



BACKGROUND #4: Regional Economy and Growth

Purpose: Why is this topic important to the Regional Transportation Strategy?

An efficient and effective transportation system is a critical component in the Metro Vancouver economy, serving three key functions:

- Ensuring people have access to jobs, goods and services;
- Providing businesses with access to labour and markets; and
- Enhancing our role as Canada's Pacific Gateway for international trade.

There are benefits and costs associated with all of these tasks. Travel time and expenses affect the costs of doing business. Access times affect labour markets, reliable product delivery and intermodal transportation connections, and changes can shift productivity and regional competitiveness – particularly relevant for the Gateway, which competes directly with ports on the West Coast and beyond. The transportation system also affects quality of life and household wealth.

The purpose of this backgrounder is to identify transportation issues that the Regional Transportation Strategy should address to support a growing and changing economy.

Trends and Outlook

Population will increase by 1 million by 2041

Metro Vancouver, already home to more than half the B.C. population, is growing at a rate of 30,000 to 40,000 people per year, largely as a result of immigration. At that rate, the population will rise by one million people by 2041, to a total of 3.4 million.

Approximately 40% of that growth is projected to occur south of the Fraser, predominantly in Surrey and the Township of Langley; 18% is forecast in the Northeast Sector. Densification will enable a 28% increase on the Burrard Peninsula (Vancouver/UEL, Burnaby and New Westminster) and continued growth in Richmond and the North Shore. About 70% of the total growth is forecast to occur in an Urban Centre or along the Frequent Transit Network.

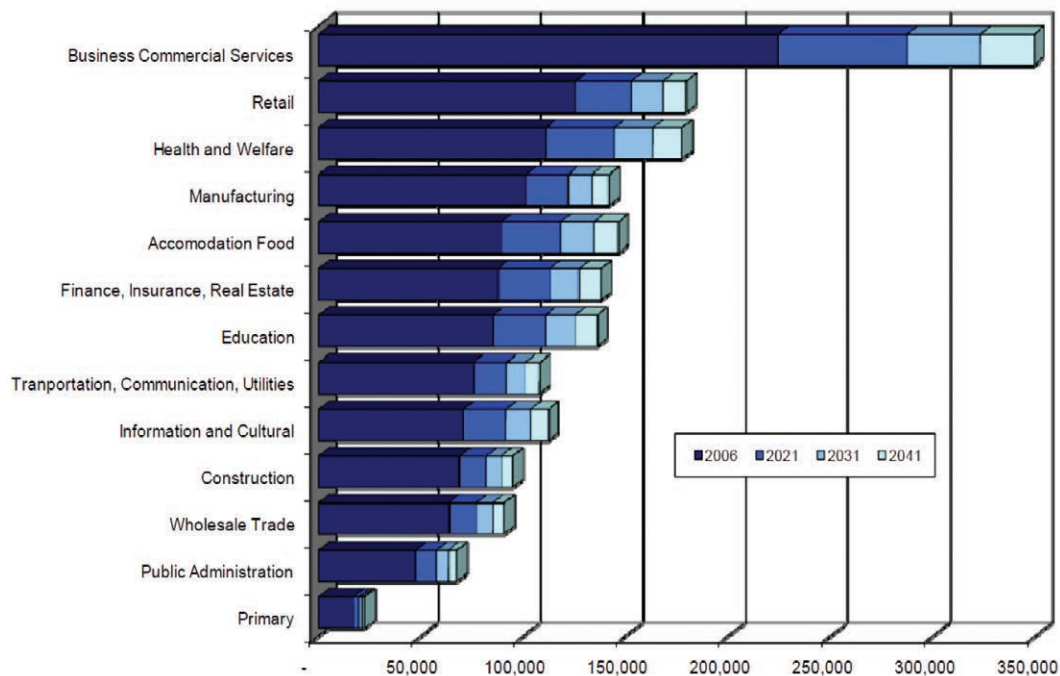


Job numbers will grow within a constant economic structure

Although B.C.'s economy is highly responsive to international economic conditions, most agencies predict that the provincial economic structure will remain stable and that job numbers will grow. Metro Vancouver Regional District predicts an increase of 600,000 jobs, and the Business Council of BC concludes: "The industrial structure and job market are likely to be quite similar to today. The province will still rely on resource-related industries, especially to generate exports; the United States will remain our leading trading partner, even as Asia comes to occupy a larger place in the global economy."

Figure 1 shows existing and forecast structure of the Metro Vancouver economy, based on studies by the BC Business Council, the Provincial Government and the Conference Board of Canada. Strong growth is predicted in business and commercial services, health services, accommodation and food, and information and cultural sectors. Some of these sectors serve the local population and will grow with population, while other sectors are influenced more by external factors.

Figure 1: Structure of the Metro Vancouver Economy and Projections



Metro Vancouver will continue to be an attractive place to live and visit

Aside from high housing prices, Metro Vancouver remains highly attractive, drawing new residents and businesses from the rest of Canada and internationally. An effective regional transportation system is an important factor in maintaining that draw. Easy access to work, chores, and recreation is a crucial feature of livability, which has an important influence on regional economic strength.



Future Distribution of Economic Activity and Implications for Transportation

The number, distribution and type of jobs in the region will influence the demand for transportation. For example, work and post-secondary trips comprise more than half of morning peak trips and more than one-third of all daily trips. On transit, 65% of all trips are for work/post-secondary purposes. The majority of truck trips serve industrial and Gateway functions.

Given that the economy depends to a large degree on industrial activity (including Gateway functions) and major employment centres, the following section focuses on how these areas may evolve in the future.

Serving Industrial Areas and Gateway Functions

The region's industrial areas and mixed employment areas contain about 310,000 jobs. (Metro Vancouver's 2011 Regional Growth Strategy contains policies to steer major trip generators like office and retail complexes to Urban Centres where they can be served by transit, improving access for both employees and customers.)

Industrial areas are reserved for uses that fit poorly in Urban Centres, such as manufacturing, repair, and distribution. These lands therefore tend to be the biggest traffic generators. Industrial land produces local, regional, provincial, national, cross-border and international goods movement trips. Shopping centres and office buildings require regular goods deliveries, which are typically supplied from regional distribution facilities also located on industrial land.

Of Metro Vancouver's total of 11,430 hectares of municipally designated industrial land, about 76% is developed and 24% is not currently being used for industrial purposes. Most of this "vacant" industrial land is located south of the Fraser, so growth in truck traffic is likely to be concentrated in these areas.

Port facilities and terminals are typically located in industrial areas. The Asia Pacific Gateway connects Canada and the North American market to Asia and the rest of the world. The Gateway Transportation System encompasses the marine ports, airport, rail, trucking and related activities that serve international trade and tourism, and directly contribute 82,000 jobs and more than \$6.5 billion in GDP annually to the regional economy.

Port Metro Vancouver is forecasting container traffic growth from 2.5 million TEU in 2010 to between 5.5 and 7.9 TEU by 2030, adding significant demand on the transportation system. (See the How and Why Goods Move backgrounder for more information.)



Figure 2: Regional Land Use Designations



The Metro Vancouver Regional Growth Strategy identifies Urban Centres (and areas along transit corridors) as priority areas for job and housing growth. Industrial area and mixed employment areas are also designated to help stabilize the locations for industrial activity and provide certainty for transportation investment.

Supporting Major Employment Centres

About 40% of the region’s jobs, roughly 500,000, are located in Urban Centres, more than half of them in the Metro Core. Urban centres are also expected to attract half of the 600,000 additional jobs expected between now and 2041.

Of the 600,000 total, 25% of those new jobs will not be suited to urban centre and frequent transit corridor locations because they are either neighbourhood-based (such as in schools) or they are industrial/port and agricultural sector jobs. That leaves 450,000 jobs that have the potential to locate in Urban Centres and frequent transit corridors and will generally occupy retail/services space and office space. Major office complexes naturally gravitate to the Metro Core, Surrey Metro Centre and the seven Regional City Centres. Local offices are more likely to locate in Municipal Town Centres.



There is currently about 68 million square feet of office space in the region accommodating about 350,000 jobs. If past trends continue, the region will add about 1.2 million square feet of office space per year, making room for 6,000 to 8,000 new workers annually. This is equivalent to three times the amount of floor space contained in a 25 storey, 400,000-square-foot office tower, such as the new Metrotower III in Burnaby. These new spaces are most likely to be filled by a number of small firms rather than large corporate head offices. The Metro Core and the Broadway Corridor contain about 45% of the region's office space, although there is increasing market interest in Surrey Metro Centre and Regional City Centres, especially those located on rapid transit lines.

For retail space, centres with good transit service enable customers and workers to take transit and also attract a significant number of pedestrian trips. For example, 46% of people shopping at Metropolis at Metrotown came by transit and 13% walked; while 42% of people shopping at Oakridge Centre took transit and 15% walked.¹ Retail facilities that are accessible by multiple modes contribute to the vitality and convenience of urban centres.

The Metro Core, including the downtown Vancouver peninsula and extending south to the Broadway corridor, is the current high-density centre for financial, legal, professional and medical services. It is headquarters for many provincial firms and a prime location for national and international businesses. It also has major retail, entertainment and cultural functions and is B.C.'s premier tourist destination.

Continued growth in jobs and housing is forecast for the Metro Core. The City of Vancouver has a long-standing policy to promote walking, cycling and transit for new trips to the Metro Core, a policy intended to meet economic and environmental objectives while enhancing the area's attractiveness. Adequate transit capacity, as well as continued improvements in cycling and pedestrian infrastructure will support the economic function of the Metro Core.

Surrey Metro Centre is emerging as the region's second downtown, serving communities south of the Fraser. The City of Surrey's many investments and decisions, as well as the locating of the newest Simon Fraser University campus and the Surrey Hospital, have provided major catalysts to the centre's development. The Central City office tower and more recent developments provide a growing supply of office space. Continued job growth in Surrey Metro Centre is critical to reduce the length of work trips and access to services.

In 2006, Surrey Metro Centre had 8,300 jobs, a number expected to grow to 50,000 by 2041. Surrey Metro Centre is also an important residential location with brisk development in recent years. Adequate transit capacity, as well as improved cycling and pedestrian facilities, leading to Surrey Metro Centre from other points south of the Fraser are needed to support the growth. In the shorter time frame, continued capacity for vehicles will be necessary but as transit and walking trips increase, vehicle demand should plateau.

In addition to the Metro Core and Surrey Metro Centre, the Metro Vancouver Regional Growth Strategy identifies a network of 7 Regional City Centres serving all of the sub-regions and a number of Municipal Town Centres which serve a more local function.

¹ Ivanhoe Cambridge Market Research



Big Economic Issues on the Horizon

What is a reasonable / economically-efficient / affordable amount to spend on transportation in the region? This is an important but difficult question. The region's economy was estimated to be worth \$100 billion in 2011. The transportation sector, including all direct costs, is estimated to be about \$13 billion. As a proportion of GDP, transportation costs have decreased from 13.5% in 1991 to 9.6% in 2009. Per capita spending on transportation has increased only slightly since 1991, from \$3,800 per person to \$4,000 per person (2011 dollars).

Tracking transportation expenditures as a proportion of the GDP, however, does not necessarily help answer the question posed above. For example, collision costs actually add to the region's GDP but cannot be viewed as a desirable societal expenditure. GDP also does not distinguish between costs and benefits of the various types of investment. For example, investments in public transit may increase public expenditures but reduce overall societal expenditures including out of pocket costs, economic losses from collisions, and costs of congestion.

The Role of Transportation Pricing

Another dimension of this question is that transportation is not priced accurately. All modes of transportation receive some subsidy, with automobile being the most heavily subsidized.

Under current policies, everyone pays a relatively equal amount toward our road network, through property taxes, fees and insurance. The roads are then free to use, except for the tolled bridges. As a result, some people may make many unnecessary trips, even as those who seldom drive still pay the same amount. If, instead, we all paid each time we used the roads, it would help us think more carefully about each trip and it would reward us financially if we were able to drive less, either by forgoing trips, by bundling trips together, or by making some trips by walking, cycling, transit or carpooling.

Pricing could also assist those who use the roads more, especially at rush hour when there is limited space and high demand. Tolls set at an appropriate level would encourage people who had access to transportation options, or flexibility in their timing, to avoid peak period trips. This could reduce traffic to a point that permits continuous driving at speed, increasing the effectiveness of the road system and adding travel-time reliability for commuters and truckers in the goods movement industry. A number of regions around the world are implementing direct transportation pricing both as a means to increase efficiency and to help pay for new infrastructure. See the backgrounder on Transportation Pricing for more on this topic.

Economic resiliency, oil vulnerability, climate change and pollution

Peak oil, climate change and the risks of particulate pollution all loom as cost factors that could badly damage our economy. We are vulnerable to sudden and dramatic fuel increases, and our port and airport facilities are located in high-risk areas should sea level rise as predicted. Our region has been a leader in electric-based transit systems such as the trolley buses and SkyTrain. Reducing dependency on fuels further would increase the resiliency of our economy.



Challenges and Implications

Once again, as the population and job numbers continue to grow, an efficient and cost-effective transportation network will be essential to the region's competitiveness as well as its livability, making a well-defined and adequately funded transportation system a key element in regional economic security.

The Metro Core, Surrey Metro Centre and the region's other Urban Centres play a vital role in the regional economy; good multi-modal transportation linkages are critical to their continued success.

The Metro Vancouver Regional Growth Strategy targets about 75% of the region's job growth to occur in Urban Centres and along transit corridors looking out to 2041. This is an ambitious target, highly reliant on TransLink's ability to provide cost-effective transit services. Municipalities can assist TransLink in matching demand with transportation supply by providing staging plans for the Regional City Centres and ensuring an adequate supply of sites for economic activity.

Most industrial growth is expected south of the Fraser. Many south-of-the-Fraser industrial areas are off the Frequent Transit Network and difficult to serve by transit, but most have low worker densities and recent infrastructure investments have assured good road access. Growth in Gateway-related goods movement could ultimately strain that capacity, making this a good candidate area for analysis of key corridors and measures needed to meet long-term demand.