BACKGROUNDER #6:
Moving Goods & Services

Introduction

The Metro Vancouver region plays a critical role as Canada's Pacific Gateway — providing the network of roads, waterways, rail facilities, and air and sea ports that connect Canada to its Asia-Pacific trading partners. Goods movement is also critical to the regional economy – both because it keeps local businesses and shops well stocked and because 21% of the region's workers are employed directly in trade, transportation, and warehousing.

Goods movement refers to the transportation system, infrastructure, and policy that enable the movement of:

- **Goods** – distinct physical products, such as packages or bulk cargo; and
- **Services** – including personnel and equipment necessary to provide services that can only be delivered on site; everything from home-care to high-rise construction.

Goods move through and within the region for a variety of reasons, including:

- **Local deliveries**: transport of products to markets and homes within the region; for example, a shipment of produce to a local grocery store, or a package delivery to a residence.
- **Processing and production**: movement of materials and components to and from manufacturing facilities, which produce finished consumer goods or which create "intermediate" goods destined for further manufacturing; for example, a window glass production facility, or a timber processing plant.
- **Imports and exports**: shipping of commodities and goods to and from the global marketplace; for example, export of grain from Saskatchewan, or import of textiles from Asia.

Goods movement is complex, entailing the interaction and coordination of many modes – including bicycles, trucks, trains, marine vessels, airplanes, and pipelines – and of numerous public agencies, private firms, and individual shippers and receivers. Goods movement can sometimes conflict with passenger transportation needs or with other community aspirations.

As a result, we need to ensure that goods movement objectives are considered together with other transportation and land use objectives in an integrated regional policy framework. To this end, as part of the Regional Transportation Strategy (RTS) TransLink will work to identify the region's strategic-level goods movement needs, develop a policy framework, and articulate TransLink's role in the goods movement sector.

Context

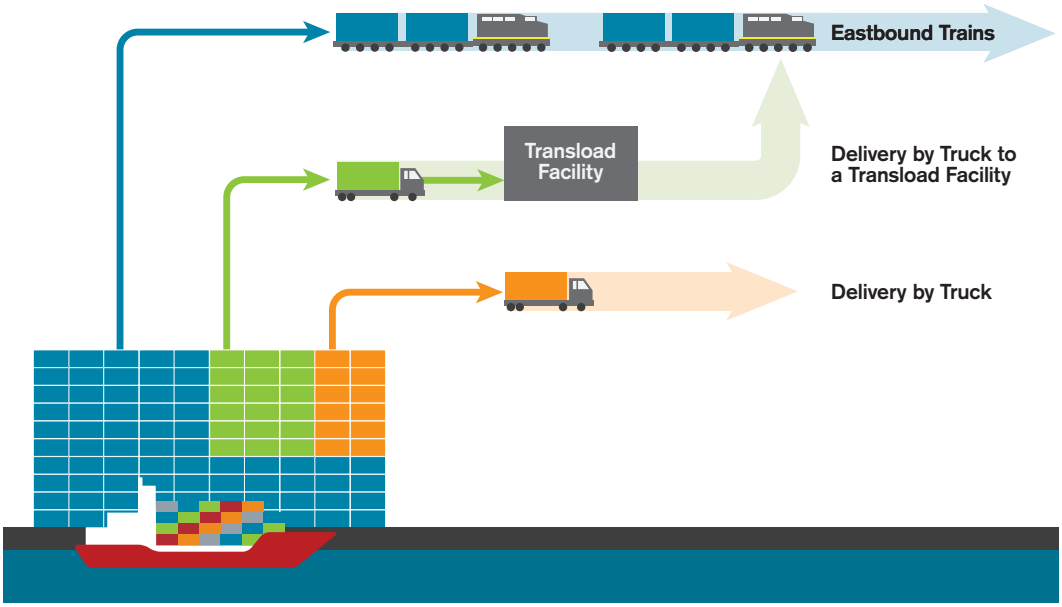
Metro Vancouver's diverse economy relies on an integrated and efficient transportation system that facilitates accessibility between goods, services and markets- local and export. Over the past several decades, the region has expanded the capacity of the transportation system- both roads and transit, to support the growing region's needs. Issues related to travel time reliability and accessibility will continue to be key drivers of economic productivity and competitiveness. Over the same period there has been a consistent call to identify and implement more comprehensive management strategies to support these objectives.

Goods arrive in the region through four modes: air, rail, marine and road. Air cargo volume is limited by the number and capacity of air cargo carriers operating in the Metro Vancouver region. In 2010, the Vancouver International Airport handled an estimated value of $10 billion of cargo, which is about 10% of Canada's air cargo trade.

Rail, marine, and road goods movement are heavily interdependent, with rail primarily feeding and receiving bulk cargo to the port system. Trucks are used to move cargo around the region and to other areas of the province that are not easily served by rail or by sea.

In 2012, Port Metro Vancouver served over 3000 vessels and about 125 million tonnes of cargo. About **80% of this cargo is bulk** consisting mostly of coal, chemicals, metals, minerals, fertilizers, grain, petroleum products, forest products, and timber bound for export. Bulk cargo arrives and leaves the region primarily via the rail network which is made up of lines owned and operated by three railway companies.

Figure 1: How Port Metro Vancouver Containers Move in Our Region[1]



Source: Port Metro Vancouver

[1] Port Metro Vancouver, *Roberts Bank Terminal 2 Project*, Presentation to Metro Vancouver's Regional Planning Advisory Committee, November 23, 2012. http://www.metrovancouver.org/planning/development/RPAC/Agendas/CliffStewart-PortMetroVancouver.pdf

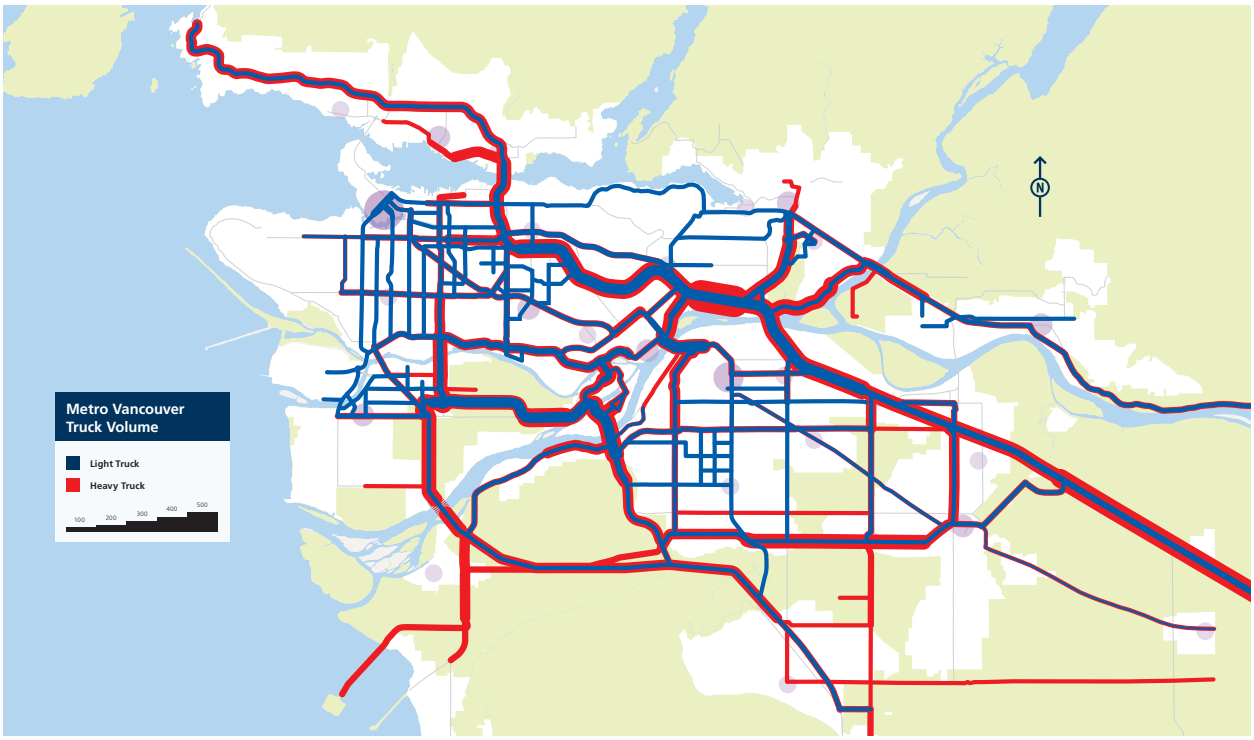
The **other 20% of this cargo is in shipping containers** – with a fairly good balance between imports and exports. As shown in Figure 1, about two-thirds of the arriving containers are loaded directly onto eastbound trains and about one-third is loaded onto trucks. These trucks either make deliveries within Metro Vancouver, travel beyond the region, or transport their cargo to a transload facility. At a transload facility goods from each arriving container are sorted and rearranged into a mix more suitable for their final destination before being loaded onto trains or trucks for points east. Since transloading is space intensive, facilities tend to be further inland – requiring trucks to act as shuttles between the Port and these sorting locations.

Although trucks carry only a small portion of the cargo moving through the region, these trips utilize the regional road network and interact with local residents heading to offices, stores, and schools.

In addition to this Gateway-related goods movement, there is a great deal of truck travel to fulfill our region's metropolitan functions. This includes local shipping, as well as traffic to and from value-add facilities, where goods are assembled or modified along the supply chain.

As shown in Figure 2, most truck traffic is accommodated on the provincial highway network and the region's Major Road Network (MRN). On average, close to 10% of all weekday traffic on Translink's bridges is truck traffic.

Figure 2: 2009 Truck Volume Data; TransLink AFRI Final Report, 2013



Source: TransLink AFRI Final Report, 2013

Trends, Challenges & Opportunities

- **Our future goods movement needs are uncertain**. Whereas the trend of regional population growth is predictable and reinforced by federal immigration and economic policies, goods movement patterns and demands are strongly influenced by factors external to the region, the Province, and the country. It is difficult to predict what mix of goods and services will be central to the region's future economy; how our commodity sectors will compete within the global context; or how much we will import and export. This uncertainty requires a policy response that is resilient, adaptable, and flexible.
- **Gateway-related goods movement is expected to grow, but it's difficult to predict how or how fast.** Asia-Pacific trade is expected to increase from 10% of Canada's total trade in 2002 to more than 20% by 2030. A number of key factors will affect the change, particularly: the evolution of economic growth, production, and consumption in Asia; the continuing transformation of uni-directional supply chains to "value chain" goods movement processes; global energy costs; and competitive influences such as the widening of the Panama Canal (which may shift some port demand from Vancouver to east coast ports).
- **We have significantly increased roadway network capacity, but have fallen short on strategies to make the system we already have work more efficiently**. Recent Gateway-focused transportation projects have resulted or will result in significant new roadway capacity, including the Port Mann and Golden Ears bridges, and the South Fraser Perimeter Road. We have historically placed less emphasis on measures that could make better use of existing infrastructure and improve goods movement reliability without encouraging growth in automobile traffic. Focusing more on demand-management measures like pricing, and on optimization measures, like allowing evening deliveries, will help the region cost-effectively adapt to the changing needs and patterns of goods movement.
- **System efficiency and reliability remain priorities**. Despite major road infrastructure investments, there are still traffic delays and pinch points. The resulting unreliable travel times create significant economic costs, particularly for high-value, time-sensitive goods. Strategies to better manage congestion, to prioritize high-value goods movement, and to address modal conflict points (such as rail crossings) can create benefits for shippers, individual travellers, and for the whole regional economy.
- **There will be increasing competition for roadway space**. The Regional Growth Strategy (RGS) forecasts 80% of the population growth and almost all of the employment and commercial activity growth will occur in already urbanized areas. The RGS also identified a strategy of intensifying industrial lands. With limited space to accomodate this growth, it is essential to prioritize and accommodate different uses, including goods movement, transit, cycling, walking, and driving trips.
- **Neighbourhood-level impacts generate significant concern**. Local deliveries serve the residents and businesses of Metro Vancouver most directly – keeping the store shelves stocked and connecting our businesses to local and global markets. This type of goods movement also typically has the most noticeable negative impacts – with trucks vying for space in busy neighborhoods and town centers where people live and work, generating noise and emissions and raising concerns around compatibility with neighboring land uses.

- **Goods movement planning and decision-making should be based on more consistent data and analysis**. The private goods movement industry relies upon highly-sophisticated data management and analysis systems in order to improve operations, address logistics issues, and reduce costs. Unfortunately, there is currently limited public capacity for the collection and analysis of regional goods movement data. Routine and standardized information gathering and analysis will improve the quality and effectiveness of management-based policies.
- **Goods movement governance and policy is complex, and goods movement has not always been well integrated in regional planning processes**. Planning for goods movement presents challenges due to fragmentation of authority and responsibility among public and private sector actors. Public interests include federal, provincial, regional, and local governments. Private actors range from large rail companies to small local trucking operators. Goods movement regulations, such as truck permits and regulations set by local municipalities, are not harmonized across the region. Ultimately, the region has underdeveloped mechanisms to facilitate consensus-building, joint policy development, and public-private cooperation with respect to goods movement. A more flexible and responsive policy approach will require more formalized forums in which to build and sustain partnerships and better align authority and responsibility with regional goals.
- **TransLink's leadership role in coordinating the multiple players in the regional goods movement system needs to be better established**. TransLink's official jurisdiction over goods movement is limited to a supporting role in terms of both management and investment. TransLink is well situated to bring together the public and private sectors and agree upon how to collaborate effectively and address opportunities and challenges.

TransLink will continue to collaborate with stakeholders on these issues through 2013 and 2014 as it develops a Goods Movement Strategy as an integrated part of the update to the Regional Transportation Strategy.