



cutting through complexity

The UBC-Broadway Corridor – Unlocking the Economic Potential

Executive Summary

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Executive Summary

The UBC-Broadway Corridor (the Corridor) is the second largest business and innovation centre in British Columbia. Running from Commercial and Broadway, the busiest transit hub in the region, all the way to the University of British Columbia (UBC), the province's largest and most globally significant educational institution, it is currently the busiest bus corridor in North America.

The economic potential of the UBC-Broadway Corridor is enormous. The linkage between its health care precinct, life sciences hub, burgeoning technology industry, and UBC's research enterprise, sets the stage for significant growth in the coming decades. With UBC's annual economic impact estimated at more than \$10 billion annually, and more than 150 spin-off companies, 100 of which are in life sciences and have raised more than \$2 billion in capital, decisions made today on the development of the UBC-Broadway Corridor will determine how Vancouver, the region, and the province capitalize on these economic benefits.

The corridor linking Vancouver to UBC has the potential to become a technology hub on par with Toronto's MaRS district, San Diego's CONNECT or London's Tech City. Already, growth in the Corridor is outpacing predictions from just a few years ago, with estimates currently predicting an increase in employment and population of 150,000 over the next 30 years. A number of key enablers favour the UBC-Broadway Corridor in becoming a top-tier global research hub: a concentration of academic research excellence; locally available, well-trained graduates; and an appealing lifestyle to attract and retain top talent.

The research conducted by KPMG identifies two major weaknesses that are currently limiting the economic potential of the UBC-Broadway Corridor. These are the lack of a collaborative approach among stakeholders, and the absence of superior transit infrastructure. Cities such as Toronto and New York have developed partnerships with local academic institutions that have strengthened technology hubs and attracted significant investment from both the public and private sectors.

These cities have another clear competitive advantage over Vancouver: they have a public transportation network that provides rail rapid transit between their major employment centres and their academic research facilities. The UBC-Broadway Corridor is already at full transit capacity during peak hours, with an estimated 500,000 pass-ups a year, and off-peak service up to 75 percent of capacity. TransLink's preliminary evaluation of options for the UBC-Broadway Corridor, along with work done by the City of Vancouver, concludes that rail rapid transit – a subway – all the way to UBC best meets the needs of today's transit riders and tomorrow's population and economic growth.

Without an investment in rail-based rapid transit along the UBC-Broadway Corridor, the province's principal health and technology sectors will be at a disadvantage in attracting talent, venture capital, and businesses to the Corridor because of the serious inconvenience of increasing gridlock and a lack of transit capacity. The combination of UBC's long-term plan for the campus, which will see a daytime population of 87,000 by 2041, and continued development in Vancouver around existing transit nodes along Broadway and on Musqueam lands, will drive significant population and job growth in the Corridor.

But this is only one piece of the puzzle. To fully capitalize on this coming growth, a strategy needs to be in place now, delivering a transportation system that will enable the UBC-Broadway Corridor to take its place as a top-tier, globally leading research and technology hub.

Key Study Findings – At a Glance

Key features of the UBC-Broadway Corridor:

- After Downtown Vancouver, the largest business and innovation centre in the province, with more jobs and people than any other town centre in the region;
- Growing faster than previously projected in the 2011 Regional Growth Strategy, with an estimated increase in employment and population of 150,000 over the next 30 years due to growth both at UBC and in Vancouver;
- The combined commercial/institutional floor space in the Corridor is almost equal to that found in the Downtown and is experiencing significant growth;
- The Corridor includes UBC, BC's largest and most globally significant and research-focused university, and has the largest health care/life sciences precinct in the province; and
- Lacking adequate transportation infrastructure to meet the current and future economic and population needs of both UBC and the City of Vancouver.

Unlocking the economic potential of the UBC-Broadway Corridor to become a globally significant high-tech hub like Toronto's MaRS, San Diego CONNECT or London's Tech City requires:

- High-capacity, fast, reliable rail-based rapid transit connecting UBC with essential research partners and job centres along the Corridor, including the health and research precinct around Vancouver General Hospital, and throughout the Metro Vancouver Region, and
- Strong, intentional City and UBC collaboration to support economic growth with a focus on high technology, life sciences and green business expansion, to better leverage both public and private sector investment.

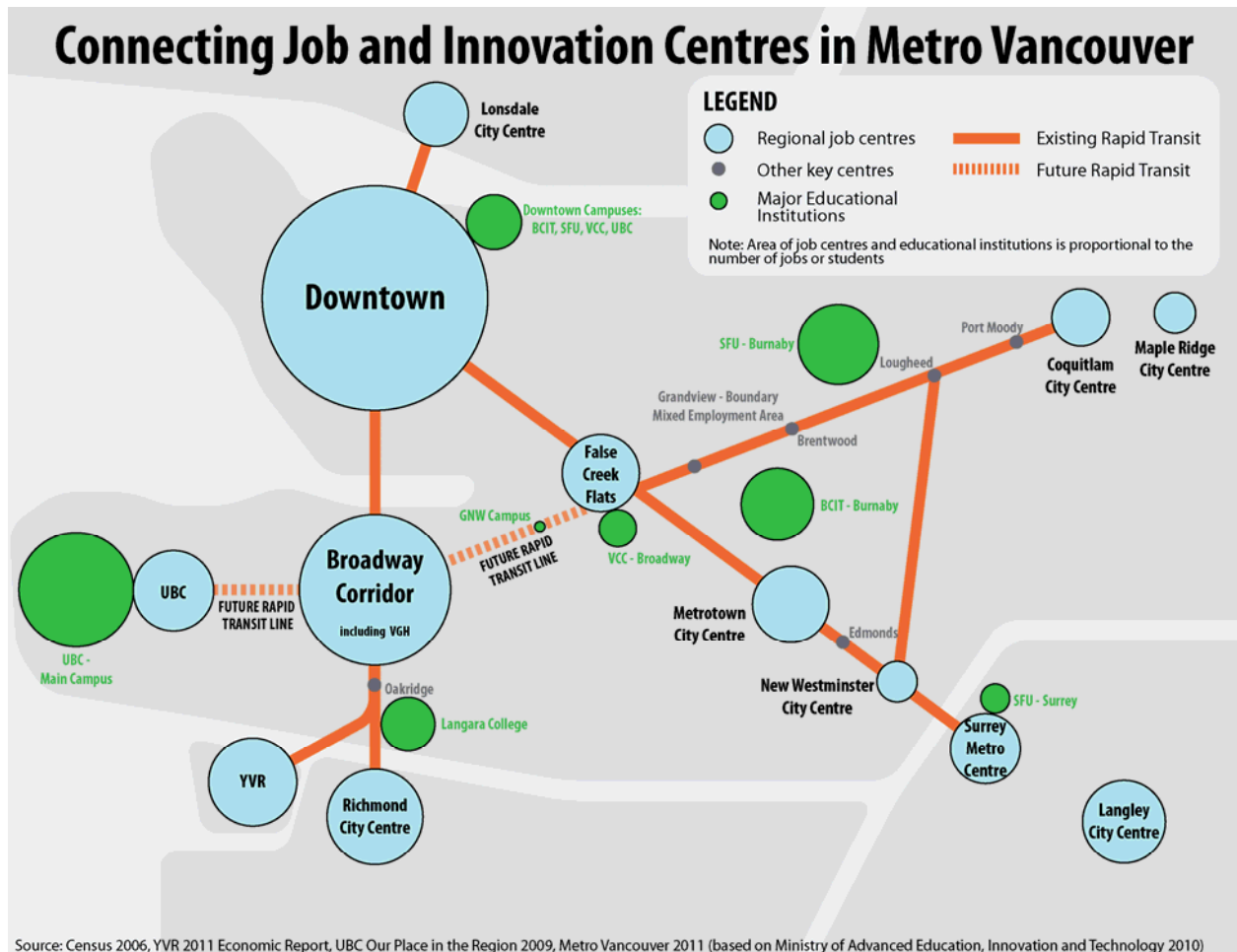
The Regional Case

The creation of rail-based rapid transit through the UBC-Broadway Corridor stands to benefit not just UBC and the City of Vancouver, but the Metro Vancouver region, and the province as a whole. The UBC-Broadway Corridor is unique in that 50 percent of all transit riders come from outside of the City's boundaries. This is driven by the high concentration of academic and economic activity within the Corridor, particularly in the health sector. Some of the province's top medical research centres are along the Corridor, including:

- Vancouver General Hospital
- BC Centre for Disease Control
- BC Cancer Agency
- BC's only Schools of Dentistry, Medicine, and Pharmaceutical Sciences
- Vancouver Coastal Health Research Institute
- UBC Hospital
- Centre for Brain Health
- Centre for Drug Research and Development.

These medical facilities provide support and care for people throughout British Columbia, and provide the employment that makes the UBC-Broadway Corridor the second largest job district in BC. A world-class life sciences cluster along the Corridor that is connected by rail-based rapid transit would provide even greater benefits to British Columbians.

The UBC-Broadway Corridor is the critical geographic connection between Vancouver’s Central Business District, UBC, other innovation centres, and key regional business centres and communities in Metro Vancouver, but it needs rapid transit to better link it to the region, as illustrated in the following figure.



The Corridor is unique in that it intersects the major north/south and east/west rapid transit lines: Canada, Expo and Millennium Lines. With the Evergreen Line opening in 2015, a subway along Broadway would connect Vancouver via rapid transit to Richmond, Burnaby, Surrey, New Westminster, Coquitlam, and Port Moody, benefiting other municipalities across the region. A subway would enhance the connections among regional town centres to the UBC-Broadway Corridor, which is the second largest business centre in the province after Downtown Vancouver, with more jobs than the next eight largest Metro Vancouver town centres combined.

The technology industry in British Columbia is a major contributor to the provincial economy, particularly in the Lower Mainland, and Vancouver has the potential to develop into a globally significant technology hub. The technology industry is:

- The second fastest creator of new jobs in the private sector;
- Growing more than twice as fast as the balance of the provincial economy; and
- Intrinsically linked to UBC through funded research (public and private), operation of research centres of excellence, spin-off companies and collaboration in areas such as health care/life sciences.

About one-quarter of current employment in the technology sector in Vancouver is located in the UBC-Broadway Corridor, as well as forty per cent of all jobs in the health care/social assistance sector in the city, with a significant linkage between these two sectors and UBC. The economic potential of the Corridor will be significantly tied to the further development of the technology sector.

UBC is closely linked to research institutes and technology firms throughout the Corridor:

- UBC is a leading international research institution (30th out of 500 in the world and 2nd in Canada in 2010).
- In 2010-11, UBC attracted more than \$549 million in research funding from all sources for 8,054 projects. A large proportion of these funds are expended in the Corridor.
- One hundred of the 152 spin-off companies have been in the health care sector, creating more than 2,500 jobs and over \$2 billion in capital to date.

A 2009 UBC study estimated the university's economic impact at more than \$10 billion annually, half of which is due to UBC's research activities. Research intensive universities are a critical component in the economic growth and development of the technology sector.

What needs to be done?

Based on the findings of this study, the priority actions to unlocking the UBC-Broadway Corridor's economic potential include the following.

1. Implement rail-based rapid transit, linking the UBC-Broadway Corridor's academic and research institutes to each other and to the Metro Vancouver community

The ability of the Corridor to achieve its economic and development potential will depend on the implementation of high-capacity, fast, reliable rapid transit as the long-term solution to its current and growing transportation congestion and transit capacity issues. In light of the TransLink study and based on work by the City of Vancouver, alternatives such as expanding bus service, or building light rail transit simply do not have the capacity to meet the population and economic growth that the Corridor will experience in the coming years.

International experience with global technology hubs indicates that effective infrastructure is a key enabler for collaboration and economic growth. Knowledge, workforce, funding, business acumen and appropriate space need to be effectively linked for technology hubs to work. Cities like New York and Toronto have a strategic advantage over Vancouver when it comes to transit connections for technology hubs.

For the UBC-Broadway Corridor to strengthen its competitive edge as a world-class life sciences and technology hub, rail-based rapid transit infrastructure is critical.

2. Provide appropriate and affordable commercial and residential space

Commercial space

One of the necessary components of economic development is the need to develop attractive and affordable commercial space along the UBC-Broadway Corridor – to enable fast-growing technology and other firms to take advantage of the Corridor's proximity to UBC, downtown, YVR, and adjacent residential neighbourhoods. The strongest opportunities for growth include (1) increasing the allowable density for existing commercial areas in the central and western parts of the Corridor, and (2) developing new higher-density commercial areas in eastern sections of the Corridor, in conjunction with improved rapid transit services.

Residential space

The UBC-Broadway Corridor is already seen as a highly attractive residential area within Metro Vancouver. Increasing the supply of affordable residential dwellings along and near the Corridor will assist Corridor-based firms in attracting talented employees, by enabling them to live and work in close proximity.

3. Develop an intentional, collaborative strategy to deliver a strong, vibrant and resilient technology sector

Culture of Collaboration

City/university collaboration in other cities — e.g. MaRS in Toronto (U of Toronto and City of Toronto), San Diego CONNECT (UC San Diego and City of San Diego) and New York City’s new partnership with Cornell — has been proven to attract significant investment from both the public and private sectors. There is similar potential for UBC and the City of Vancouver. The City of Vancouver and UBC have strong partnerships in a number of areas, and should continue to strengthen collaboration and complementarities in the areas of land use and economic planning. The critical mass of research facilities and businesses, geographic proximity and shared economic spin-offs create the potential for a powerful collaboration between BC’s biggest city and its largest post-secondary institution.

Business attraction strategy

Leading economic development centres typically result from the successful implementation of an intentional and targeted business attraction strategy – drawing on support at the local, regional, state/provincial, and national levels. The Vancouver Economic Commission and UBC are well positioned to develop and deliver such a strategy. Development of specific strategies and incentive programs to attract targeted industry sectors and firms — learning from the successes of other jurisdictions — is a key to realizing the economic potential of the UBC-Broadway Corridor. A targeted strategy focused on world-class research facilities and start-ups, access to capital and quality of life can spur new investment and allow the Corridor’s technology and science sectors to enhance its standing relative to other global cities.

An analysis of Vancouver’s position as a world-class technology hub shows that while the Corridor has many strengths, there are weaknesses that need to be addressed moving forward.

Key Enablers	UBC-Broadway Corridor’s Relative Strength
Building out of academic research excellence within a university	Strong
Supply of locally available well-trained graduates	Strong
Proximity and access to hospitals & clinical trial opportunities	Strong
Attractive lifestyle to attract top young talent	Strong
Clustering/critical mass considerations	Strong
Close proximity of world-class technological research capabilities	Moderate
Proximity to arts-oriented residential communities	Moderate
Access to the business community/ financial support	Moderate
Access to affordable office/lab space	Weak
Collaborative approach from stakeholders	Weak
Superior transit infrastructure	Weak

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It is clear that the economic potential of the UBC-Broadway Corridor is significant and can build off an already strong base, with many of the enablers for future growth already in place. The City of Vancouver and UBC are taking steps to realize this potential, but ultimately a rail-based rapid transit link is essential to provide the mobility required for this economic potential to be fully realized.

To develop a technology hub economy that is second to none at a global scale, a new approach is needed – one that sees UBC and Vancouver collaborating closely on a long-term plan to invest in the UBC-Broadway Corridor, through strategic land-use planning, targeted economic strategies and the development of a rail-based rapid transit line to meet the population and economic needs of the future.

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