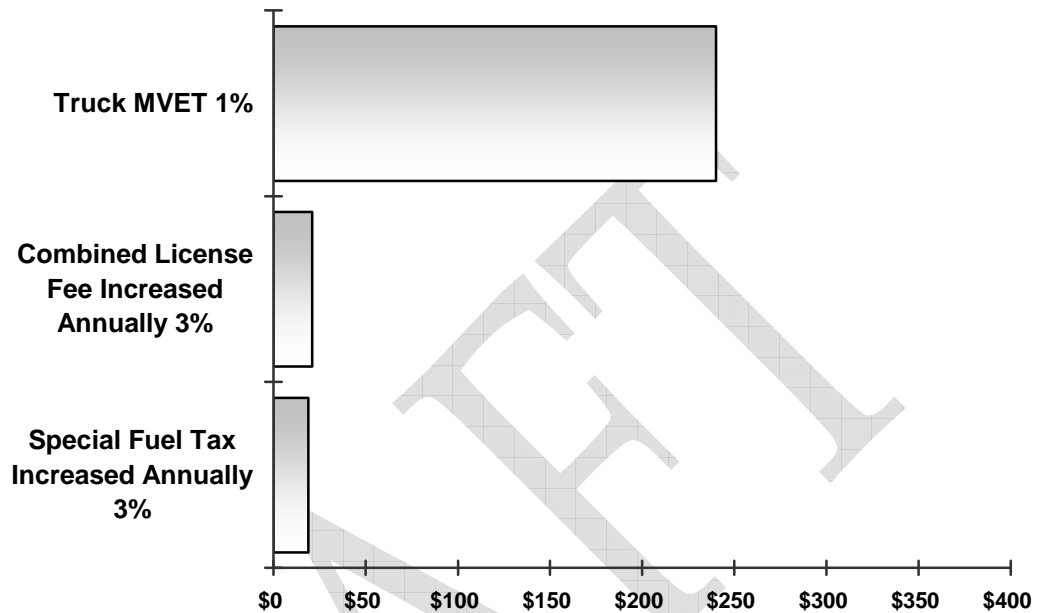
⁸ In addition, tolls and ferry fares are also paid by freight users, but are relatively small compared to the combined license fees and fuel tax.

⁹ Detailed analysis of revenues from these and other fees paid by the freight industry is provided in the Task 1-4 Report of this project.

¹⁰ Before it was repealed, the MVET was set at 2.2 percent of vehicle value. Revenues from trucks and nontrucks were not separated.

Figure 3.1 Revenue from Existing or Previous Freight-Related Charges

Revenues in a Biennium in Millions of 2008 Dollars



Source: Cambridge Systematics, Inc., using information from the Washington State Transportation Resource Manual and information provided by the Washington State Department of Transportation.

The advantage of these fees is the low administrative burden associated with implementing them, and the fact that they are suitable for bonding (the combined license fee and special fuel tax were bonded as part of the 2003 and 2005 transportation revenue packages). As they are currently implemented, however, they do not require a connection between the amount of fee paid and the amount of benefit received; thus, they are technically taxes and not true user fees.

To transform any of these revenue sources into user fees, Washington State could dedicate an increment on one or more of them (e.g., combined license fee, diesel fuel tax) to a special fund to be used only for projects that substantially benefit the freight industry or mitigate freight impact. Such a fund has in fact already been established in Washington State (the Freight Mobility Multimodal Account and the Freight Mobility Investment Account), but these receive only limited funds (\$3 million each, annually)¹¹.

¹¹Source: Washington State Transportation Resource Manual.

Tolls are the closest to a true road user fee already implemented in Washington State. The cumulative amount paid by trucks (and other road users) is proportional to the degree to which they benefit from the tolled corridor. Tolls have been extensively studied by the Washington State Transportation Commission, the Puget Sound Regional Council, and other entities within the State; and have generally been judged to be an attractive mechanism for raising new funds for roadway improvements. The primary disadvantage of tolls is that they can cause diversion off the tolled route when parallel routes exist. They are best suited for situations in where there are no convenient alternative routes.

The Comprehensive Tolling Study prepared for the Washington State Transportation Commission provides several examples of tolling projects. Annual revenues for the projects included in the study range from below \$10,000 to several hundred thousands of dollars.

One important freight corridor included in the study was I-90 through Snoqualmie Pass. Toll revenues through the Pass were projected to exceed \$43 million in the first year of operation (2009). Trucks represent about 15 percent of vehicle volumes through the Pass, but would account for more than double that share of toll revenue, since the expected toll rate for large trucks was assumed to be more than twice that of passenger cars.

3.2 NEW ROAD USER FEES

Washington State could also institute a new road user fee to support freight infrastructure. Two examples of freight road user fees that have been instituted elsewhere include the vehicle miles traveled (VMT) fee or its close cousin, the truck weight-distance charge.

Truck VMT Fee

A truck VMT fee is a per-mile fee on truck travel. VMT fees, like weight-mile charges, have the advantage of being invulnerable to improvements in fuel efficiency (unlike the motor fuel tax) and are a more direct form of road user fee.

Collection Mechanism

VMT fees may be collected a number of different ways, including the following examples:

- **Geographic Position Systems (GPS) technology.** In Germany, a truck VMT fee is collected through the use of GPS and mobile communications network (GMS) technologies, which have been installed in all trucks, foreign and domestic. The systems allow for determination of position, toll calculation, and transmission of toll amount to the collection center. See Table 3.1 below.

- **Embedding in fuel purchases.** A pilot test in the Portland, Oregon area showed that a VMT charge can be successfully collected by embedding the mileage fee in the fuel bill.

Table 3.1 Truck Vehicle Miles Traveled Fee

	Truck VMT Fee
Where Implemented	Germany
Fee Amount	Toll rates vary by numbers of axles and emission category from 10 to 15 Euro-cents per kilometer (about 24 to 36 U.S. cents per mile).
Who Pays	Trucking companies.
Payment Mechanism	To collect the tolls, a combination of satellite positioning systems (GPS) and mobile communications network (GSM) was placed in all trucks, whether foreign or domestic. The systems allow for determination of position, toll calculation, and transmission of toll amount to the collection center.
Fee Administration and Use	The toll collection system was developed and is operated by Toll Collect, a public-private partnership that includes the German Ministry of Transport, Deutsche Telecom, Daimler-Chrysler Financial Services, and Cofiroute.

Source: Toll rates from the Toll Collect Web Site (<http://www.toll-collect.de>). Collection information from: *Scanning Tour Summary Report: Pricing Experience in Northern Europe: Lessons Learned and Applicability to Minnesota and the United States*, Scanning Tour Summary Report: *Pricing Experience in Northern Europe: Lessons Learned and Applicability to Minnesota and the United States* October 2006, pp. 11-16.

- **Self-reporting.** Trucks may self-report miles traveled. Distance-based weight mile charges are collected in this way in Oregon and other states (see weight-distance charges below for more detail).

Yield and Reliability

Estimates suggest that the revenue collected by imposing a fee of 15 cents per mile on heavy trucks could reach \$200 million per biennium. The calculations assumed an annual inflation of 3 percent, a heavy-truck fleet size of 10,000 vehicles¹² and annual average vehicle miles traveled per truck of around 64,000 based on historical data from the 2000 Federal Highway Statistics, the latest

¹² Heavy truck fleet size is based on 2007 data provided by the Washington State Department of Transportation. Heavy trucks were defined as trucks of 26,000 lbs and over.

statistic available on vehicle miles traveled by truck weight. Revenues from a VMT fee are likely to be bondable, given that VMT fees have grown at a stable pace with minor fluctuations compared to other revenue sources (e.g., container fees).

Implementation Issues

Institution of a truck VMT fee in Washington State poses some technical challenges, as it would require either the installation of GPS in all trucks traveling through the State, or the embedding of the fee at all fuel stations throughout the State. Deployment of Germany's Toll Collect proved to be technically difficult and was delayed over a period of several years¹³.

The alternative is to ask trucks to report their mileage. This is a simpler mechanism, but more prone to evasion.

Weight Distance Charge

Weight distance charges are similar to VMT charges, except that they account for the weight of the truck in addition to the miles traveled. The tax rate increases with the weight of a truck and it is paid per mile of truck operation in the state. This charge is a pure user fee, as it links the cost that users impose on the roadway system to a fee, including both distance traveled and weight (heavier vehicles impose much higher wear and tear on roads than lighter vehicles). The charge is currently in place in four states (see Table 3.2 below).

¹³See *Germany's Toll-Collection Plan Stalls*, October 25, 2003, New York Times.

Table 3.2 Weight Distance Charge

	Weight-distance charge
Where Implemented	Kentucky, New Mexico, New York, and Oregon
Fee Amount	Varies –Oregon charges the highest rates among the four states, with rates ranging from 4 cents per mile traveled for trucks of 26,000 pounds to 14 cents per mile for trucks of 78,000 pounds or more.
Who Pays	Trucking companies.
Payment Mechanism	Annual or quarterly. Trucking companies are required to report their state road miles.
Fee Administration and Use	Varies by state. In Oregon, fees are used for general transportation purposes.

Source: Cambridge Systematics, phone calls and web site information.

Collection Mechanism

Trucking companies are required to report their state road miles and to transmit the calculated weight mile tax on those miles, either monthly or quarterly, to the DOT. Weights are recorded at weigh stations.

Yield and Reliability

Estimates suggest that the revenue collected by imposing a weight distance tax on heavy trucks could reach \$32 million per biennium. The calculations assumed New Mexico's weight distance fees¹⁴, an annual inflation of 3 percent, a heavy-truck fleet size of 10,000 vehicles¹⁵ and annual average vehicle miles of around 64,000 based on historical data from the 2000 Federal Highway Statistics, the latest statistic available on vehicle miles traveled by truck weight.

Revenues from a VMT fee are likely to be bondable, given that vehicle fleet size and VMT fees have grown at a stable pace with minor fluctuations compared to other revenue sources.

¹⁴ New Mexico's weight distance fees are in the middle of the range of weight-distance fees collected in the U.S. Oregon has the highest per mile fees and Kentucky has the lowest fees.

¹⁵ Heavy truck fleet size is based on 2007 data provided by the Washington State Department of Transportation. Heavy trucks were defined as trucks of 26,000 lbs and over.

Administrative/Implementation Issues

Fee evasion has been an issue for states with the weight-distance tax. Truckers are required to report their lane miles, and may not report accurately. This is especially true in New Mexico where the state line weigh stations are open only during week days and court rulings have restricted enforcement methods for state police.

To address this problem, some states periodically audit the submitted paperwork and/or records kept at the company's place of business. In addition, states have installed weigh stations to screen the trucks at different points along the roadway system. Trucks carry transponders which contain a number that is used to identify the carrier and truck. A computer processes this information, verifies the truck size and weight, checks the carrier's registration and safety records, and sends a green light signal back to the transponder if the truck is "good to go" past the station. These enforcement measures are often expensive. CVISN

In addition, weight-distance taxes have met with many legal challenges. For example, the state of Idaho repealed its weight-distance tax after a successful suit brought by the American Trucking Association. The courts ruled that the tax discriminated against interstate trucking companies, in violation of the Interstate Commerce Clause of the U.S. Constitution, by having reduced weight-mile tax rates for natural resource commodities. The State of Oregon's weight-distance tax was also challenged by the American Trucking Association, but survived the challenge¹⁶.

¹⁶Source: Oregon Weight-Mile Tax Issue Brief: <http://www.leg.state.or.us/comm/commsrvs/wtmile.pdf>.

4.0 Rail User fees

A rail user fee is essentially a toll on a railroad facility. Some of the best known examples in the United States are the per-container rail charges on the Alameda Corridor rail line (discussed under port user fees above) and the rail car fee on the Shellpot Bridge, a tolled rail bridge in Delaware (discussed in Table 4.1 and at length in the Tasks 1 through 4 report completed for this study).

4.1 COLLECTION MECHANISM

All rail cars in North America are marked with RFID tags. The tags can be automatically scanned using Automatic Equipment Identification (AEI) scanners, devices frequently used by railroads to monitor freight movements¹⁷. AEI scanners are used to monitor rail car movements over the Shellpot Bridge¹⁸, and could be used for the same purpose in Washington State. A distance-based rail car fee would be possible if multiple AEI scanners set up along a rail line could be used to track the mileage traveled by each car along the line. To the consultant's knowledge, no such distance-based fee is currently in place in the United States.

Yield and Reliability

Similar to roadway tolls, yield from a railway toll would vary based on rail volumes and the fee amount. The Washington State Rail Capacity and Needs Study¹⁹ provides rail volumes (in average trains per day) on some of the main corridors throughout the State. As an example, one of the more congested corridors is the Everett-Spokane line, which passes through the Cascade Tunnel at Stevens Pass and is the Burlington Northern Santa Fe Railway's (BNSF) major transcontinental route for double-stack intermodal container trains. It is heavily used, operating at about 27 trains per day, which is about 123 percent of practical capacity. This amounts to about 3,000 rail cars per day²⁰. Under this scenario, a fee of \$1.00 per rail car would generate about \$1.1 million in annual revenue.

¹⁷Bourque, S., *Trends in AEI Technology and its Impact on Shippers and Carriers*, Presentation at the fall 2006 meeting of the National Industrial Transportation League.

¹⁸Source: Interview, freight staff of Delaware DOT.

¹⁹The study is accessible at: <http://www.wstc.wa.gov/rail/default.htm>.

²⁰Assuming a train length of 8,000 feet on average and an average car length of 70 feet (including spacing). Typical rail car lengths run between 50 and 70 feet, depending on the type of car (see <http://www.railcarmover.com/appissue.asp>). The Washington State Rail Capacity and Needs Study assumes train lengths of 8,000 feet on average.

Rail car volumes are expected to grow significantly in the next decades. The total freight tonnage moved over the Washington State rail system is expected to increase by about 60 percent between 2005 and 2025²¹. If these expected increases bear out, a rail car fee would be a reliable means of generating revenues in the foreseeable future.

Table 4.1 Rail Car Fee

	Rail Car Fee
Where Implemented	Shellpot Bridge, Delaware
Fee Amount	Sliding scale based on volume of rail cars in that year. The cost is \$35 per car for the first 5,000 cars decreasing to \$5.00 per car when there are greater than 50,000 cars using the bridge.
Who Pays	Railroad (Norfolk Southern).
Payment Mechanism	Rail cars volumes are tracked electronically by AEI Scanners, which register the movement of each rail car based on its RFID tag. The railroad reports the volumes monthly to the Delaware DOT. The railroad pays Delaware DOT annually based on the number of cars to use the bridge in that year.
Fee Administration and Use	Fee revenues are used to pay back an \$8.9 million loan Delaware DOT gave to the railroad to reconstruct the bridge.

Source: Conversation with freight staff of the Delaware Department of Transportation and *Shellpot Bridge is Getting Back on Track*, Port Illustrated, July/August 2003.

²¹Source: Washington State Transportation Commission Rail Capacity and Needs Study.

5.0 Federal Level Fees

There are a number of fees being proposed on the Federal level that would provide additional funds for freight infrastructure. Two of those currently under consideration include a transfer of existing revenues from customs duties and a freight waybill fee.

These fees are most easily applied at the Federal level, rather than independently at the state level. Nevertheless, they are worthy of some discussion because, if implemented at the Federal level, they could provide opportunities to generate significant revenues to meet some of Washington's freight rail funding needs, either through Federal grants or through an additional charge at the state level, which could be added to the Federal fee and dedicated to state freight projects or used as matching funds to leverage Federal fees.

5.1 FREIGHT WAYBILL TAX

Proposals for a tax on freight bills (also referred to as a freight waybill tax) are under discussion at the Federal level as a means of funding national freight infrastructure needs.

Freight waybills are customarily charged to the receiver of goods transported from one point to another. For example, if a container is sent from Curacao on a Dutch ship and is loaded onto a tractor trailer that drives the container for delivery to a Montana company, that Montana company will pay one or more freight bills, covering the cost of shipping from Curacao to Seattle on a ship, and from Seattle to Helena on a truck. Freight waybills are used primarily in association with these types of multi-leg intermodal container movements. Freight "bills of lading", by contrast, are bills associated with one segment of a truck trip.

Representative Adam Smith of Washington has recently submitted a bill proposing a Federal tax on freight bills. The act would institute a "Freight Mobility Infrastructure Fee" (e.g., freight bill tax) equal to one percent of the amount paid for the "taxable transportation of property." Funds would flow into a National Freight Mobility Infrastructure Fund, and would be available to states through a competitive grant application process.

Congressman Smith's proposal stipulates that the tax would apply only to for-hire transportation services, because companies that own their own trucks are not charged a bill for domestic transportation services. The implication is that private trucking, which represents a substantial minority of all freight, would not be subject to the tax. According to 2002 Bureau of Transportation Statistics Data, Private Trucking carries 30 percent of all U.S. freight by value (compared to 45 percent carried by for-hire truck), 36 percent of freight by ton (compared to

31 percent by for-hire truck), and 9 percent by ton-mile (compared to 31 percent by for-hire truck).²²

Another difficulty with the tax occurs in the situation when the bill is to be paid by a beneficial cargo owner (BCO) located outside the United States. In this situation, Smith proposes that the bill be collected by the entity furnishing the last domestic segment of the trip, and that the U.S.-based entity receiving the goods (not the international entity providing the goods) be responsible for payment. Returning to the previous example, the Montana company would pay tax only on the container's journey from Seattle to Helena.

These difficulties would be magnified if the tax were to be imposed at the state level, since the state could only tax the portion of the trip occurring within its boundaries. To accomplish this, trucks and railroads would have to track their mileage within the state and apportion their billings accordingly. Washington State would then have to devise a system for collecting the tax from beneficial cargo owners located outside the State. Finally, a state-level tax (and possibly a Federal-level tax) on freight bills could be challenged in court as an impost or duty on goods in international commerce moving through the State.

The revenue potential of a waybill fee would be a function of the total freight bill in the United States. According to an analysis of potential freight fees by the American Road and Transportation Builders Association (ARTBA), the U.S. total freight bill totals more than \$739 billion annually. A one-percent fee could yield significant revenues (about \$7.4 billion).

5.2 TRANSFER OF CUSTOMS DUTY REVENUE

Another proposal being discussed at the Federal level is a possible transfer of revenues from customs duties. Current U.S. Customs duties go into the Federal general fund and other non-transportation-designated programs. It has been proposed to dedicate a portion of existing custom duties (e.g., 5 to 10 percent) for port and intermodal improvements. A politically difficult alternative option would be to raise the customs duties 5 to 10 percent with the increase going to transportation. If implemented, this source would not be a true freight user fee, since payment would be related to the value of goods imported rather than usage of the transportation system.

For the Federal Highway Administration (FHWA), Cambridge Systematics has estimated that setting aside 10 percent of customs duties would generate about \$3 billion for freight projects in 2010, increasing to about \$8 billion by 2030.

²²Source: http://www.bts.gov/press_releases/2005/bts003_05/html/bts003_05.html.

6.0 Summary and Next Steps

6.1 SUMMARY FINDINGS

This paper has discussed a range of freight user fee sources selected by the Policy Group as being potentially feasible for consideration. Their selection was made from a longer list of both public and private revenue sources presented at their June 25, 2008 meeting.

Each fee type has advantages and disadvantages that can not be fully assessed without its direct application to specific freight projects. The selection of funding sources should be determined by type of projects being funded, their direct and indirect benefits to specific users and stakeholders, the need to mitigate impacts, and the cumulative funding need.

The benefits of freight projects include improving the competitiveness of industries located in Washington State and mitigating the impacts of freight movement on communities and the environments. All improvements to goods movements are not equal with regard to their contributions to job creation, personal income of state residents and increases to the gross state product. For example, some imported cargos move through Washington without significant value added activities, while other cargo undergo further processing or manufacturing which generates significant employment and income. The same is even more the case for goods grown or manufactured in Washington. These benefits are only estimated for specific projects and may be used to show how much the public at large should contribute to a project's funding through public sources such as the fuel tax, license fees, and general fund revenues.

It is also important to consider the potential yield and reliability of each source as well as administrative, technical, and legal issues associated with it. Table 6.1 and Table 6.2 below summarize that information for each source and provide commentary on the degree to which the source may be defined as a freight user fee.

Table 6.1 Comparison of Port-Related and Rail User Fees

Source	Approximate Yield & Reliability (High, Medium, or Low)	Nexus to Freight Project Benefits	Administrative/Implementation Issues
Container Fee	Medium (tens of millions a year, assuming fees greater than \$10/TEU)	To meet the definition of a user fee, the container fee would need to be linked to a program of projects that directly benefit those involved in the transport of containers.	The collection mechanism would have to be established, but there are models for collecting this fee. The fee must be structured to avoid legal challenges relating to the U.S. Constitution, international trade agreements, and port leases.
Bulk Cargo Fee	Medium-low (tens of millions a year, assuming fees of greater than \$1/metric ton)	To meet the definition of a user fee, the bulk cargo fee would need to be linked to a program of projects that directly benefit those involved in the transport of bulk cargo.	The collection mechanism would have to be established, and there are currently no models for collecting this fee (though one is under development). Collection may be difficult or expensive. The fee must be structured to avoid legal challenges relating to the U.S. Constitution, international trade agreements, and port leases.
Rail Car Fee	Varies by location	To meet the definition of a user fee, the fee revenues would be invested in the rail corridor or corridors serving the railroad(s) that pay the fee.	The technical mechanism for collecting this fee exists and has been used successfully elsewhere.

Table 6.2 Comparison of Road User Fees

Source	Approximate Yield	Nexus to Freight Project Benefits	Administrative/Implementation Issues
Combined License Fee	Medium-low (a 3% increase yields about \$9 million a year)	In its current form, this is not a true user fee. The fee amount is unrelated to freight benefits received or impacts mitigated. Nevertheless, revenues from commercial licenses could be separated and spent only on freight projects.	This fee already exists; no administrative issues. Revenues may only be used for highway projects (restricted by 18 th amendment).
Diesel Fuel Tax	Medium-low (a 3% increase yields about \$9 million a year)	This tax more closely approximates a user fee, in that the amount paid by the freight industry is proportional to freight benefits received/impacts mitigated. However, revenues are not designated specifically for projects that benefit freight.	This tax already exists; no administrative issues. Revenues may only be used for highway projects (restricted by 18 th amendment).
MVET on Trucks	High (a 1% MVET would produce hundreds of millions per year)	As it was previously implemented, the MVET was not a user fee (the tax amount was unrelated to freight benefits received or impacts mitigated). Nevertheless, revenues from commercial vehicles could be separated and spent on freight projects	The MVET has been repealed in the past, and may be particularly vulnerable to political opposition. MVET revenues generated by commercial vehicles were not separated in the past.
Weight-distance charge	Medium (fees similar to those in New Mexico would produce about \$16 million a year).	The amount paid by truckers is very closely related to their impact on the roadway system. Fee amounts could be varied by time of day and route depending on congestion, could improve the nexus between trucking on roadway use.	Implementation requires the installation of weigh stations and transponders on trucks. Evasion has been a significant issue in some states. Enforcement and auditing are expensive. Nevertheless, new technology may reduce costs and improve enforcement.
Truck VMT fee	High (a 15 cent per mile fee would produce hundreds of millions per year).	The amount paid by truckers is closely related to their impact on the roadway system.	Implementation requires installation of transponders on trucks or systematic integration of the fee into fuel purchases.

Tolls

Varies by location

The amount paid by truckers is proportional to the benefit they derive from usage of the corridor.

Tolls are most effective as a revenue generating mechanism when few alternative routes are available. Revenues may only be used on the tolled corridor.

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6.2 NEXT STEPS

During the next round of Stakeholder and Policy Group meetings, the consultant team will present a few practical examples of specific projects and possible funding scenarios, which make use of some combination of the user fees discussed in this technical memorandum.

The team will also lay out a generic process for preparing a funding portfolio, which will include in the mix these user fees and public revenue sources. This process has some simple rules that include requiring a proportional nexus between each payer's share of a project's cost and the benefits each payer receives. The calculation of a nexus that measures the benefits of a project, however, has significant technical and political challenges. Thus, the calculations are only intended as information for negotiations over how each project will be funded.