Streamlining Opportunities for the Permitting, Enforcement, and Regulation of Regional Truck Movements

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ABSTRACT

TransLink and Metro Vancouver municipalities are interested in identifying efficiency improvements to the movement of goods within and through the region. The movement of goods by truck is influenced by general road conditions and traffic, but the influence of regulatory, permitting and enforcement is less well understood. Opportunities to improve the efficiency of the regional transportation system, specifically to support urban goods movement and the Vancouver region trucking industry, can include consistency and continuity of bylaws, permitting and enforcement.

The regulation and enforcement of goods movement in the Vancouver region is particularly complicated from the perspective of the trucking industry because there are 21 municipalities, TransLink, the Province, Transport Canada, Port Metro Vancouver, rail companies, and logistics providers (among others) all influencing the movement of goods, but often without coordination. There are a variety of bylaws, regulations, permit requirements, and time-of-day restrictions across the region that the trucking industry must comply with.

This paper presents the findings of research and consultation conducted to identify streamlining opportunities for the various governmental and institutional regulatory, permitting and enforcement processes in Metro Vancouver. Work is currently underway to recommend changes that would be acceptable and beneficial to the trucking industry, the relevant government agencies, and goods movement stakeholders. This TransLink initiative responds to industry issues as well as municipal concerns about transportation safety, efficiency, and community impact.

Study Purpose

The TransLink mandate includes responsibility for a designated Major Road Network, and has approving authority over municipalities for any action that would prohibit truck movement. TransLink may impose standards respecting weight and dimensions on the MRN and designate routes for movement of dangerous goods. The Transport 2040 Plan visions statements include the following:¹

The Major Road Network is a reliable and efficient road network that moves people and goods to support the regional land use strategy and serve the regional economy.

This 'Streamlining Opportunities for the Permitting, Enforcement, and Regulation of Regional Truck Movements' (SOPERRTM) work was designed to bring awareness to TransLink and the 21 municipalities of Metro Vancouver regarding the impact of government regulations and enforcement on goods movement operations.

Background

Understanding goods movement, and how the public sector can influence freight is a dynamic and complex subject that many public agencies have explored. The Greater Vancouver Gateway Council was formed in 1994 to pursue a vision for Greater Vancouver as the Gateway of Choice for North America, in order to capitalize on opportunities from expanding world trade and tourism.² The Council approved a Major Commercial Transport System including road, rail and shipping modes, and it spawned further studies about goods movement in the Metro Vancouver region - some of them resulting in specific transportation network infrastructure investments, while others focused more on enhancing the understanding of supply chain logistics in the region.³ TransLink, although a member of the Gateway Council, has focused its attention mostly on the road network and traffic operations rather than the regulatory environment of freight movement through Metro Vancouver.

There are several Canadian and U.S. studies completed in an effort to better understand goods movement trends and issues, as well as attempt to integrate freight interests into government planning processes. Generally, TransLink shares these interests as noted in the Ministry of Transportation of Ontario Study:⁴

- Improve transportation operations for the benefit the freight sector
- Engage with stakeholders to address goods movement issues and opportunities
- Look beyond infrastructure solutions and to examine policy, operations and the role of freight transport

The SOPPERTM Study found that there are mechanisms in place to promote harmonization among the provinces, and between the Canadian federal regulations and provinces. While TransLink is not involved in the process, it is useful context for understanding the overall framework and to better appreciate comments received from the trucking industry. BC is represented in the Canadian Council of Ministers Responsible for Transportation & Highway Safety through the Commercial Vehicle Safety and Enforcement Branch of the Ministry of Transportation (see Figure 1).⁵



Figure 1 - Canadian Council of Transportation Ministers

These efforts have resulted in some harmonization among the provinces and recognition of the differences that require each province to manage and provide some accommodation for non-standard equipment. There is a focus on identification and elimination of regulatory standards that might constitute unjustifiable barriers to internal trade via highway transportation and on issues affecting the motor carrier (trucking) industry. Standards are embodied in the Memorandum of Understanding respecting an Agreement on Interprovincial Vehicle Weights and Dimensions, which deals with harmonized vehicle weight and dimension limits and in the National Safety Code for Motor Carriers, which deals with licensing, registration and control of motor vehicle transportation and safety.⁶

The Transportation Research Board (TRB) of the U.S. completed a report on the Regulation of Weights, Lengths, and Widths of Commercial Motor Vehicles, which reported that throughout its work, there was a lack of information about the impacts of size and weight

regulations.⁷ This TRB study concerned itself largely with the potential impact of changing weight dimensions on public infrastructure and costs, and suggested some harmonization of regulations between the Federal and US states. The study is the outcome and synthesis of several other research initiatives and was several years in the making, and recommended additional research on:

- Evaluation of the effectiveness of the enforcement of size and weight regulations,
- Air quality impacts of changes in truck characteristics,
- Relation of truck performance to crash involvement,
- Risk-based bridge costs,
- Freight transportation market research,
- Costs of mixed automobile and truck traffic arising from nuisance and stress, and
- New infrastructure development and truck-only facilities.

Although public sector agencies struggle with becoming knowledgeable about freight transport because it is a dynamic system that responds to multiple variables, truck movements can result in serious externalities such as congestion, accidents, noise, pollution, and pavement damage. These externalities alone provide good reasons for public sector involvement in both the provision of infrastructure and in the regulation of transportation service in order to ensure efficiency, convenience and safety, not to mention supporting goods mobility for economic benefit.

Metro Vancouver Context

Truck routes in the Metro Vancouver region cover all 21 municipalities and include both urban and rural arterial roads as well as Provincial highways shown in Figure 2 in blue. TransLink has authority over the Major Road Network (shown in green); however, truck routes may be any combination of the blue, green and other roads in the region. The authority to designate or restrict truck movements is shared between the CVSE, TransLink and municipalities, and to date TransLink has been cooperative with municipal desires for local autonomy in this matter. Coordination among the 21 municipalities with respect to truck definitions, routes, or regulation, permitting and enforcement is a challenge for TransLink.



Figure 2 - Metro Vancouver Highways, Major Roads, Truck Routes

The Vancouver region has a sizable truck industry to support the national economy in its role as a major Canadian port and "Gateway" city, as well as to provide service for the regional economy. In 2008, Transport Canada, the Ministry of Transportation and Infrastructure and TransLink partnered to conduct a "Dangerous Goods and Truck Classification Survey" in order to collect some data on the volume and nature of trucks within Metro Vancouver.⁸ Close to 165,000 trucks were recorded over the course of the survey, and a breakdown by count station grouping is provided in Figure 3. The survey found that 38 percent of all observed trucks were light trucks, and 102,710 heavy trucks were observed, constituting 62 percent of the truck observations.

Figure 4 illustrates that there are significant numbers of construction type trucks on the road, along with containers, bulk and other port related freight vehicles, thus indicating that local municipalities should have an interest in regulations for these regional truck movements.

Truck Types		Regional Screenline	Trade Corridor	Special Locations	Total
То	otal	130,980	27,360	6,350	164,690
Light	Observed	53,140	7,030	1,810	61,980
Trucks	Percent	41%	26%	29%	38%
Heavy	Observed	77,840	20,330	4,540	102,710
Trucks	Percent	59%	74%	71%	62%

Figure 3 - 2008 Truck Count Survey by Type



Figure 4- 2008 Truck Counts by Vehicle Type

SOPERRTM Study Objectives and Key Activities

Why is it important to improve or streamline permitting, regulation and enforcement of the trucking industry within Metro Vancouver?

- Improve safety of truck movement in the Metro Vancouver region
- Increase efficiency and capacity of regional truck movements
- Improve compliance with industry regulations and municipal regulations

• Reduce the amount of municipal resources needed in permitting, regulation and enforcement (man power, infrastructure expenditure, etc)

- Keep up-to-date with practices in neighboring jurisdictions, and possibly other jurisdictions
- Mitigate concerns experienced by government and the trucking industry

In order to understand the regional situation regarding truck movement regulations, permitting and enforcement and identify opportunities for streamlining, the study combined stakeholder consultation with literature/government regulations review.

Current Legislation and Regulations Applied to Trucking

It is not uncommon to find multiple layers of jurisdictions involved with the regulation of truck movements. Research of similar Gateway cities like Montreal, Melbourne, Seattle, Los Angeles demonstrates that each location has federal, state or provincial, regional, local and in some cases a special purpose organization dealing with trucks or goods movement. The British Columbia responsibilities nestle between and sometimes are shared with the Federal and Municipal government.



Several steps are mandatory to become a commercial truck operator in B.C. All trucks must apply for National Safety Code certificate online through the BC Commercial Vehicle Safety and Enforcement branch (CVSE) website. The website offers considerable education for the trucking industry to become compliant with provincial regulations. The other steps include obtaining vehicle registration and liability insurance through the Insurance Corporation of BC (ICBC), and for trucks exceeding 8,200 kg a vehicle inspection is mandatory.

Municipal Governments Responsible for

- Roads and bridges within their jurisdictions
- Jurisdictional policies and regulations concerning truck operations on the municipal road network
 - Road safety (shared responsibility)

Municipal regulations applicable to the trucking industry include municipal bylaws.⁹

Truck permits are required for municipal roads or provincial highways in Metro Vancouver for trucks that are:

- Oversize (height, width or length)
- Overweight

Oversize and Overweight limits are determined by each municipality in accordance with local conditions. There are other conditions for trucks operating on provincial highways through Metro Vancouver that also require a permit: Non-resident commercial vehicle; Specific highway crossing; any others to be confirmed in consultation with the applicant.

Municipalities often consult with the CVSE on truck restrictions and other truck routing



matters. For example, a municipality and CVSE need to work together to ensure unrestricted truck movements through a municipal road that provides linkage between two highways.

Municipalities also consult CVSE on the assessment of bridge capacity against vehicle weights. One of the main challenges in the Metro Vancouver region is an inconsistent definition of a truck for both route designation and permitting.

Table 1 - Truck Definition								
Burnaby,	Vancouver,	Port						
New	Delta, Langley	Coquitlam,	UEL	Provincial				
Westminster,	City, Surrey,	Maple Ridge		Highways				
Coquitlam,	City of North							
	Van.							
GVW > 13,600 kg	GVW > 10,000 kg	GVW > 4,600 kg	A vehicle with 3 or more axles	GVW > 5,000 kg included in the National Safety Code program				

The variability facing truck operators in Metro Vancouver also includes:

- 11 municipalities that have designated truck routes based on GVW from 4,600 kg to 13,600 kg
- Richmond and District of North Vancouver have designated dangerous goods routes but not truck routes
- 2 municipalities restrict vehicles to truck routes (based on dimensions) regardless of whether GVW is exceeded

TransLink has worked with the municipalities to produce a Regional Truck Guide, however, it has been less successful in bringing about regional consistency and conformity. This is partly due to institutional mandate, and partly due to respect for municipal autonomy. The SOPERRTM study is an attempt to bring both government regulatory agencies and stakeholders together to re-initiate a dialogue that seeks further streamlining at least at the municipal level.

Commercial Vehicle Licensing

In addition to the regulations for truck routes, weights and measures, trucking operations are subject to business licensing and fees for each municipality.¹⁰ Commercial vehicle licensing provides a source of revenue to participating municipalities to offset expenses related to the use of local government roads and highways as a result of commercial vehicle traffic. Expenses would include the cost of maintenance of municipal roadways, road signage, snow removal, parking control, etc. Local Government Act Any vehicle using municipal roads and operating for commercial purposes must annually purchase and display a commercial vehicle license decal Fees are set by the provincial statute Example: City of Vancouver Municipal decal provides the advantage of loading

privileges

A review of the trucking industry requirements of other provinces shows that the situation for

regulations and permitting is somewhat similar across the county. The differences are in regards to some conditions for over height/over weight permit requirements, and perhaps as importantly for the trucking industry is the process of compliance with regulations, permitting and enforcement. The tools available to the trucking industry across the provinces are now mostly on-line but they vary in capability, application, and effectiveness.

In B.C. there are several initiatives underway that attempt to improve various aspects of trucking regulations such as:

- CVSE has introduced web based information and permitting with future functionality improvements on the horizon.
- Weigh2GoBC: application of weigh-in-motion and automatic vehicle identification technologies to produce an intelligent network of inspection stations
- Provide up-to-date or real-time information: Smart Corridors Strategy
- Manage truck arrival times through the use of technology: CN Gate, Port Metro Vancouver
- Encourage compliance: Customs Border Services Agency (CBSA) self assessment program
- Reduce time and cost to the trucking industry, CBSA e-Manifest program, Weigh2GoBC.

The Commercial Vehicle Safety Enforcement Perspective

The CVSE issues approximately 150,000 permits annually for trucks on all Provincial Highways for the three basic types of permits: overweight, oversize, non-resident trucks. The online permitting system was initiated about 1.5 years ago, and all dimensional permits are available through the online system. However, the current view is that the online system will never be able to handle all permits because special situations require staff intervention. An updated online system (including weight permits) is anticipated to be available in 2010.

The B.C. system is modeled after the Alberta system, however, there are some limits to the functionality due to the protection of privacy issues surrounding the opportunities to share existing data bases between ICBC and truck permitting. As a result, basic information must be entered by trucking operators for each institution.

Currently, trucking companies report their routes to CVSE, and CVSE staffs check and confirm that the size and weight of trucks are acceptable along their routes. A potential way to improve this system is to have the trucking companies confirm vehicles' dimensions through information provided online. However, there is difficulty in keeping the online information up-to-date (requiring regular data updates by municipalities and the Ministry of Transportation and Infrastructure).

The level of resource used to enforce trucking regulations on highways and municipal roads in the Metro Vancouver region by the CVSE in the range of 70 to 80 staff for mobile enforcement and enforcement at inspection stations. Mobile enforcement is flexible: it works by a basic schedule but with occasional blitz to target certain areas and/or locations. CVSE often partner with the RCMP because CVSE has the technical expertise for vehicle inspection.

At the time of writing this report the CVSE expressed support for the notion of shared information among regulatory and permitting municipal agencies and itself. <u>The BC Trucking Association Perspective</u>

The nature of the trucking industry in BC and Metro Vancouver is such that the BCTA does not represent all trucking interests. Furthermore, TransLink consultation with the BCTA on the issue of regulations, permitting and enforcement was limited, and intending to provide insight on the most pressing concerns or more prevalent experiences, and it did not ask the BCTA to prioritize regulation, permitting and enforcement issues against other concerns. Although the opinions reported here may not stand up to a more rigourous statistically designed survey of trucking stakeholders, there is no reason to doubt the authenticity of the comments received.

TransLink's purpose was strictly to collect input from the trucking industry on issues and concerns with respect to permitting, regulation and enforcement in regional truck movement and operations in order to understand the processes that are involved in meeting legislative requirements. The BCTA representatives were also invited to suggest ways to streamline processes related to truck permitting, regulation, enforcement.

The main themes heard were:

- There are too many municipal regulations to become knowledgeable about
- Harmonization of size and weight would help save time to deal with the different regulations. The invited carriers have encountered situations where they received different interpretation of a regulation from different staff at CVSE. The same has happened with municipal agencies.
- Both Vancouver and Surrey have a "self-permitting" system in place but the Vancouver system is less convenient to carriers than the Surrey system. Both systems involve carriers pre-pay for a batch of permits. When needed, a driver would fill in the form and then fax to the city. In Surrey, there is no requirement for a physical copy of the form to be available in the vehicle (only need to report the permit number when being checked), whereas in Vancouver the permit must be carried in the vehicle at all times.
- Vancouver and Surrey are the only cities that are "in-the-know" of truck permitting.
- With regards to dangerous goods, the invited carriers feel that municipal staff are generally not well informed about dangerous goods transportation, with the exception of an active North Shore Emergency Program.
- There is lack of continuity in the currently designated truck route network across various municipalities in Metro Vancouver.

The BCTA also opined that there are redundant or unnecessary permits and licenses: namely the Municipal "decals" issued under the Commercial Vehicle Licensing (CVL) Program. The opinion was that the trucking industry received little or no recognizable service or value from paying these fees.

Some suggestions offered for improving their experience with the permits included:

- a single business license such as Okanagan's Mobile Business Licensing System rather than individual municipal business licensing requirements
- A single permit system to handle both provincial and municipal requirements
- A system that allows for easier in the field permit issuance because carriers can only fill out overweight permits after trucks are loaded.
- Term permits are most useful for standard equipment transport (same dimension and weight every time).

• The invited carriers are supportive of a Central Permitting initiative (similar to the Alberta system). This would involve a carrier making a single phone call to report all the relevant trip and vehicle information and pay a single fee, and be able to travel through multiple jurisdictions without having to repeat the same procedure in each and every jurisdiction.

Trucks would try to stay on the provincial highways as much as possible to avoid the procedures associated with getting municipal permits. Carriers are expected to plan their routes, check route conditions (especially for "superloads"), and to obtain permit(s) where necessary. The opinion was that municipalities assume carriers would comply with permitting requirements with due diligence.

The BCTA representatives also provided some insight to the issue of enforcement. Whereas the CVSE noted that enforcement, or rather compliance, is considered to be reasonable in Metro Vancouver and that there were good processes in place, the carriers offered a slightly different view with respect to compliance with municipal regulations. It was noted that:

- Vancouver and Surrey are the only cities that do enforce trucking. These cities have dedicated commercial vehicle enforcement staff.
- Enforcement on the provincial highways is currently more effective than municipal enforcement. Carriers will always get the required permits when traveling on highways as they are better informed about provincial permit requirements and there is more enforcement conducted on the highways.
- Permit fees have not increased in many years and enforcement fines has no bearing on compliance.

It was noted that violation on municipal roads does not necessarily affect national safety code standing (it appears that NSC standing is only affected by violation on the provincial highways).

Carriers do not want to challenge existing regulations; rather, they wish the rules could be simplified and be consistent, and to have more accessible information, and easier permitting process.

Conclusion

The SOPERRTM study process was successful in bringing together the diverse interests of trucking regulation, permitting and enforcement in Metro Vancouver. At the time of writing this report, a few opportunities for improvements that are beneficial to industry and government seem possible, but will require considerable focus of resources to investigate further and to enact. The BCTA stakeholder group has indicated that efforts to "fix" identified issues would be well received, and most of these would not impact road safety or use of infrastructure, but rather processes and government administration resources.

In the context of possible public interventions in the movement of goods, streamlining regulations and permitting may not always rank highest in importance to the trucking industry because the cost impact of these regulations are not well understood by either the trucking industry or government. This conclusion was evident in the 2002 TRB report on "Regulation of Weights, Lengths, and Widths of Commercial Motor Vehicles"¹¹, and as recently as 2009 in the

US Department of Transportation Motor Carrier Efficiency Study Phase I Study. The latter study conducted a literature review of common motor carrier inefficiencies extracted from more than 200 individual published sources and/or offered by industry experts, and conducted stakeholder consultation in order to examine the degree to which individual inefficiencies could be clearly defined, in both qualitative and quantitative terms.¹² Interestingly, but perhaps not surprisingly, the industry stakeholders list of inefficiencies did not include issues directly related to regulation permitting or enforcement with the exception of cross border processing.

Nevertheless, investigation into the opportunity to streamline the regulation permitting and enforcement of truck movements in Metro Vancouver is a worthwhile exercise because of the potential public cost savings, let alone the potential benefits to the trucking industry.

References

¹ Transport 2040 A Transportation Strategy for Metro Vancouver, TransLink 2008

² <u>MCTS Phase 1 Report - Roads</u>, Greater Vancouver Gateway Council, 2004.

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⁵ <u>Harmonization of Transportation Policies and Regulations: Context, Progress and</u> <u>Initiatives in the Motor Carrier Sector</u>, Council of Ministers Responsible for Transportation and Highway Safety June 2008

⁶ Harmonization of Transportation Policies and Regulations: Context, Progress and <u>Initiatives in the Motor Carrier Sector</u>, Council of Ministers Responsible for Transportation and Highway Safety June 2008

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⁸ 2008 Dangerous Goods and Truck Classification Survey

⁹ Local Government Act, [RSBC 1996] CHAPTER 323; and Community Charter SBC 2003 CHAPTER 26

¹⁰ Ibid.

¹¹ Regulation of Weights, Lengths, and Widths of Commercial Motor Vehicles, Special Report 267, Committee for the Study of the Regulation of Weights, Lengths, and Widths of Commercial Motor Vehicles, Transportation Research Board, 2002

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